JACQUES

2018 PRODUCT CATALOGUE

ONE SYSTEM, ENDLESS POSSIBILITIES

Founded in 1980, Jacques Technologies is an Australian design and manufacturing company boasting a team of highly innovative and proactive electronics professionals. Jacques team of engineers are adept at uniting form and function to produce leading-edge and future-proof communication systems.

A decade ago, they pioneered the use of IP technology within the intercom and public address space. Today, this ensures Jacques IP communication systems are dynamic and efficient across endless industry applications. As market leaders in the IP communication industry, Jacques continues to supply national and international projects with quality audio, video and public address systems suitable for a diverse range of industries.

CONTENTS

INDUSTRY APPLICATIONS

Jacques' communications solutions are designed and developed to meet the virtually limitless requirements unique to any industry application. Our IP integrated communication systems are highly suited to applications where reliable, high quality voice and/or video communication is required. We currently provide IP intercom and public address solutions to a range of local and international markets, including government, correctional services, public safety, mining, residential, education, transport and health.

Our professional communication systems, with the ability to integrate into third party security, building management, CCTV, telephony and access control systems, are highly sought after by the secure facilities, commercial and industrial industries. Our products have been used in a number of projects within the transport industry, which require integrated intercom, public address and Help Point Units to disseminate information and facilitate public safety.

SECURE FACILITIES

IP COMMUNICATION SOLUTION

Reliable and efficient inmate management, visitor communication and integrated central control and monitoring ensure correctional facilities staff maintain a safe and secure facility. Additionally, inmate communication, which can be critical in ensuring a safe and secure environment, can be supervised through technologically advanced features such as covert monitoring, threshold alarm monitoring and the non-contact visit systems.

Non-Contact Visit System | Covert Monitoring | IP Cell Intercom | Anti-Ligature Intercom Design | HLI Integration | Sophisticated Reporting and Diagnostics

COMMERCIAL

IP COMMUNICATION SOLUTION

Comprehensive IP intercom and public address systems with fire stair and lift solutions allow staff to react quickly in the case of potential threats, intruders or extreme emergencies. Reliable audio and video intercom communication, public address announcements, CCTV monitoring capabilities and entry/exit access control features comprehensively safeguard commercial facilities.

Video Intercom | HLI Integration | Relay Control | Public Address | Fire Stairs Intercom

EDUCATION
IP COMMUNICATION SOLUTION

Facilitate a safe and positive learning environment with a multi-zone public address system and video and/or audio intercom communication. Administration can schedule school bells, pre-recorded announcements, alarms and broadcast live verbal announcements to all or selected PA zones from one central location. Communication between teachers and administration or security personnel is easily achieved through intercom terminals available in each classroom.

Bell scheduling | Public Address | Audio and Video Intercom

TRANSPORT
IP COMMUNICATION SOLUTION

Whether travelling during the day, alone, or at night, it is important for passengers and staff to feel safe and secure when using transportation systems. Jacques' integrated IP Communication System which features intercom, Help Point Units and public address, provides a flexible and reliable communication solution featuring integration to many third party devices including CCTV, security management and access control systems. Jacques' provides unique and individual solutions that work effectively for bus, train, airport and maritime transportation systems.

HLI Integration | Public Address | Video and Audio Intercom | Help Point Units

INDUSTRIAL
IP COMMUNICATION SOLUTION

From mining sites, to defence and factories the Jacques' integrated IP Communications System is effective and flexible in meeting any specific requirements in order to ensure maximum safety and security for all individuals on site. The dynamic IP communication system features devices and tools which have the capability of being integrated into third party security systems and devices along with the advantage of durability and excellent voice quality suited for harsh conditions.

Explosion-proof Telephone | Public Address | Help Point Units | Echo Cancellation | Fire Stair Intercom | Relay Control

PUBLIC SAFETY

IP COMMUNICATION SOLUTION

Provide communities with an around-the-clock security solution that offers reliable and integrated help/emergency assistance and information dissemination. Help Point Units, located in public areas, are weather and vandal resistant and can withstand high volume usage, while pay station and boom gate intercom terminals provide assistance to those using car park facilities. Security personal are able to protect the public through CCTV monitoring capabilities, public address announcements, warning alarms, and communication to any intercom endpoint all from one central location.

CCTV Integration | Audio and Video Intercom | Help Point Units | Car Park Pay Station Intercom | Public Address

HEALTH

IP COMMUNICATION SOLUTION

The critical safety of patients, visitors and staff is maintained through video and audio intercom communication, public address and entry/exit access control features. Staff are able to instantly communicate to other departments, broadcast public address announcements, ensure help and assistance is available 24/7 in carparks, and grant entry or exit access to authorised personnel all from one central location.

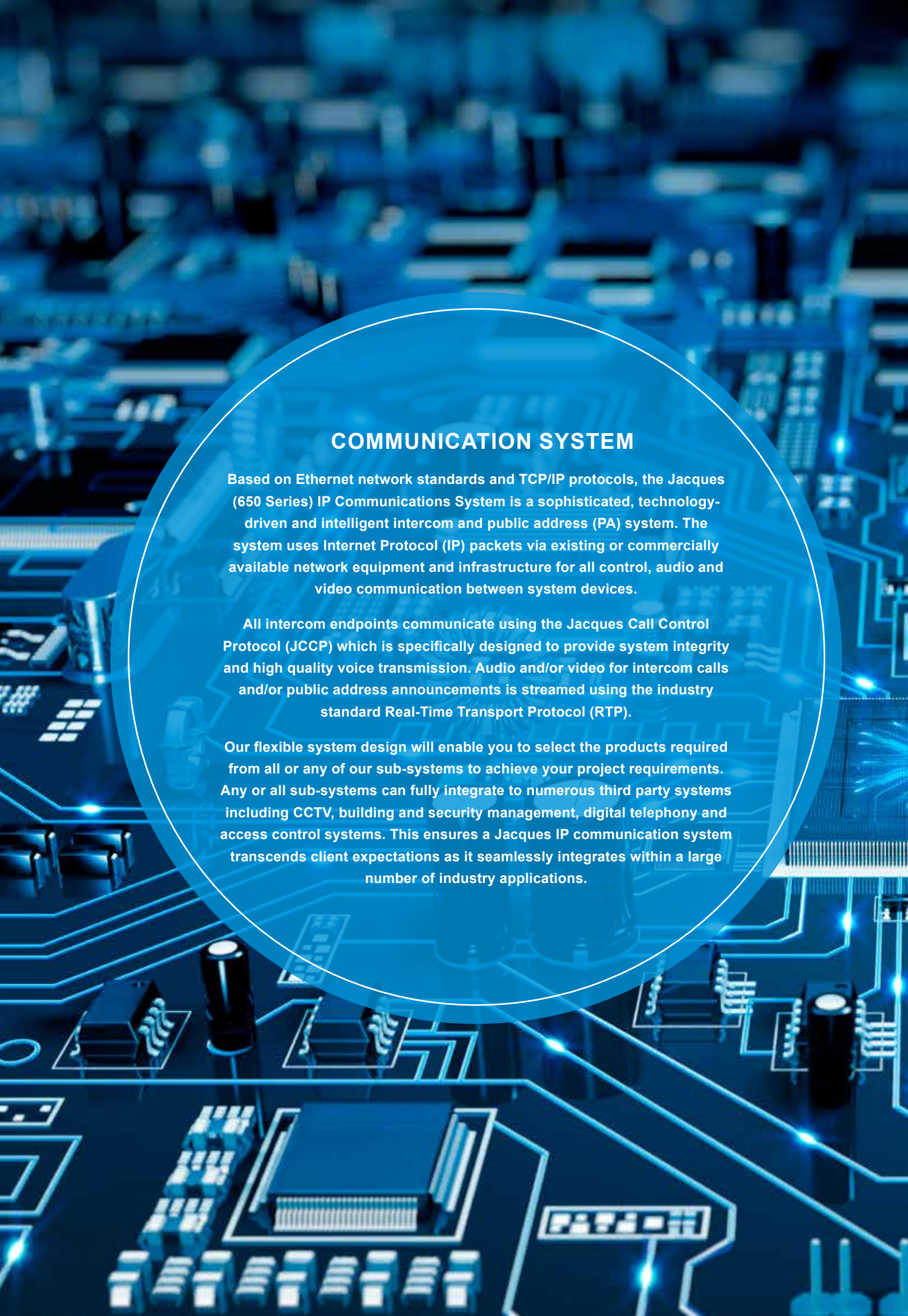
Help Point Units | Public Address | Relay Control | HLI Integration | Car Park Pay Station Intercom | Video Intercom

RESIDENTIAL

IP COMMUNICATION SOLUTION

Step in the door, relax and enjoy! Jacques' IP Communication System for residential living ensures residents are safe and secure through the user friendly system and devices. Protect the home from intruders with features such as IP video intercom with fire stair IP intercom solutions and assimilation with third party security devices. Jacques' has tailored packages specific for apartments, housing estates and private housing to ensure maximum safety and security.

SIP | Video Intercom | Relay Control | CCTV Viewing



COMMUNICATION SYSTEM

Based on Ethernet network standards and TCP/IP protocols, the Jacques (650 Series) IP Communications System is a sophisticated, technology-driven and intelligent intercom and public address (PA) system. The system uses Internet Protocol (IP) packets via existing or commercially available network equipment and infrastructure for all control, audio and video communication between system devices.

All intercom endpoints communicate using the Jacques Call Control Protocol (JCCP) which is specifically designed to provide system integrity and high quality voice transmission. Audio and/or video for intercom calls and/or public address announcements is streamed using the industry standard Real-Time Transport Protocol (RTP).

Our flexible system design will enable you to select the products required from all or any of our sub-systems to achieve your project requirements. Any or all sub-systems can fully integrate to numerous third party systems including CCTV, building and security management, digital telephony and access control systems. This ensures a Jacques IP communication system transcends client expectations as it seamlessly integrates within a large number of industry applications.

SYSTEM FEATURES

INVESTMENT LONGEVITY

The expandability and flexibility of the Jacques IP Communication System ensures longevity. Jacques remains at the forefront of innovation, development and technological design, so you can install our systems confidently knowing they will grow and develop with the changing environment.

CENTRAL CONTROL & MONITORING

Integration of the Jacques IP Communication System with many security, building and surveillance management systems provides staff with complete facility control and ultimate security. Jacques master stations are easy to use. Intercom calls can be transferred between master stations while auto remote configuration ensures unattended master stations will transfer calls to other master stations – or directed to a SIP enabled phone system, ensuring real-time user flexibility. Hierarchical call handling centralises responsibility for timely response to calls. The system provides specialised call handling to and from multiple control rooms via hierarchical and/or peer to peer predefined structures. Furthermore, the system provides complete event logging of all call activity and fault conditions for incident reporting or maintenance.

EFFECTIVE DESIGN

All Jacques IP Communication System intercom terminals feature easy to use navigation resulting in simplified one-touch calling with hands free communication (once the call is established). Each terminal provides crystal clear audio and/or high quality video communication, essential in real-time emergency response providing users with comfort and peace of mind.

SIMPLE INSTALLATION

The Jacques IP Communication System uses standard Ethernet networks for operation. Our IP intercom and public address devices connect directly to any port on a standard Ethernet network. Our IP devices support Power over Ethernet (PoE) ensuring power can also be supplied via the network. This allows for a simple plug-and-play installation.

ENVIRONMENTAL SPECIFIC FEATURES

Designed for indoor or outdoor use, the Jacques IP Communication System endpoints are weather protected, operate within a wide temperature range, are robust and vandal resistant. All intercom terminals and public address speakers are manufactured to withstand continued, high volume usage ensuring continued reliability.

UNPARALLELED RELIABILITY

Designed and manufactured in Australia, Jacques products use impact and corrosion resistant materials, and fibreglass high stability printed circuit boards (PCB) which provide excell nt long term audio and video reliability. Our distributed server framework reduces single points of failure ensuring system robustness and reliability.

FULLY SUPPORTED INTEGRATION

Critical to the ongoing national and international success of Jacques is the ability of our IP communication systems to seamlessly integrate with a large number of third party systems. Jacques' team of talented software engineers, together with the support of a number of highly recognised partners, have developed a wide range of High Level Interfaces (HLI) to achieve greater system interoperability.

FLEXIBLE SYSTEM ARCHITECTURE

Create small, large or cross site communication systems as our system allows almost an unlimited number of intercom stations, Help Point Units and public address zones to be connected in a fully integrated, easily managed system that meets high usage demand.

HOW TO BUILD YOUR SYSTEM

Begin with an Ethernet Network configured for QoS.

1

CONTROLLER

Choose a controller which can manage your system size and offer the functionality you require.

2

INCLUDED SOFTWARE

JCCP and JELinux software modules will come pre-loaded with every system.

3

OPTIONAL SOFTWARE

Choose your optional software. These software modules provide additional functionality and integration to your system.

MASTER STATIONS

Choose your master station. They can make and receive intercom calls, make public address announcements and more depending on your system configuration.

INTERCOM TERMINALS

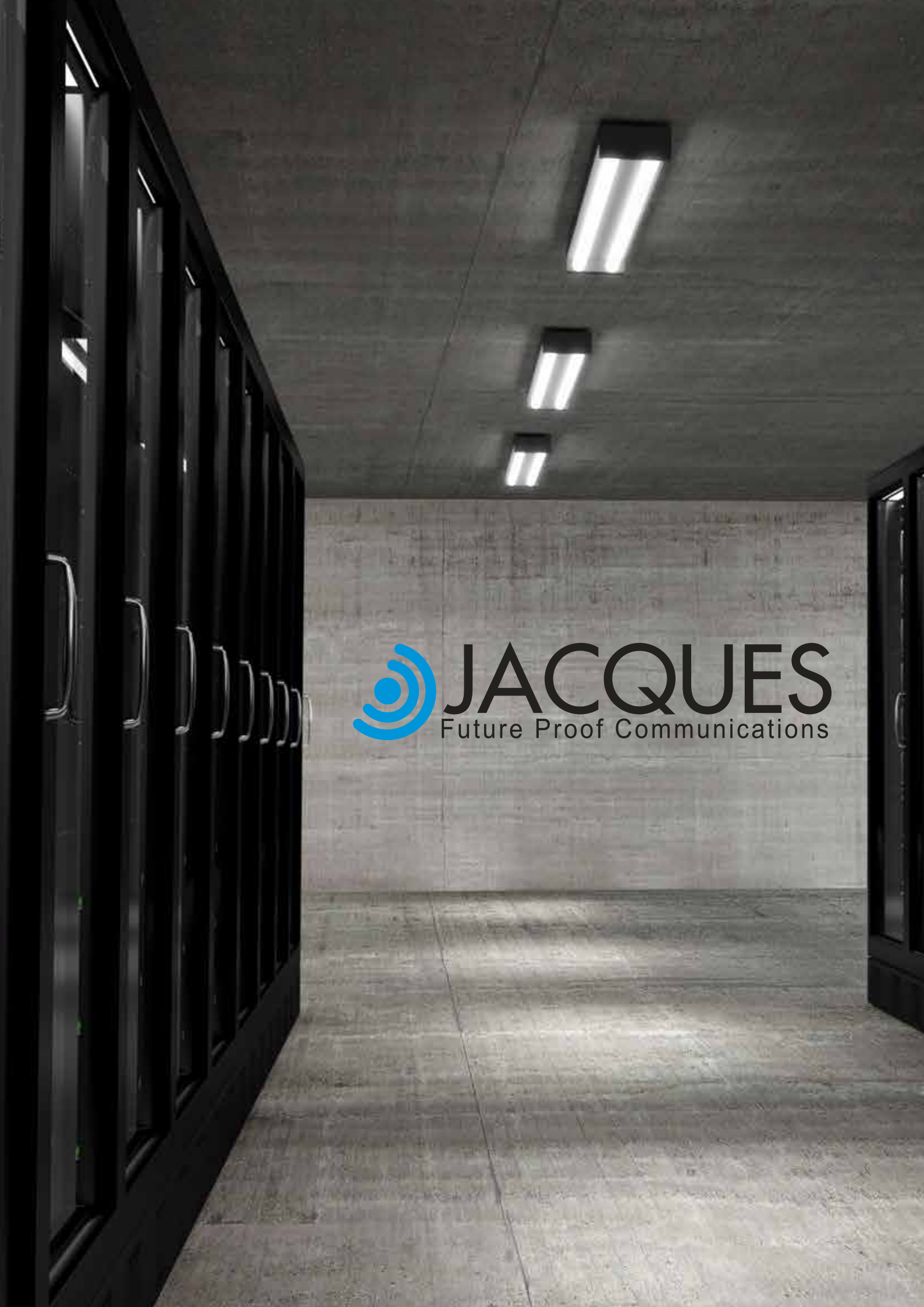
Choose your intercom terminals. They call pre-defined master stations and can initiate relays within your system.

ACCESSORIES

Choose your accessories. They provide additional functionality to your system.

CUSTOMISATION

A key advantage of the Jacques IP Communication System is our ability to customise the system to meet your requirements. Customisation can range from visual changes, such as intercom etching and unique Graphical User Interfaces (GUI), to developments which provide the system with unique and specific functionality. To learn more about the customisation of your Jacques system, please contact a sales representative.


JACQUES
Future Proof Communications

CONTROLLERS AND SOFTWARE

Each Jacques IP communication system MUST include a controller, combined with included and/or optional software, which allows the end user to easily control the entire system.

All Jacques software modules are designed and engineered in-house. Our innovative approach to software research, design and development enables Jacques to develop leading-edge IP communication solutions while responding to unique and custom market requirements in a timely manner.

Jacques offers controllers in various capacities, each allowing for a predetermined number of endpoints and industry required functionality. The controllers, united with included software, manage the key functionality of the system, such as communication and reporting between intercoms, public address components and Help Point Units.

With optional software modules, systems can achieve greater functionality including (but not limited to); third party system integration, audio recording, digital message store with audio broadcast, live audio input for distribution and in depth system monitoring and reporting.

Central to Jacques intercom system design is the controller. Controllers combined with software modules, manage all system functionality.

CONTROLLER TCH-2MXH

PRODUCT CODE 51660

FEATURES

- IP controller, up to 80 endpoints
- Available to administer a large number of the Jacques system software modules & interfaces
- Facilitates almost all core functions of the Jacques IP Communication System
- Supports high definition audio
- Fanless and low power consumption
- SATA hard drive

PACKAGE CONTENTS

- TCH-2MXH controller
- Power adapter
- 2RU rack mounting kit
- JELinux and JCCP Software

OPTIONAL SOFTWARE PACKAGES

- Intercom Report Server
- High Level Interface
- Event Controller
- Voice Annunciator
- High Availability Package
- DAR
- SIP Proxy

SPECIFICATIONS

Endpoints Supported	<80*
CPU	Intel Atom D525 1.8 GHz, 64-bit, dual core with hyper-threading
Chipset	Intel D525 + ICH8M
RAM	2 GB DDR 3
Storage	500 GB HDD
Power Input	2 way 5.08 mm pluggable screw terminal block or 2.5/5.5 mm jack (12 – 24) V d.c.
Power Consumption	45 W max. (23 W standby)
Operating Temperature	(0 - 50) °C
Operating Humidity	(5 - 95) % (non-condensing)
Indicators	Front: LAN 1 & 2 link and activity, power and HDD Rear: LAN 1 & 2 link and activity
Connectors	2 x LAN (1 GB), 6 x USB 2.0, 2 x audio (mic in, line out), VGA, 4 x RS-232, PS/2 mouse/keyboard, DC IN (terminal block, 2.5/5.5 mm jack)
Compliance	CE, FCC, RoHS
Dimensions (WxHxD)	203 mm x 55 mm x 155 mm
Weight	1.7 kg
Environment	Indoor use only
Mounting Options	2RU rack mounting kit

**Dependent on server configuration and network bandwidth*

CONTROLLER JSC-5L/JSC-5L-AEC

PRODUCT CODE 51814/51815

FEATURES

- IP controller, large, more than 80 endpoints supported
- Includes JCCP server software for intercom devices to make and receive calls
- Supports high definition audio
- SATA hard drive (Enterprise)
- Segregated air-flow design for optimal unit cooling
- Redundant, hot swappable power supply

PACKAGE CONTENTS

- JSC-5L controller
- Power cable (IEC 60320) C13 x 2
- Rack mount rails
- JELinux and JCCP Software
- Acoustic Echo Cancellation Software (JSC-5L-AEC only)

OPTIONAL PACKAGES

Software	Hardware
Intercom Report Server High Level Interface Event Controller Voice Annunciator High Availability DAR SIP Proxy	Redundant HDDs–RAID 1

SPECIFICATIONS

RAM	8 GB DDR4 1.2 V 2133 MHz ECC Registered DIMM
Storage	1TB 3.5'', 7200rpm, 32 MB, 3.0 Gb/s, NCQ SATA HDD
Chipset	Intel® C612 express Chipset
CPU	Intel Xeon E5-1620V4 4-Core, 8 Threads, 3.5GHz, 10MB Cache or similar
Configuration	Supports more than 80 endpoints
Indicators	LAN1 Link & Activity, LAN2 Link & Activity, Power, HDD
Dimensions (WxHxD)	437 mm x 89 mm x 648 mm
Weight	25 kg
Material	Steel, powder coated black
Mounting Options	2RU rack mounting, 660mm min rack depth
Power Input	(100 – 240) V a.c., (10 – 3.5) A a.c. 50-60Hz, IEC 60320 C14
Power Consumption	Redundant power supply capable of 740 W, 230 W (typical)
External connections	2 x LAN (1 Gb), 4 x USB 2.0, VGA, RS-232, IPMI
Environment	Indoors
Operating Temperature	(5 – 35) °C
Operating Humidity	(8 – 90) % (non condensing)
Non-operating Temperature	(-40 – +60) °C
Non-operating Humidity	(5 – 95) % (non condensing)

CONTROLLER COMPARISON GUIDE

TCH-2MXH

JSC-5L

JSC-5L-AEC

ENDPOINT LIMITATION			
	<80	80>	80>
INCLUDED SOFTWARE			
JELinux	✓	✓	✓
JCCP	✓	✓	✓
Audio Echo Cancellation			✓
OPTIONAL SOFTWARE			
Intercom Report Server	✓	✓	✓
High Level Interface	✓	✓	✓
Event Controller	✓	✓	✓
Voice Annunciator	✓	✓	✓
High Availability Package	✓	✓	✓
DAR	✓	✓	✓
SIP Proxy	✓	✓	✓

VIRTUAL CONTROLLERS

Jacques' IP communications system software is made available to run in virtual environments on hosts supplied by the client. Offering full system functionality to the user, with increased flexibility and usability, virtual controllers can be integrated into essentially any existing networks and infrastructure.

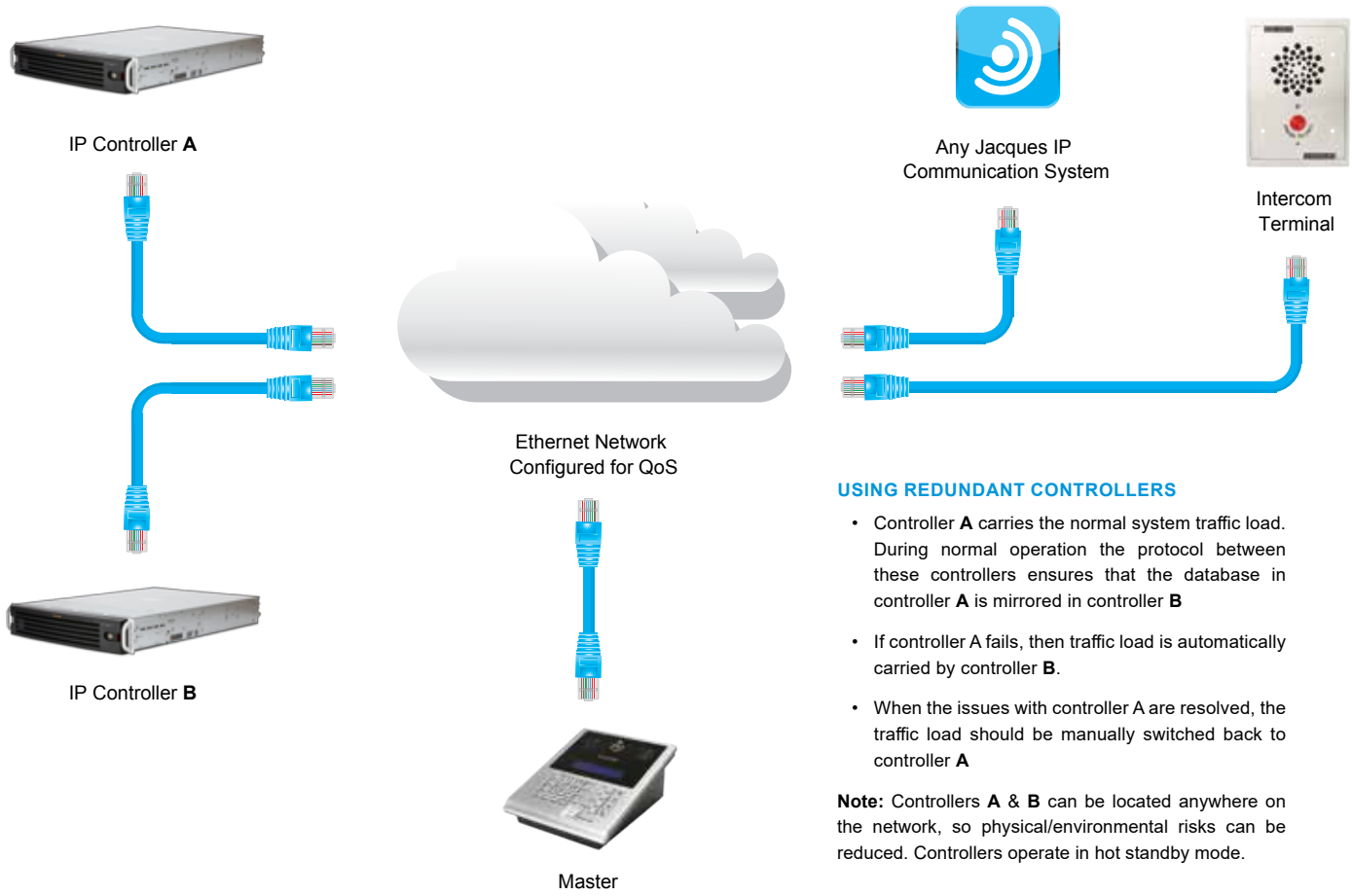
REDUNDANT CONTROLLERS

Jacques redundant controller solution is ideal for industry applications where continual, uncompromised communication and surveillance is critical. The primary purpose of redundancy is to reduce the risk of an entire system failure due the failure of the primary controller (software or hardware). An IP communication system featuring redundant controllers comprises of a primary and secondary controller, where the primary controller acts as the central point of contact, responsible for the entire network. In the case of a module, hardware or software failure, the secondary controller will automatically failover and connect with the endpoints to ensure continuous system operation.

Our onsite redundancy testing system, utilising 1000 endpoints, verifies that upon failure of the primary controller the secondary controller will failover and connect with the endpoints in less than one minute. Furthermore, the secondary controller is automatically updated with any changes made to the primary controller via UCARP protocols.

Though it is unlikely for Jacques hardware and/or software to fail due to our rigorous testing procedures, our redundancy solution dramatically reduces the risk of system failure, specifically for communication critical environments such as prisons, defence establishments or hospitals.

REDUNDANT CONTROLLERS DIAGRAM



USING REDUNDANT CONTROLLERS

- Controller **A** carries the normal system traffic load. During normal operation the protocol between these controllers ensures that the database in controller **A** is mirrored in controller **B**
- If controller A fails, then traffic load is automatically carried by controller **B**.
- When the issues with controller A are resolved, the traffic load should be manually switched back to controller **A**

Note: Controllers **A** & **B** can be located anywhere on the network, so physical/environmental risks can be reduced. Controllers operate in hot standby mode.

DISTRIBUTED NETWORKS

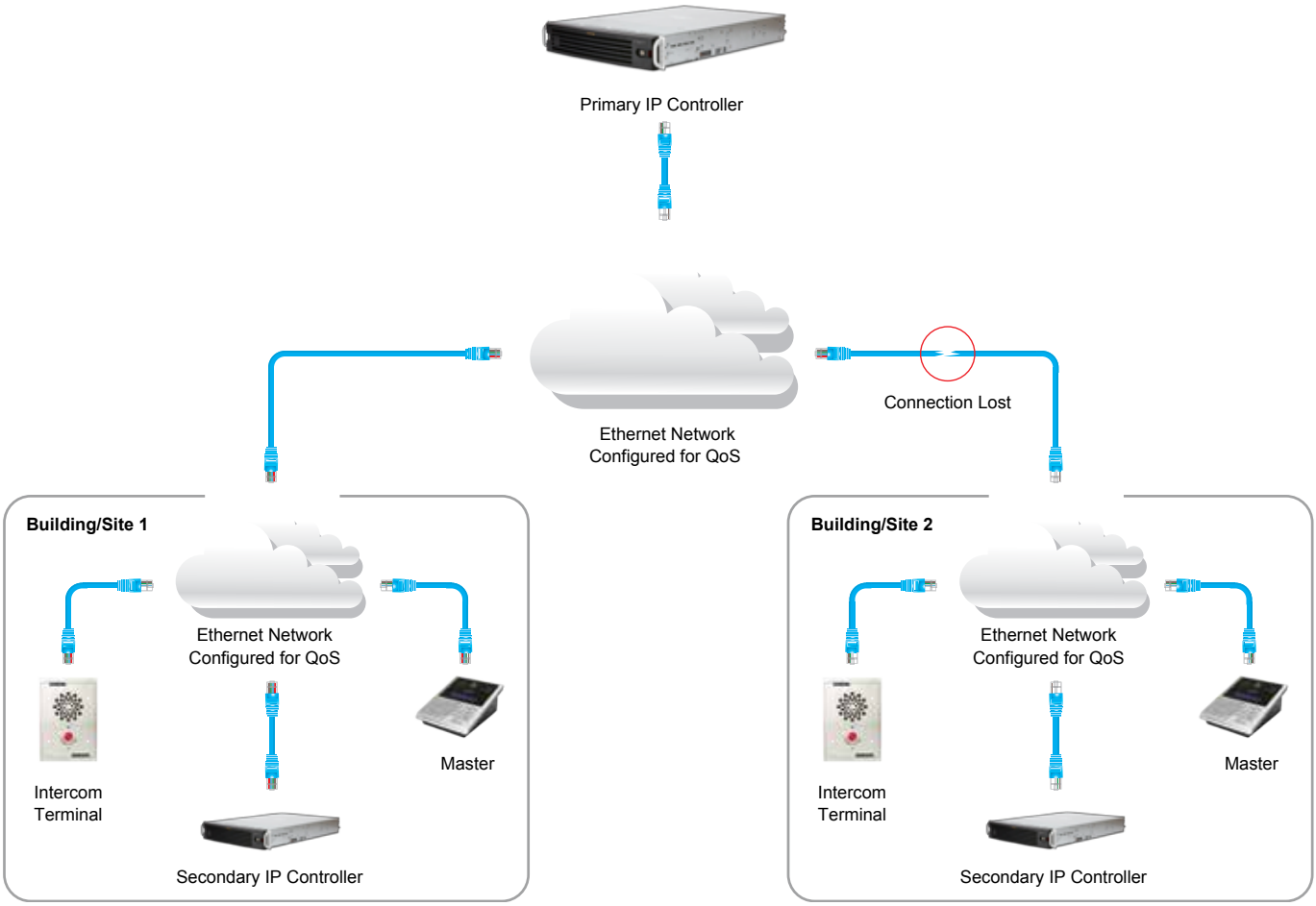
The Jacques IP Communications System supports distributed networks which can be located at different sites.

The system has hot standby, redundant controllers at site A. Multiple transmission links provide for alternate routing of network traffic should any link fail. In addition, there is a local controller at each remote site. Should all transmission links fail then the local site can operate independently.

Furthermore, if a master should fail or be unanswered at a remote site, calls can be routed to alternate sites on the wide area network (WAN).

Note: A redundant controller setup is not limited to two controllers: multiple controllers are supported, making the setup a valuable asset to distributed networks.

DISTRIBUTED NETWORKS DIAGRAM

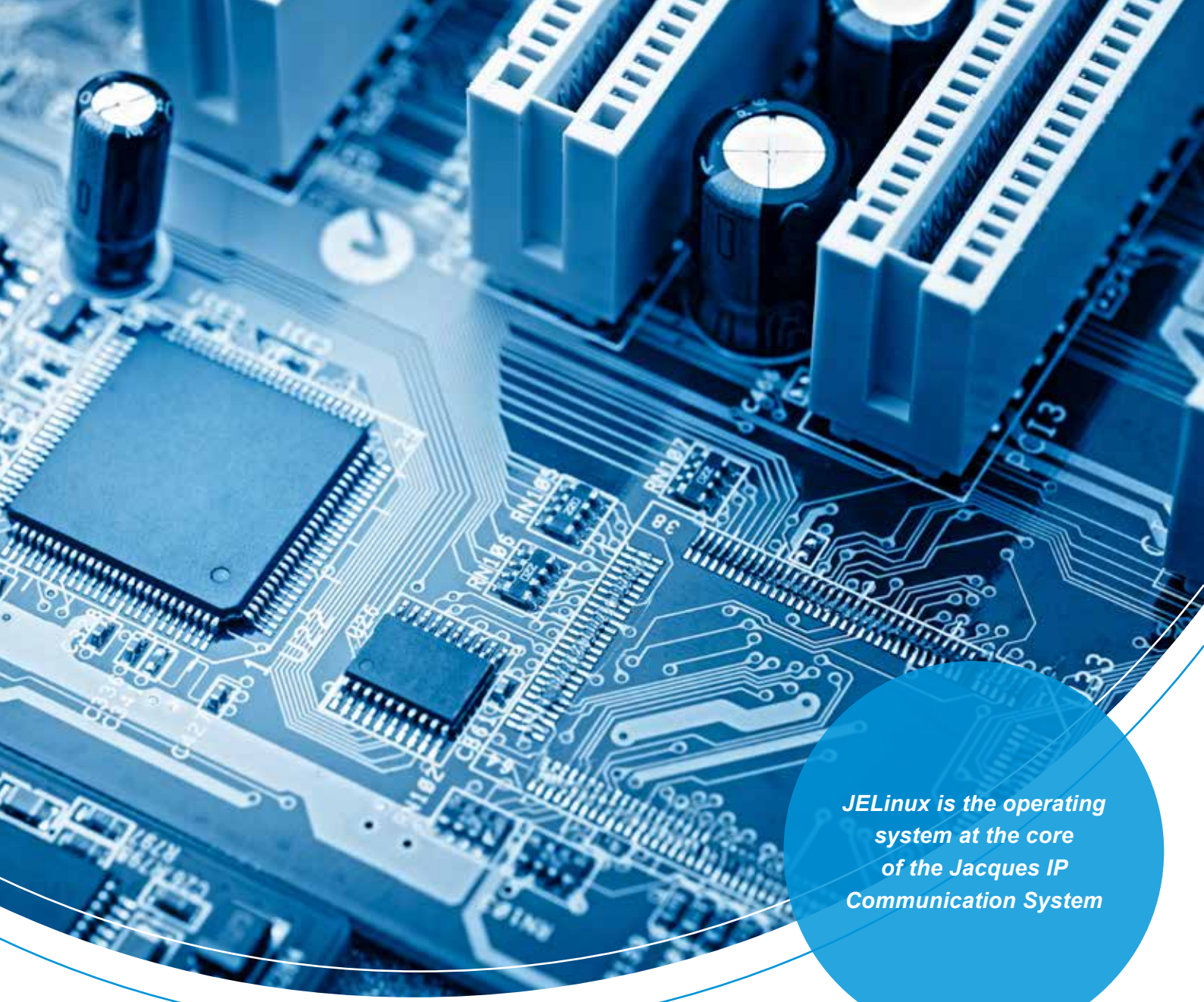


NORMAL OPERATION

Under normal operation, all secondary controllers, master stations and intercom terminals communicate directly with the primary controller. During normal operation any master station or intercom terminal that attempts to connect to its secondary controller will be rejected.

CONNECTION LOST – DISRUPTED OPERATION

- The Secondary IP Controller at building/site 2 detects a lost network connection to the Primary IP Controller
- The Secondary IP Controller at building/site 2 will now accept connections from master stations and intercom terminals within it's network
- The master stations and intercom terminals at building/site 2 will detect the lost connection to the Primary IP Controller and automatically connect to their Secondary IP Controller
- Building/Site 1 continues to operate as normal with connection to the Primary IP Controller



JELinux is the operating system at the core of the Jacques IP Communication System

JCCP

INCLUDED

JELinux

INCLUDED

INCLUDED SOFTWARE

Jacques software modules are designed and engineered to provide market driven features and to suit a variety of applications and system requirements.

JCCP

The Jacques IP Communication System uses the Internet Protocol (IP) suite for all control, audio and video communications between intercom and PA devices. Audio for intercom calls or public address announcements is streamed in digital form using the standard Real-time Transport Protocol (RTP). Control communication for initiating and terminating calls uses the Jacques Call Control Protocol (JCCP), which is specifically designed for Jacques intercom and public address systems. The JCCP software, loaded to our range of system controllers, is the 'hub' of the IP Communications System.

JELINUX

JELinux is the operating system at the core of the Jacques IP Communications System. This is a Linux based operating system. It allows users to monitor, view, filter and record events within our communication systems. 32-bit and 64-bit versions are available.

OPTIONAL SOFTWARE

EVENT CONTROLLER

PRODUCT CODE SOF148

Jacques Event Controller software provides simplified interfaces for the integration of external systems and products into the IP communications system. The Event Controller software also features highly configurable rules to match system events, simultaneous event triggers, alarms and device off-line events. The core of the Event Controller Software consists of configurable modules.

FEATURES

Standard handling of CCTV function

- Intercom-Activated-Video (IAV) – if a call is present at an intercom station, the associated CCTV camera will activate and provide video feed
- Audio-Follow-Video (AFV) – if a CCTV camera is selected, audio from the associated intercom station can be monitored

Interfaces to external third party equipment including but not limited to:

- Standard Modbus/TCP server and client
- Inner Range Concept 4000 Equipment, which includes:
  - Intelligent 4-Door Access Module
  - Big Expander Module
  - Reader Single Door Access Module
- ADAM relay module
- Highly configurable rules to match system events, such as call and button press events can trigger resulting event/relay actions. For example:
  - When a call is connected a relay can be triggered to unlock a door or turn on a light
  - A pre-recorded announcement can be broadcast through Help Point Unit's (HPU) speakers with the simple push of the HPU Information button (requires Voice Annunciator Software)
- Simultaneous event triggers - one event can trigger multiple other events / relays, for example:
  - Open the front door and switch on the front light simultaneously
  - Trigger the lobby door's relay and enable the lift button for a specified floor simultaneously
- Threshold Alarm Monitor. Intercom audio can be monitored for excessive noise, and upon reaching a preset audio threshold an alarm/call can be triggered
- Alarms and device off-line events
  - A PC Master GUI, which can monitor the status of Jacques Intercoms, will indicate an alarm when the status of each Jacques intercom goes offline, is unplugged or power cycling. An alarm will also be activated if a short circuit occurs on the speaker lines

DAR

PRODUCT CODE SOF196

KEY FUNCTIONALITIES

- Interfaces call audio to third party recording devices (digital, SIP or analogue)
- Streams background music/entertainment through intercom devices and PA speakers
- Echo cancellation for full duplex communication (JEM2 & JEM2+ audio devices)
- Visual audio monitoring, in conjunction with Jacques Graphical User Interface (GUI)
- Threshold Alarm Monitoring identifies and displays threshold alarms

FEATURES

- Output recording for up to 32 conversations simultaneously
- Additional DAR software can be added to a system via dedicated servers to provide more channels
- Analogue audio outputs that can be used with standard telephony recording equipment such as digital voice loggers
- Operation is automatic; the software runs under the control of the intercom system server
- Clear recording of talk/listen with Press-to-Talk control
- No additional cabling is required to record conversations from intercom devices
- Each intercom station can be assigned its own record output

INTERCOM REPORT SERVER

PRODUCT CODE SOF102

The Intercom Report Server optional software package has been specifically designed to provide a detailed and accurate reporting of live activities across the Jacques IP Communications System. Detailed reporting of system operation and traffic aids in accurate and efficient fault diagnosis, preventative system maintenance, network management via traffic monitoring and automatic report generation, document creation and report distribution.

FEATURES

- Logging of intercom call activity, call summary information and fault events
- Dynamic view of events to monitor the system in real time
- Multi-user access to the event log through a web interface
- User access control with multi-level permission rights and password protection
- Search and filter functions, allowing events to be retrieved based on time and date range, event type and identification of the system endpoints
- Report generation and printing
- Data export to CSV and HTML files

VOICE ANNUNCIATOR

PRODUCT CODE SOF149

The Voice Annunciator software package is a digital message store used to manage pre-recorded announcement audio files, which can be directed to any individual or group of endpoints within the Jacques IP Communications System. Announcements can be created from any master station, PC workstation or from professional sound recordings and stored as sound files on the network.

These announcements can be broadcast throughout the system using rule based permissions and system hierarchy. The Voice Annunciator software can also be used in conjunction with the Event Controller software to provide scheduled announcements – ideal for transport, public safety and education applications.

FEATURES

- A digital message store provides digital storage of announcements with no fixed limits on duration or capacity
- Announcements can be streamed to any intercom or public address device in the system, or any group of zones
- Announcements can be created from any master station, PC workstation or from professional sound recordings and stored as conventional wave files on the network
- Rule based permissions control access to announcement playback and recording
- Concurrent playback and recording of multiple announcements
- Announcements may be shared or distinct to each originating intercom station
- Priority queuing of announcements
- Automatic muting of background music during a public address announcement or intercom call
- Standard Microsoft Windows wave files are used for announcements
- Directory support on master stations
- Supports audio streaming in RTP protocol, support for multicast, IGMPv2 and Diffserv standard for Quality-of-Service (QoS)
- Online addition, deletion and update of audio files in the digital message store at any time from the intercom system TCP/IP network

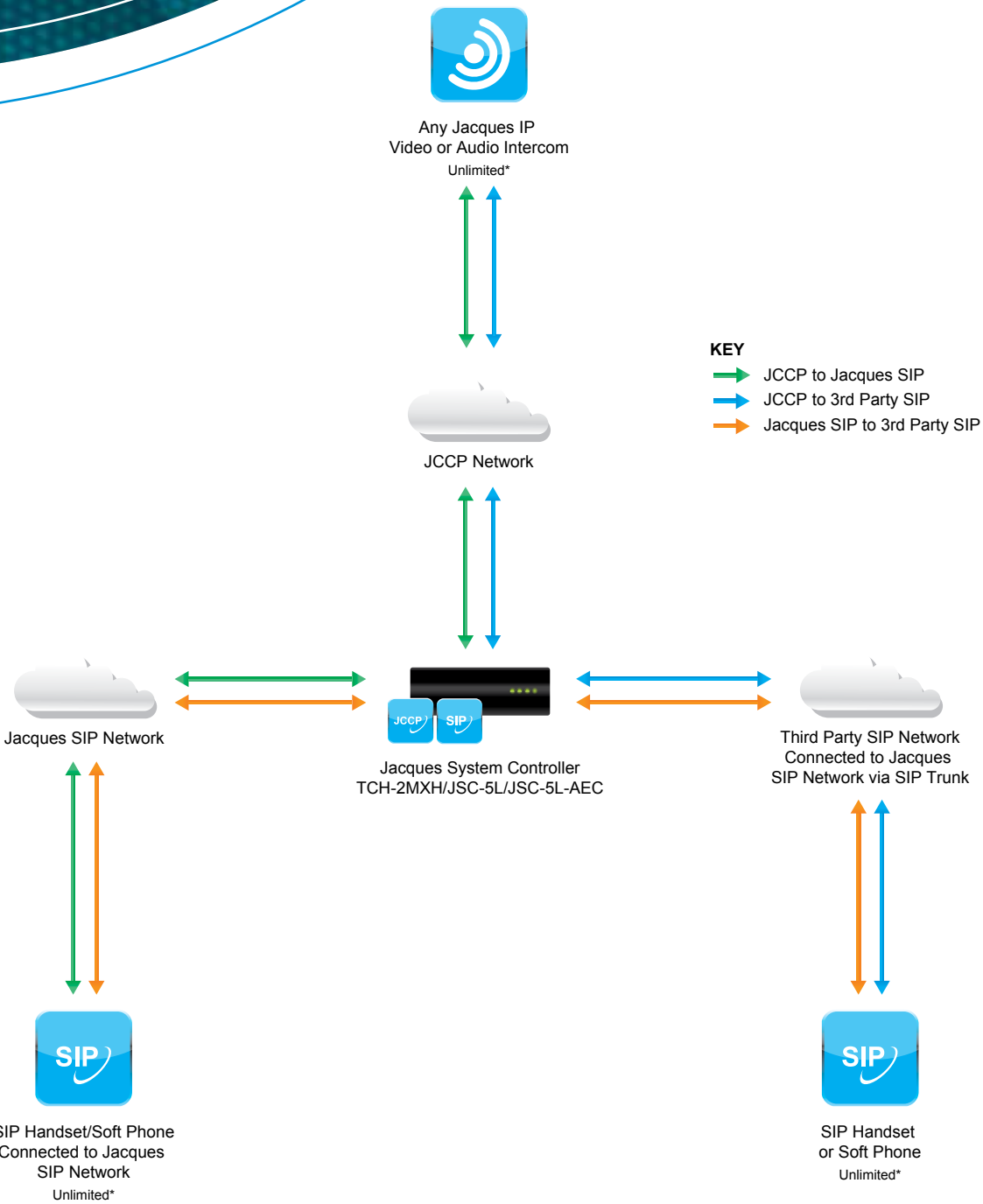
HIGH AVAILABILITY PACKAGE

PRODUCT CODE SOF195A

The Jacques High Availability Package in conjunction with two or more system controllers (TCH Series) provides system redundancy against the complete loss of one of the system controllers. Operating in an active/standby configuration, the primary system controller hosts all services while the backup server remains idle under normal conditions. If the primary system controller fails, the High Availability software package ensures the backup system controller takes over all services. The backup system controller remains active until a switchover or failover occurs. This allows the primary controller to be inspected and any faults diagnosed with minimum disruption to services. Additionally, the software module ensures the primary and backup controllers monitor each other's state

For further detail, see Redundant Controllers.

SIPDIAGRAM



*Virtually unlimited. Dependent on server configuration and network bandwidth.

SIP

PRODUCT CODE SOF202

Jacques SIP Proxy Software module is an intermediate interface loaded onto a Jacques System Controller that allows Jacques intercom devices to connect to SIP compatible phones and PABXs.

The interface implements RFC 3261 – Core Session Initiation Protocol to transfer, convert and filter the communication (e.g. calls, streaming media) from the Jacques communication system devices and make it available to third party SIP systems and devices.

FEATURES

- Physical and soft SIP devices can be directly registered to the Jacques system without the need of a third party SIP PBX
- A user at a Jacques IP intercom may establish, conduct and terminate an audio call to a SIP telephony device directly connected to the Jacques system running our SIP software or connected via an external SIP server/PBX
- A user at a SIP telephony device either connected directly to the Jacques system running our SIP software or connected via an external SIP server/PBX may establish, conduct and terminate an audio call to Jacques' IP endpoints
- A SIP IP telephone can initiate the operation of relays onboard Jacques intercoms via DTMF, during a connected call
- Switch Jacques IP master station to night mode whereby calls are diverted to a SIP phone after hours (may also require Jacques Event Controller software)
- Support for bridge calling allowing a Jacques device to dial multiple SIP devices however only allowing one to answer and perform a call
- SIP trunking to external SIP PBX/servers (with or without digest authentication)
- Support for numerical prefix and remote ID details when defining a SIP trunk
- Supports G.711 U-Law codec only

*Dependent on server configuration and network bandwidth

JAS

PRODUCT CODE SOF149

Jacques Announcement Scheduler (JAS) is a public address and bell scheduling interface that runs on a Jacques system controller. The JAS interface allows for the uploading of audio files (tones, bells, chimes, songs and/or pre-recorded announcements) for use and broadcast throughout the Jacques IP Communications System (650 series).

Schedules allow the user to build a timetable for the broadcast of audio files at allocated times across all or selected zones.

Schedules are assigned to days, weeks or months according to the audio broadcast requirements of the site.

Daily management of the system is via the calendar where users can assign, view and remove schedules on a particular day or date range.

HIGH LEVEL INTERFACE (HLI)

PRODUCT CODE SOF116

Jacques boasts a number of High Level Interfaces (HLI's) to industry leading, third party systems, enabling the functions of our system to integrate with numerous building and security management, telephony, CCTV and access control systems.

The Jacques High Level Interface Software permits third parties to enhance their own programs to interact, control and respond to the Jacques IP Communications System. Provided to third party developers as a windows 32-bit or 64-bit Dynamic Link Library, Jacques can make events available from our system to a client's application through event handlers. This allows third-party system designers to communicate with the Jacques IP Communication System without having to implement network communications or low-level protocol message handling.

FEATURES

System Controller Connection Status - The HLI will be polled regularly by the system controller and will enter a failure mode when the poll from the controller is not received for an interval of time.

Call Queue Display - All calls in the intercom system are queued in priority order by the controller and the following call queue information can be passed through the HLI:

- Total number of calls in the queue
- Details of each incoming call: call-id, queue position, priority and the id, tag, name, location of the originating intercom station
- Additional site specific information as required, for example associated CCTV camera number or additional location information

Call Notification Display - The HLI can receive call information for all calls in the intercom system, including those that may not directly involve the HLI as an intercom master station. The information passed is the same as the call queue display.

Call Originate - The HLI can originate calls as an intercom master station using the tag assigned to each intercom station to initiate the call

Call Answer - The HLI can answer a specific call in the queue of calls by specifying the call-id or tag of the originator

Call Answer Next Call - The HLI can answer the next queued call according to the priorities assigned to each call by the intercom system

Call Originate, Master Call - The HLI can originate a call to the next available master station above it in the zone hierarchy

Call Originate, Monitor - The HLI can originate a call to monitor an intercom terminal to receive audio from the endpoint without any indication at the intercom that the audio path is open.

Call Originate, Group Call - The HLI can originate a group call to a group of intercom terminals simultaneously for a public address call. Any combination of pre-defined intercom groups can be selected for a group call.

Call Originate, Public address - The HLI can originate a call to the PA controller/ amplifier system. Any combination of pre-defined PA zones may be selected for a public address call.

Call End - The HLI can terminate any call that it is connected to, regardless of the call type (master call, monitor, group call, PA)

INTEGRATIONPARTNERS

Honeywell

GALLAGHER

SAAB

www.innerrange.com
inner range
Intelligent Security Solutions

PACOM

CISCO

AVIGILON

VERINT

BOSCH

C-Bus
ENABLED PARTNER

AVAYA

Johnson Controls

LENEL

Genetec

VVS

vidsys

GEUTEBRÜCK
Competence in Video Security

CNL

Integration currently in development with Milestone.

Call Hold - The HLI can place a connected call on hold, returning it to the call queue so that it can perform other call functions. The held call can be reconnected by one of the call answer functions.

Call Forward - The HLI can forward a connected call, or any call in its call queue to any other master station.

Remote Intercom Master Station - The HLI can set its state to “remote”. When remoted, all calls queued for it will be diverted to the next available master station in multi-level zone hierarchy.

General Purpose Input/Output (GPIO) Control - The HLI can control the general purpose inputs/outputs/relay outputs on intercom terminals or dedicated relay module devices.

Alerts and Alarms Interface - The HLI can receive alerts and alarms from the system for logging or the attention of operators, including:

- Device offline or self-test faults
- Tamper alarms
- Isolate timeouts warning

Event Logging Interface - The HLI can receive event logging information from the system, including:

- Event log records
- Intercom call activity logging (call time and date of the call, call ring time, call duration)

View/Edit Site State - The HLI can view or change the intercom system site state, including:

- List of all intercom devices in the system
- Endpoint ID
- Name
- State (online/offline/isolate/remote)
- Assigned call priority
- Tag
- Isolated state of any intercom station. Setting an intercom device to the isolate state prevents it from making calls in the system. This can be used to prevent nuisance calls
- Remote state of any intercom master stations
- Settings for auxiliary audio channels (background music) for output at intercom terminals
- The date and time of the system controller clock

Site Specific Information Distribution - The HLI can receive site specific information from the controller, such as GPS information, temperature or other system statuses.

JACQUES

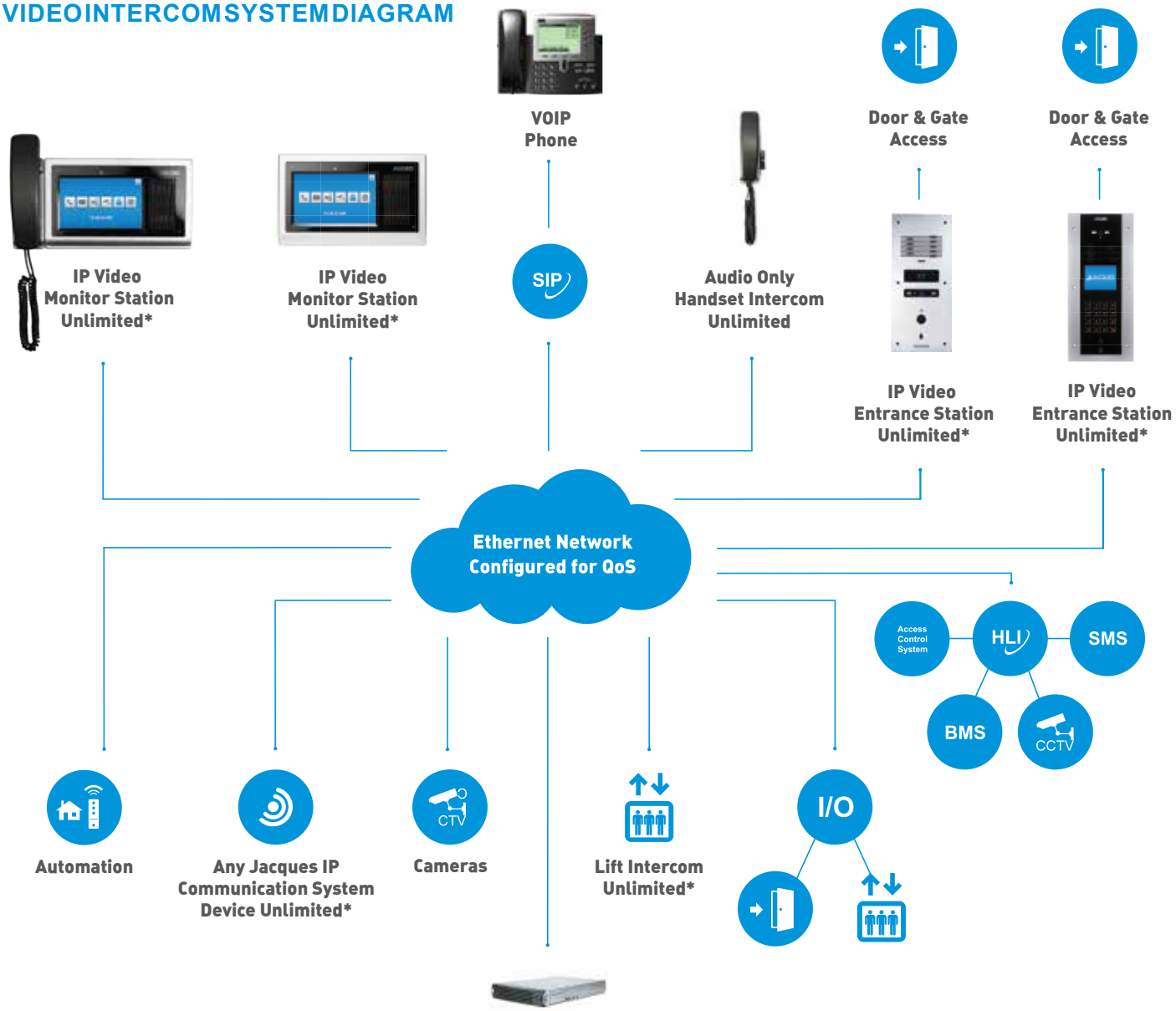
VIDEO INTERCOM SYSTEM

VIDEO INTERCOM SYSTEM

The Jacques IP Video Intercom System combines style with function using true IP technology. The stylish intercom stations with camera allow for video calling to entrance and monitor stations within our integrated IP communications system. This allows for swift system expansion, with the flexibility to satisfy every client, every time.

As with all Jacques IP communication systems, our video intercom system fully integrates to numerous third party systems including CCTV, building and security management, digital telephony and access control systems. This ensures a Jacques IP Video Intercom System transcends client expectations as it seamlessly and stylishly integrates with a large number of applications, including commercial, residential, health, public safety and transport.

VIDEO INTERCOM SYSTEM DIAGRAM



FEATURES

- Receive text messages from building manager/concierge/control room to video monitor stations.
- Receive missed caller image snapshot to video monitor station if call from entrance station is unanswered.
- SIP gateway between the IP video intercom system and SIP enabled systems/ devices, e.g. IP telephony systems including Avaya and Cisco.
- Third party IP CCTV camera streams can be selected and viewed on demand and in real time via the video monitor station.
- Configurable relay modules exist on intercom terminals to activate external equipment - control doors, boom gates, lights or signal CCTV camera presets.
- Call activity and system events recorded to an event log database for call accounting, incident reports or fault diagnosis.
- Fully supported third party integration via High Level Interface (HLI) to systems such as CCTV camera, access control, lift control, building and security management systems.

RESIDENTIAL

The Jacques video intercom system fits perfectly into any residential environment, including apartment buildings and housing estates. The system can integrate to fire stair and lift IP intercom solutions and include products such as IP video intercom terminals, Lobby Stations and Video Monitor Stations. The stylish, slim-line designed devices not only provide a wide variety of unique features and functions, but they can be configured and customised to meet the requirements of each residential building or housing estate. Ultimately this video intercom system offers comprehensive communication security, suitable to residential applications.

MONITOR STATION VMS-750 (OPTIONAL JHS-1)

PRODUCT CODE 51336, 51432

FEATURES

- Text message facility from concierge/building manager*
- Caller snapshot image taken, and made visible on monitor station, when call is unanswered from entrance station
- View CCTV footage on monitor station*
- Duress calling to concierge/control room/building manager*
- Privacy enable/disable feature to mute calling
- Intercommunication between devices*
- Easy to use, 7" intuitive touchscreen interface
- Power saving mode while unit not in use

OPTIONS

- Ergonomic handset - black (JHS-1)
- Customisable GUI

SPECIFICATIONS

Screen	7" TFT colour LCD, 16:9 aspect ratio Active area: 152 mm x 91 mm Resolution 800 x 480, 18-bit RGB LED backlight (white) Contrast ratio: 400 Brightness: 300 cd/m² Viewing angle: 120° V, 140° H
Speaker	2 x 8 Ω 2 W
Speaker Amplifier	50 Hz – 7 kHz (output circuit frequency response -3 dB), 2.5 W
Max. Acoustic Output	88 dBSPL @ 1 m, 0 dBFS 1 kHz (non-clipped) sine wave signal
Microphone	Electret condenser, omnidirectional, sensitivity -56 dB 50 Hz – 7 kHz (input circuit frequency response ±3 dB mic)
Audio Streaming Bandwidth	256 kb/s both ways
Control Buttons	Unlimited* soft buttons, fully customisable GUI control
Auxiliary Functions	Relay contacts (1 x NO/NC), light sensor, privacy mode
Power Input	IEEE 802.3af Power over Ethernet (PoE) Auxiliary power input: (12 - 32) V d.c.
Power Consumption	10 W max. (2.5 W standby)
Operating Temperature	(0 - 50) °C
Operating Humidity	(20 - 90) % relative humidity (non-condensing)
Cabling	LAN: 4 pair UTP CAT-5/6, multi-strand, 24 AWG, max. 100 m Power: Figure 8, 0.75 mm² conductors
Dimensions (WxHxD)	280 mm x 172 mm x 33 mm (VMS-750) 340 mm x 172 mm x 64 mm (incl. JHS-1)
Weight	1.2 kg (VMS-750) 1.5 kg (incl. JHS-1)
Material	Plated zinc, acrylic, ABS, zinc plated steel chassis
Finishes	Satin chrome surround, black acrylic screen bezel
Environment	Indoor use only
Mounting Options	Wall mount kit (WMK-1) (included), surface mount backbox (SWE-13/SWE-14), desk mount kit (DMS-1/DMS-2)
Fixings	Clips to mounting options and retained with 1 x M3 CSK screw

**Dependent on server configuration and network bandwidth*

The Jacques IP Video Intercom System combines style with function using true IP technology

ENTRANCE STATION VES-75K/VES-741/VES-742

PRODUCT CODE 51335, 51423, 51468

VES-75K

VES-741

VES-742

FEATURES

Attractive slimline design

Wide angle camera

Two configurable relays that can control lights, gate/door access etc.

Insect resistant microphone/speaker

VES-75K	VES-741	VES-742
3.5” LCD screen	316 type stainless steel construction	316 type stainless steel construction
Backlit keypad	Weather resistant, with optional rain cover	Weather resistant, with optional rain cover
Relay enabled by entering a PIN code	Call one master/monitor station	Call two master/ monitor stations

SPECIFICATIONS

Screen (VES-75K only)	3.5” TFT colour LCD, 4:3 aspect ratio Active area: 70 mm x 53 mm Resolution: 320 x 240, 24-bit RGB LED backlight (white) Contrast ratio: 400 Brightness: 350 cd/m² Viewing angle: 120° H, 115° V
Camera	Type: 1/3” CCD image sensor, LED illumination Resolution: 520 TVL Sensitivity: 0.1 lux Functions: AES, AGC, BLC, AWB, Lens: f = 2.5 mm, f 2.0 Viewing angle: 75° V, 105° H
Speaker	1 x 4 Ω 3 W (VES-75K) 1 x 4 Ω 1 W (VES-741)
Speaker Amplifier	50 Hz – 7 kHz (output circuit frequency response -3 dB), 2.5 W
Max. Acoustic Output	88 dBSPL @ 1 m, 0 dBFS 1 kHz (non-clipped) sine wave signal
Microphone	Electret condenser, omnidirectional, sensitivity -56 dB 50 Hz – 7 kHz (input circuit frequency response ±3 dB mic)
Audio Streaming Bandwidth	256 kb/s both ways
Control Buttons	4 x 4 cap-sense, backlit, touch keypad (VES-75K) 1 x piezo switch, black, 19 mm (VES-741) 2 x piezo switch, black, 19mm (VES-742)
Auxiliary Functions	Relay contacts (2 x NO/NC), power saving modes, light sensor
Power Input	IEEE 802.3af Power over Ethernet (PoE) Auxiliary power input: (12 - 32) V d.c.
Power Consumption	12 W max. (2.0 W standby) (VES-75K) 8.5 W max. (2.0 W standby) (VES-741)
Operating Temperature	(0 - 50) °C
Operating Humidity	(20 - 90) % relative humidity (non-condensing)
Cabling	LAN: 4 pair UTP CAT-5/6, multi-strand, 24 AWG, max. 100 m Power: Figure 8, 0.75 mm² conductors
Dimensions (WxHxD)	160 mm x 360 mm x 45 mm (VES-75K) 130 mm x 290 mm x 45 mm (VES-741)
Weight	1.9 kg (VES-75K) 1.6 kg (VES-741)
Material	Acrylic and satin chrome plated zinc (VES-75K) 316 stainless steel (3 mm) (VES-741)
Finishes	Bead blasted, electro-polished (VES-741)
Environment	Indoor and outdoor use
Vandal Resistant	Yes (VES-741 only)
Mounting Options	Flush mount backbox (FWE-15), surface mount backbox (SWE-12/SWE-9SS), rainhood (SRH-2)
Fixings	6 x M3 CSK screws (VES-75K) (included with purchase of backbox) 6 x M4 security torx screws (VES-741) (included with purchase of backbox)


Emergency!
Press Intercom
For Assistance

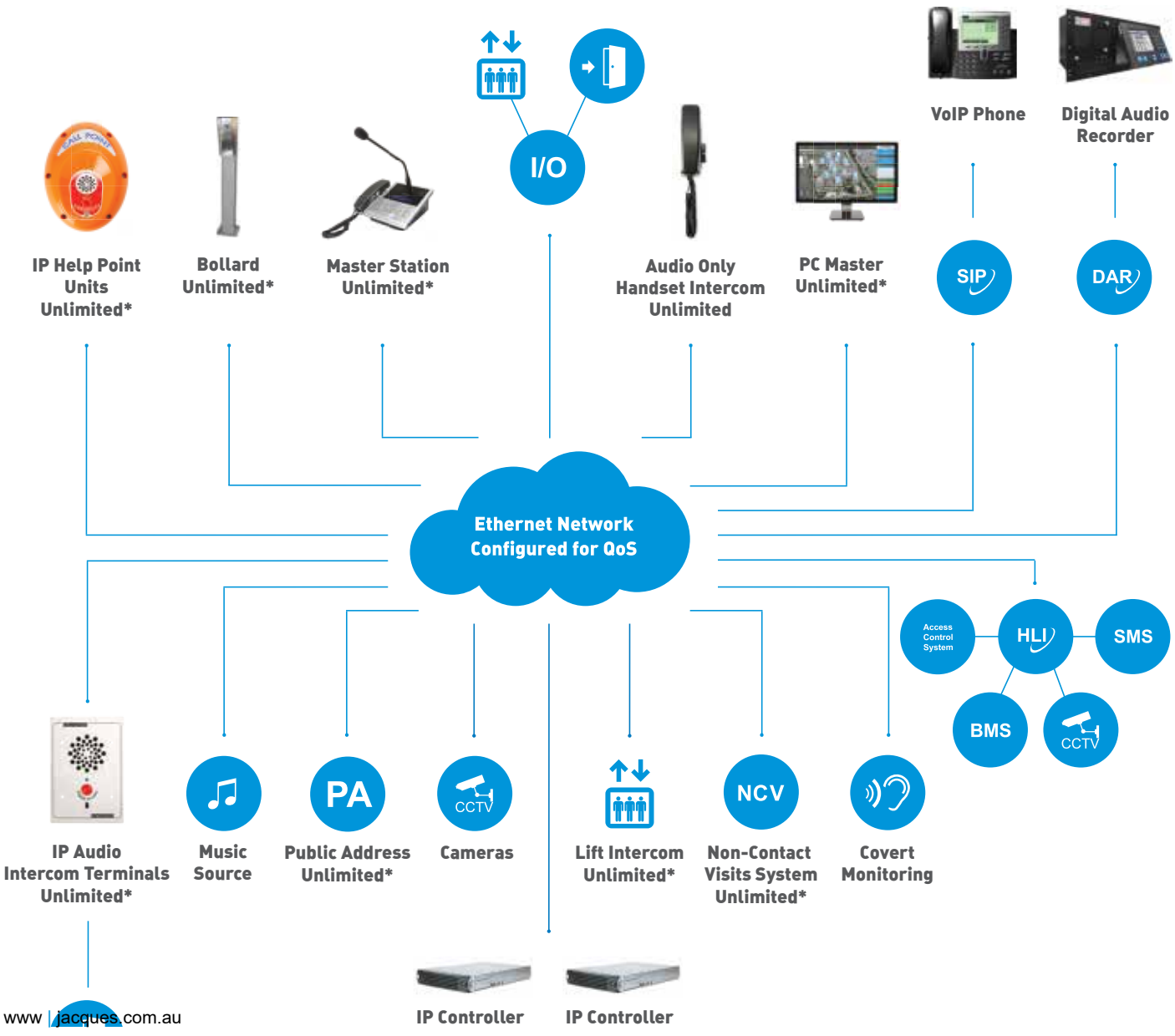

AUDIO
INTERCOM
SYSTEM

AUDIO INTERCOM SYSTEM

Designed with scalability, function and security in mind, the Jacques IP audio communication system can adapt to almost any sized application where audio intercom and/or public address is required. Experts within the security intercom and communications market, Jacques' audio communication system will withstand the harshest environments while providing quality audio communication.

Functioning on true IP technology, Jacques audio communication system fully integrates to numerous third party systems including CCTV, building & security management, digital telephony and access control systems. See how our IP audio intercom system, together with our integration capabilities, can provide a robust, high traffic communications system suitable for your industry application.

AUDIO INTERCOM SYSTEM DIAGRAM



FEATURES

- Weather protected, robust and vandal resistant intercom terminals
- Available in a wide variety of sizes, styles and finishes, suitable for mounting in most locations
- Specialised features including covert monitoring, call recording and call isolation
- Continuous integrity, tamper and diagnostic tests
- Can receive multiple channels of streamed audio for in-house audio distribution
- Acoustic testing of intercom speaker and microphone
- Optional intercom terminal customisation
- Professional public address system

PRISON

The robust and vandal resistant audio intercom system is highly suited to prison environments, providing inmates and staff with a reliable communication system. The in-cell intercom terminals provide high definition and quality audio calling to and from central control rooms. In addition to covert audio monitoring, the intercom terminal can include cell entertainment options and with a number of different configurations available. The PC master station, a key aspect of the audio intercom system, allows staff to manage all intercom terminals within the complex as well as make public address announcements and facilitate the non-contact visits system.

IP MASTER INTERCOM STATION IPM-360/360H/360G/360GH

PRODUCT CODE 51516, 51533, 51534, 51535

FEATURES

Network communications are based around TCP/IP protocol suite

Static or dynamic IP address assignment. Dynamic Host Configuration Protocol (DHCP) is supported

IEEE 802.3af PoE support

Backlit display for reliable viewing in dark conditions

OPTIONAL ACCOMPANYING PRODUCTS

Handset (IPM-360H/IPM-360GH)

Flexible gooseneck microphone (IPM-360G/IPM-360GH)

Headset (AU144)

SPECIFICATIONS

Screen	2 x 16 characters LCD, blue background with white text
Speaker	2 x 8 Ω, 2 W RMS (power rating)
Speaker Amplifier	200 Hz – 7.1 kHz (output circuit frequency response -3 dB)
Max. Acoustic Output	84 dBSPL @ 1 m, 0 dBFS 1 kHz (non-clipped) sine wave signal
Output Distortions	0.2% (0.5 W RMS speaker output)
Microphone	Internal Omni-Directional Electret (IPM-360, IPM-360H) Uni-Directional Flexible Gooseneck (IPM-360G, IPM-360GH)
Audio Streaming Bandwidth	256 kb/s both ways
Control Buttons	Metal, vandal resistant, alphanumeric keypad and PTT switch
Auxiliary Functions	Relay contacts (1 x NO)
Power Input	(12 - 32) V d.c. or IEEE 802.3af Power over Ethernet (PoE)
Power Consumption	7 W max. (3.6 W standby)
Operating Temperature	(0 - 50) °C
Operating Humidity	(10 - 95) % relative humidity (non-condensing)
Cabling	4 pair UTP CAT-5/5e/6, multi-strand (0.2 mm²), max. 100 m
Dimensions (WxHxD)	193 mm x 103 mm x 236 mm (IPM-360/IPM-360G) 254 mm x 110 mm x 236 mm (IPM-360H/IPM-360GH)
Weight	2.1 kg (IPM-360) 2.5 kg (IPM-360H) 2.3 kg (IPM-360G) 2.7 kg (IPM-360GH)
Material	Face plate: satin chrome plated mild steel Base: powder coated mild steel Window: gloss acrylic
Environment	Indoor use only
Mounting Options	Desk mount only

PC MASTER STATION
PCC-650WIN/PCC-650WTS

PRODUCT CODE 51791, 51857

FEATURES

Complete intercom call handling functions

- Call queue display
- Call notification display
- Call originate
- Call answer/end/hold/forward
- Group calling
- Call monitoring
- Central control location for duress/concierge calls

Complete public address functionality

- Make live and pre-recorded announcements
- Broadcast tones, bells & alarms
- Visual display of PA zones (unlimited number of zones depending on controller)
- Selection and playback of recorded announcements
- Send text messages to video monitor stations

Diagnostics and reporting

- Alarm notifications including device state

Incoming call & connected call video from select video intercom devices

Video from third party CCTV cameras

Send text message notifications to Jacques Video Monitor Stations

Touchscreen compatible interface

Map, grid and database views

Upload multiple site maps to suit application/site

Customisable layout/functions to suit application requirements

CUSTOMISATION

Customisable GUI

PACKAGE CONTENTS

NUC Mini-PC (PCC-650WTS only)

Screen, keyboard & mouse (PCC-650WIN only)

Touchscreen (PCC-650WTX only)

SMI Console Package

SPECIFICATIONS

Screen	**PCC-650WIN** Size: 24” Resolution: 1920 x 1080 LED LCD Contrast ratio: 5000:1 Brightness: 250 cd/m² Viewing angle: 178° H, 178° V	**PCC-650WTS** Size: 22” Resolution: 1920 x 1080 LED LCD with PCAP touch screen Contrast ratio: 1000:1 Brightness: 250 cd/m² Viewing angle: 170° H, 160° V
Speaker	1 x 4 Ω, 3 W RMS (power rating)	
Speaker Amplifier	200 Hz - 7.0 kHz (output circuit frequency response -3 dB)	
Max. Acoustic Output	88 dBSPL @ 1 m, 0 dBFS 2.5 kHz (non-clipped) sine wave signal	
Microphone (SMI Console)	Microphone type: Gooseneck Output type: Uni-directional electret condenser Frequency response: 50 Hz – 18 kHz Sensitivity: -70 dB ± 3 dB @ 1 kHz	
Audio Streaming Bandwidth	256 kb/s both ways	
Mini PC	Intel NUC7i5BNH, 500GB HDD, 4GB RAM	

Jacques' fully customisable graphical user interface is the perfect solution for any application!

Power Consumption	18 W max. (PCC-650WIN) 25 W max. (PCC-650WTS) 5 W max. (SMI-3B1) 65 W max (NUC Mini-PC)
Power Input	(100 – 240) V a.c. power cords/adapters included, 2 power outlets required
Control Buttons	Stainless steel mechanical push-to-talk and volume buttons (SMI Console)
Auxiliary Functions	Relay contacts (1 x NO/NC) max. 2 A @ 24 V d.c.
Operating Temperature	(0 - 40) °C
Operating Humidity	(20 - 80) % relative humidity (non-condensing) (PCC-650WIN/PCC-650WTS) (10 - 90) % relative humidity (non-condensing) (SMI-3B1)
Cabling	UTP CAT-5/5e/6, multi-strand (0.75 mm²), max. 100 m
Dimensions	568 mm x 418 mm x 191 mm (PCC-650MX/PCC-650WIN) 551 mm x 392 mm x 193 mm (PCC-650MXTS/PCC-650WTS) 103 mm x 30.5 mm x 168 mm (SMI-3B1) 130 mm x 145 mm x 68 mm (SMI Console) 115 mm x 111 m x 32 mm (NUC Mini-PC)
Weight	5 kg (PCC-650WIN) 7.5 kg (PCC-650WTS) 0.35 kg (SMI-3B1) 1.5 kg (SMI Console) 0.7 kg (Mini PC)
Environment	Indoor use only
Mounting Options	VESA desk stand (Mini PC) Mounting bracket, DIN rail clips (SMI-3B1) Desk mount (SMI Console)

VSL-341W+

INTERCOM TERMINAL VSL-341W+

PRODUCT CODE 51656

FEATURES

- IP audio intercom terminal
- Standard PoE powered (IEEE 802.3af)
- Two configurable relays that can control lights, gate/door access etc.
- Tamper detection and attempted device removal notification
- Automated testing of speaker and microphone
- Marine grade 316 stainless steel face plate
- Microphone aperture deters insect nesting and water beads
- Water and vandal resistant

CUSTOMISATION

- Call button colour
- Call instruction etching

SPECIFICATIONS

Speaker	1 x 4 Ω, 1 W RMS (power rating)
Speaker Amplifier	50 Hz - 7 kHz (output circuit frequency response -3 dB), 2.5 W
Max. Acoustic Output	88 dBSPL @ 1 m, 0 dBFS 1 kHz (non-clipped) sine wave signal
Speaker Hole Size	42 x 4 – 7 mm Ø holes
Microphone	Electret condenser, omnidirectional, sensitivity -56 dB 50 Hz - 7 kHz (input circuit frequency response ±3 dB mic)
Microphone Hole Size	1 x “koala nose”, 6 x 10 mm
Audio Streaming Bandwidth	128 kb/s one way, 256 kb/s both ways
Control Buttons	1 x piezo switch, red, 19 mm
Auxiliary Functions	Relay contacts (2 x NO/NC), 30 V d.c./2 A Tamper detection and attempted device removal notification Automated testing of speaker and microphone
Power Input	IEEE 802.3af Power over Ethernet (PoE) (cannot be locally powered)
Power Consumption	4.5 W max. (1.6 W standby) PoE Class 2 (3.84-6.49) W
Operating Temperature	(0 - 55) °C
Operating Humidity	(10 - 95) % relative humidity (non-condensing)
Cabling	4 pair UTP CAT-5/6, multi-strand, 24 AWG, max. 100 m
Dimensions (WxHxD)	130 mm x 290 mm x 58 mm
Weight	0.85 kg
Material	316 stainless steel (2 mm)
Finishes	Linish
Environment	Indoor and outdoor
Vandal Resistant	Yes; strong front panel, speaker and microphone aperture vandal protected
Mounting Options	Flush mount backbox (FWE-1), surface mount backbox (SWE-1/SWE-9), rainhood (SRH-2)
Mounting Holes	6 x 5 mm Ø screw holes
Fixings	6 x M4 security torx screws (included with purchase of backbox)

INTERCOM / IP PA TERMINAL VSL-350+

PRODUCT CODE 51569

FEATURES

- IP audio intercom terminal
- Standard PoE powered (IEEE 802.3af)
- Two configurable relays that can control lights, gate/door access etc.
- Tamper detection and attempted device removal notification
- Automated testing of speaker and microphone
- No call button, ideally suited for non-contact visits systems, ticket window booths or IP PA applications
- Water and vandal resistant

SPECIFICATIONS

Speaker	1 x 4 Ω, 1 W RMS (power rating)
Speaker Amplifier	50 Hz - 7 kHz (output circuit frequency response -3 dB), 2.5 W
Max. Acoustic Output	88 dBSPL @ 1 m, 0 dBFS 1 kHz (non-clipped) sine wave signal
Speaker Hole Size	42 x 4 – 7 mm Ø holes
Microphone	Electret condenser, omnidirectional, sensitivity -56 dB 50 Hz - 7 kHz (input circuit frequency response ±3 dB mic)
Microphone Hole Size	1 x 2.5 mm Ø hole
Audio Streaming Bandwidth	128 kb/s one way, 256 kb/s both ways
Auxiliary Functions	Relay contacts (2 x NO/NC), 30 V d.c./2A Tamper detection and attempted device removal notification Automated testing of speaker and microphone
Power Input	IEEE 802.3af Power over Ethernet (PoE) (cannot be locally powered)
Power Consumption	4.5 W max. (1.6 W standby) PoE Class 2 (3.84-6.49) W
Operating Temperature	(0 - 55) °C
Operating Humidity	(10 - 95) % relative humidity (non-condensing)
Cabling	4 pair UTP CAT-5/6, multi-strand, 24 AWG, max. 100 m
Dimensions (WxHxD)	125 mm x 180 mm x 58 mm 67 mm min. mounted depth
Weight	0.59 kg
Material	304 stainless steel (2 mm)
Finishes	Linish
Environment	Indoor and outdoor
Vandal Resistant	Yes; strong front panel, speaker and microphone aperture vandal protected
Mounting Options	Flush mount backbox (FWE-14), surface mount backbox (SWE-6/SWE-4SS), rainhood (SRH-1)
Mounting Holes	4 x 4.5 mm Ø screw holes
Fixings	4 x M4 security torx screws (included with purchase of backbox)

VSL-351+

INTERCOM TERMINAL VSL-351+

PRODUCT CODE 51612

FEATURES

- IP audio intercom terminal
- Standard PoE powered (IEEE 802.3af)
- Two configurable relays that can control lights, gate/door access etc.
- Tamper detection and attempted device removal notification
- Automated testing of speaker and microphone
- Single call button
- Water and vandal resistant

CUSTOMISATION

- Call button colour
- Call instruction etching

SPECIFICATIONS

Speaker	1 x 4 Ω, 1 W RMS (power rating)
Speaker Amplifier	50Hz - 7kHz (output circuit frequency response -3 dB), 2.5 W
Max. Acoustic Output	88 dBSPL @ 1 m, 0 dBFS 1 kHz (non-clipped) sine wave signal
Speaker Hole Size	42 x 4 – 7 mm Ø holes
Microphone	Electret condenser, omnidirectional, sensitivity -56 dB 50Hz - 7 kHz (input circuit frequency response ±3 dB mic)
Microphone Hole Size	1 x 2.5 mm Ø hole
Audio Streaming Bandwidth	128 kb/s one way, 256 kb/s both ways
Control Buttons	1 x piezo switch, red, 19 mm
Auxiliary Functions	Relay contacts (2 x NO/NC), 30 V d.c/2 A Tamper detection and attempted device removal notification Automated testing of speaker and microphone
Power Input	IEEE 802.3af Power over Ethernet (PoE) (cannot be locally powered)
Power Consumption	4.5 W max. (1.6 W standby) PoE Class 2 (3.84-6.49) W
Operating Temperature	(0 - 55) °C
Operating Humidity	(10 - 95) % relative humidity (non-condensing)
Cabling	4 pair UTP CAT-5/6, multi-strand, 24 AWG, max. 100 m
Dimensions (WxHxD)	125 mm x 180 mm x 58 mm 67 mm min. mounted depth
Weight	0.59 kg
Material	304 stainless steel (2 mm)
Finishes	Linish
Environment	Indoor and outdoor
Vandal Resistant	Yes; strong front panel, speaker and microphone aperture vandal protected
Mounting Options	Flush mount backbox (FWE-14), surface mount backbox (SWE-6/SWE-4SS), rainhood (SRH-1)
Mounting Holes	4 x 4.5 mm Ø screw holes
Fixings	4 x M4 security torx screws (included with purchase of backbox)

VSL-351W+

INTERCOM TERMINAL VSL-351W+

PRODUCT CODE 51680

FEATURES

- IP audio intercom terminal
- Standard PoE powered (IEEE 802.3af)
- Two configurable relays that can control lights, gate/door access etc.
- Tamper detection and attempted device removal notification
- Automated testing of speaker and microphone
- Marine grade 316 stainless steel face plate
- Microphone aperture deters insect nesting and water beads
- Single call button
- Water and vandal resistant

CUSTOMISATION

- Call button colour
- Call instruction etching

SPECIFICATIONS

Speaker	1 x 4 Ω, 1 W RMS (power rating)
Speaker Amplifier	50 Hz - 7 kHz (output circuit frequency response -3 dB), 2.5 W
Max. Acoustic Output	88 dBSPL @ 1 m, 0 dBFS 1 kHz (non-clipped) sine wave signal
Speaker Hole Size	42 x 4 – 7 mm Ø holes
Microphone	Electret condenser, omnidirectional, sensitivity -56 dB 50 Hz - 7 kHz (input circuit frequency response ±3 dB mic)
Microphone Hole Size	1 x “koala nose”, 6 x 10 mm
Audio Streaming Bandwidth	128 kb/s one way, 256 kb/s both ways
Control Buttons	1 x piezo switch, red, 19 mm
Auxiliary Functions	Relay contacts (2 x NO/NC), 30 V d.c./2 A Tamper detection and attempted device removal notification Automated testing of speaker and microphone
Power Input	IEEE 802.3af Power over Ethernet (PoE) (cannot be locally powered)
Power Consumption	4.5 W max. (1.6 W standby) PoE Class 2 (3.84-6.49) W
Operating Temperature	(0 - 55) °C
Operating Humidity	(10 - 95) % relative humidity (non-condensing)
Cabling	4 pair UTP CAT-5/6, multi-strand, 24 AWG, max. 100 m
Dimensions (WxHxD)	125 mm x 180 mm x 58 mm 67 mm min. mounted depth
Weight	0.60 kg
Material	316 stainless steel (2 mm)
Finishes	Linish
Environment	Indoor and outdoor
Vandal Resistant	Yes; strong front panel, speaker and microphone aperture vandal protected
Mounting Options	Flush mount backbox (FWE-14), surface mount backbox (SWE-6/SWE-4SS), rainhood (SRH-1)
Mounting Holes	4 x 4.5 mm Ø screw holes
Fixings	4 x M4 security torx screws (included with purchase of backbox)

INTERCOM TERMINAL VSL-351Q+

PRODUCT CODE 51607

FEATURES

- IP audio intercom terminal
- Standard PoE powered (IEEE 802.3af)
- Two configurable relays that can control lights, gate/door access etc.
- Tamper detection and attempted device removal notification
- Automated testing of speaker and microphone
- Single call button
- Anti-ligature speaker design to prevent self harm in security environments
- Water and vandal resistant

SPECIFICATIONS

Speaker	1 x 4 Ω, 1 W RMS (power rating)
Speaker Amplifier	50 Hz - 7 kHz (output circuit frequency response -3 dB), 2.5 W
Max. Acoustic Output	88 dBSPL @ 1 m, 0 dBFS 1 kHz (non-clipped) sine wave signal
Speaker Hole Size	193 x 1.6 mm Ø holes, anti-ligature design
Microphone	Electret condenser, omnidirectional, sensitivity -56 dB 50 Hz - 7 kHz (input circuit frequency response ±3 dB mic)
Microphone Hole Size	1 x 2.5 mm Ø hole
Audio Streaming Bandwidth	128 kb/s one way, 256 kb/s both ways
Control Buttons	1 x piezo switch, red, 19 mm
Auxiliary Functions	Relay contacts (2 x NO/NC), 30 V d.c/2 A Tamper detection and attempted device removal notification Automated testing of speaker and microphone
Power Input	IEEE 802.3af Power over Ethernet (PoE) (cannot be locally powered)
Power Consumption	4.5 W max. (1.6 W standby) PoE Class 2 (3.84-6.49) W
Operating Temperature	(0 - 55) °C
Operating Humidity	(10 - 95) % relative humidity (non-condensing)
Cabling	4 pair UTP CAT-5/6, multi-strand, 24 AWG, max. 100 m
Dimensions (WxHxD)	125 mm x 180 mm x 58 mm 67 mm min. mounted depth
Weight	0.59 kg
Material	304 stainless steel (2 mm)
Finishes	Linish
Environment	Indoor and outdoor
Vandal Resistant	Yes; strong front panel, speaker and microphone aperture vandal protected
Mounting Options	Flush mount backbox (FWE-14), surface mount backbox (SWE-6/SWE-4SS), rainhood (SRH-1)
Mounting Holes	4 x 4.5 mm Ø screw holes
Fixings	4 x M4 security torx screws (included with purchase of backbox)

INTERCOM TERMINAL VSL-351QS+

PRODUCT CODE 51703

FEATURES

IP audio intercom terminal
Standard PoE powered (IEEE 802.3af)
Two configurable relays that can control lights, gate/door access etc.
Tamper detection and attempted device removal notification
Automated testing of speaker and microphone
Single call button
Automated self test feature allows for the testing of the push button mechanism, acoustics and data comms remotely
Anti-ligature speaker design to prevent self harm in security environments
Results of all diagnostic tests are logged and recorded
Water and vandal resistant
Self Testing Button (STB-2) patented for Australia and New Zealand

SPECIFICATIONS

Speaker	1 x 4 Ω, 1 W RMS (power rating)
Speaker Amplifier	50 Hz - 7 kHz (output circuit frequency response -3 dB), 2.5 W
Max. Acoustic Output	88 dBSPL @ 1 m, 0 dBFS 1 kHz (non-clipped) sine wave signal
Speaker Hole Size	193 x 1.6 mm Ø holes, anti-ligature design
Microphone	Electret condenser, omnidirectional, sensitivity -56 dB 50 Hz - 7 kHz (input circuit frequency response ±3 dB mic)
Microphone Hole Size	1 x 2.5 mm Ø hole
Audio Streaming Bandwidth	128 kb/s one way, 256 kb/s both ways
Control Buttons	1 x stainless steel mechanical self testing button, 22 mm
Auxiliary Functions	Relay contacts (2 x NO/NC), 30 V d.c/2 A Tamper detection and attempted device removal notification Single self testing button: report server may auto test and generate reports for these buttons and speaker/mic functionality
Power Input	IEEE 802.3af Power over Ethernet (PoE) (cannot be locally powered)
Power Consumption	4.5 W max. (1.6 W standby) PoE Class 2 (3.84-6.49) W
Operating Temperature	(0 - 55) °C
Operating Humidity	(10 - 95) % relative humidity (non-condensing)
Cabling	4 pair UTP CAT-5/6, multi-strand, 24 AWG, max. 100 m
Dimensions (WxHxD)	125 mm x 180 mm x 58 mm 67 mm min. mounted depth
Weight	0.6 kg
Material	304 stainless steel (2 mm)
Finishes	Linish
Environment	Indoor and outdoor
Vandal Resistant	Yes; strong front panel, speaker and microphone aperture vandal protected
Mounting Options	Flush mount backbox (FWE-14), surface mount backbox (SWE-6/SWE-4SS), rainhood (SRH-1)
Mounting Holes	4 x 4.5 mm Ø screw holes
Fixings	4 x M4 security torx screws (included with purchase of backbox)

INTERCOM TERMINAL VSL-352+

PRODUCT CODE 51700

FEATURES

IP device used for voice control and communications
Standard PoE powered (IEEE 802.3af)
Two call buttons, configurable to place calls to different locations
Two configurable relays that can control lights, gate/door access etc.
Tamper detection and attempted device removal notification
Automated testing of speaker and microphone

SPECIFICATIONS

Speaker	1 x 4 Ω, 1 W RMS (power rating)
Speaker Amplifier	50 Hz – 7 kHz (output circuit frequency response -3 dB), 2.5 W
Max. Acoustic Output	88 dBSPL @ 1 m, 0 dBFS 1 kHz (non-clipped) sine wave signal
Speaker Hole Size	42 x 4 – 7 mm Ø holes
Microphone	Electret condenser, omnidirectional, sensitivity -56 dB 50 Hz – 7 kHz (input circuit frequency response ± dB mic)
Microphone Hole Size	1 x 2.5 mm Ø hole
Audio Streaming Bandwidth	128 kb/s one way, 256 kb/s both ways
Control Buttons	2 x piezo switch, red, 19 mm
Auxiliary Functions	Relay contacts (2 x NO/NC), 30 V d.c./2 A Tamper detection and attempted device removal notification Automated testing of speaker and microphone
Power Input	IEEE.802.3af Power over Ethernet (PoE) (cannot be locally powered)
Power Consumption	4.5 W max. (1.6 W standby) PoE Class 2 (3.84-6.49) W
Operating Temperature	(0 - 55) °C
Operating Humidity	(10 - 95) % relative humidity (non-condensing)
Cabling	4 pair UTP CAT-5/6, multi-strand, 24 AWG, max. 100 m
Dimensions (WxHxD)	125 mm x 180 mm x 58 mm 67 mm min. mounted depth
Weight	0.65 kg
Material	304 stainless steel (2 mm)
Finishes	Linish
Environment	Indoor and outdoor
Vandal Resistant	Yes; strong front panel, speaker and microphone aperture vandal protected
Mounting Options	Flush mount backbox (FWE-14), surface mount backbox (SWE-6/SWE-4SS), rainhood (SRH-1)
Mounting Holes	4 x 4.5 mm Ø screw holes
Fixings	4 x M4 security torx screws (included with purchase of backbox)

INTERCOM TERMINAL VSL-354+

PRODUCT CODE 51613

FEATURES

- IP audio intercom terminal
- Standard PoE powered (IEEE 802.3af)
- Two configurable relays that can control lights, gate/door access etc.
- Tamper detection and attempted device removal notification
- Automated testing of speaker and microphone
- Call, music distribution function and volume control functionality
- Water and vandal resistant

SPECIFICATIONS

Speaker	1 x 4 Ω, 1 W RMS (power rating)
Speaker Amplifier	50 Hz - 7 kHz (output circuit frequency response -3 dB), 2.5 W
Max. Acoustic Output	88 dBSPL @ 1 m, 0 dBFS 1 kHz (non-clipped) sine wave signal
Speaker Hole Size	42 x 4 – 7 mm Ø holes
Microphone	Electret condenser, omnidirectional, sensitivity -56 dB 50 Hz - 7 kHz (input circuit frequency response ±3 dB mic)
Microphone Hole Size	1 x 2.5 mm Ø hole
Audio Streaming Bandwidth	128 kb/s one way, 256 kb/s both ways
Control Buttons	4 x piezo switches, 1 x red, 1 x green, 2 x black, 19 mm
Auxiliary Functions	Relay contacts (2 x NO/NC), 30 V d.c./2 A Tamper detection and attempted device removal notification Automated testing of speaker and microphone
Power Input	IEEE 802.3af Power over Ethernet (PoE) (cannot be locally powered)
Power Consumption	4.5 W max. (1.6 W standby) PoE Class 2 (3.84-6.49) W
Operating Temperature	(0 - 55) °C
Operating Humidity	(10 - 95) % relative humidity (non-condensing)
Cabling	4 pair UTP CAT-5/6, multi-strand, 24 AWG, max. 100 m
Dimensions (WxHxD)	125 mm x 180 mm x 58 mm 67 mm min. mounted depth
Weight	0.65 kg
Material	304 stainless steel (2 mm)
Finishes	Linish
Environment	Indoor and outdoor
Vandal Resistant	Yes; strong front panel, speaker and microphone aperture vandal protected
Mounting Options	Flush mount backbox (FWE-14), surface mount backbox (SWE-6/SWE-4SS), rainhood (SRH-1)
Mounting Holes	4 x 4.5 mm Ø screw holes
Fixings	4 x M4 security torx screws (included with purchase of backbox)

INTERCOM TERMINAL VSL-361W+

PRODUCT CODE 51676

FEATURES

- IP audio intercom terminal
- Standard PoE powered (IEEE 802.3af)
- Two configurable relays that can control lights, gate/door access etc.
- Tamper detection and attempted device removal notification
- Automated testing of speaker and microphone
- Marine grade 316 stainless steel face plate
- Microphone aperture deters insect nesting and water beads
- Water and vandal resistant

CUSTOMISATION

- Call button colour
- Call instruction etching

SPECIFICATIONS

Speaker	1 x 4 Ω 1 W RMS (power rating)
Speaker Amplifier	50 Hz - 7 kHz (output circuit frequency response -3 dB), 2.5 W
Max. Acoustic Output	88 dBSPL @ 1 m, 0 dBFS 1 kHz (non-clipped) sine wave signal
Speaker Hole Size	42 x 4 – 7 mm Ø holes
Microphone	Electret condenser, omnidirectional, sensitivity -56 dB 50 Hz - 7 kHz (input circuit frequency response ±3 dB mic)
Microphone Hole Size	1 x “koala nose”, 6 x 10 mm
Audio Streaming Bandwidth	128 kb/s one way, 256 kb/s both ways
Control Buttons	1 x piezo switch, red, 19 mm
Auxiliary Functions	Relay contacts (2 x NO/NC), 30 V d.c./2 A Tamper detection and attempted device removal notification Automated testing of speaker and microphone
Power Input	IEEE 802.3af Power over Ethernet (PoE) (cannot be locally powered)
Power Consumption	4.5 W max. (1.6 W standby) PoE Class 2 (3.84-6.49) W
Operating Temperature	(0 - 55) °C
Operating Humidity	(10 - 95) % relative humidity (non-condensing)
Cabling	4 pair UTP CAT-5/6, multi-strand, 24 AWG, max. 100 m
Dimensions (WxHxD)	125 mm x 180 mm x 58 mm 58 mm min. mounted depth
Weight	0.6 kg
Material	316 stainless steel (2 mm)
Finishes	Linish
Environment	Indoor and outdoor
Vandal Resistant	Yes; strong front panel, speaker and microphone aperture vandal protected
Mounting Options	No backbox required. Designed to be installed into an existing surface or bollard.
Mounting Holes	6 x 4.5 mm Ø screw holes
Fixings	6 x M4 security torx screws (included with purchase of backbox)

INTERCOM TERMINAL VSL-371W+

PRODUCT CODE 51672

FEATURES

IP audio intercom terminal, narrow design suitable for mounting in gate posts and doorways

Standard PoE powered (IEEE 802.3af)

Two configurable relays that can control lights, gate/door access etc.

Tamper detection and attempted device removal notification

Automated testing of speaker and microphone

Marine grade 316 stainless steel face plate

Microphone aperture deters insect nesting and water beads

Water and vandal resistant

CUSTOMISATION

Call button colour

Call instruction etching

SPECIFICATIONS

Speaker	1 x 4 Ω, 3 W RMS (power rating)
Speaker Amplifier	50 Hz - 7 kHz (output circuit frequency response -3dB), 2.5 W
Max. Acoustic Output	85 dBSPL @ 1 m, 0 dBFS 1 kHz (non-clipped) sine wave signal
Speaker Hole Size	58 x 3 – 6 mm Ø holes
Microphone	Electret condenser, omnidirectional, sensitivity -56 dB 50 Hz - 7 kHz (input circuit frequency response ±3 dB mic)
Microphone Hole Size	1 x “koala nose”, 6 x 10 mm
Audio Streaming Bandwidth	128 kb/s one way, 256 kb/s both ways
Control Buttons	1 x piezo switch, red, 19 mm
Auxiliary Functions	Relay contacts (2 x NO/NC), 30 V d.c./2 A Tamper detection and attempted device removal notification Automated testing of speaker and microphone
Power Input	IEEE 802.3af Power over Ethernet (PoE) (cannot be locally powered)
Power Consumption	4.5 W max. (1.6 W standby) PoE Class 2 (3.84-6.49) W
Operating Temperature	(0 - 55) °C
Operating Humidity	(10 - 95) % relative humidity (non-condensing)
Cabling	4 pair UTP CAT-5/6, multi-strand, 24 AWG, max. 100 m
Dimensions (WxHxD)	75 mm x 261 mm x 92 mm 95 mm min. mounted depth
Weight	0.65 kg
Material	316 stainless steel (2 mm)
Finishes	Linish
Environment	Indoor and outdoor
Vandal Resistant	Yes; strong front panel, speaker and microphone aperture vandal protected
Mounting Options	Flush mount (cut out and tap), rainhood (SRH-4)
Mounting Holes	6 x 5 mm Ø screw holes
Fixings	6 x M4 security torx screws (included with purchase of backbox)

CLEAN ROOM INTERCOM VSA-76K

PRODUCT CODE 51738

FEATURES

Antimicrobial and chemical resistant surface membrane for easy cleaning, improve hygiene and reduce the risk of spreading infection

Membrane inhibits the growth of potentially harmful bacteria, mould and mildew

Robust stainless steel front plate to withstand strict cleaning and maintenance conditions

Standard PoE powered (IEEE 802.3af)

Two configurable relay output contacts for control of external equipment

Attractive slimline design

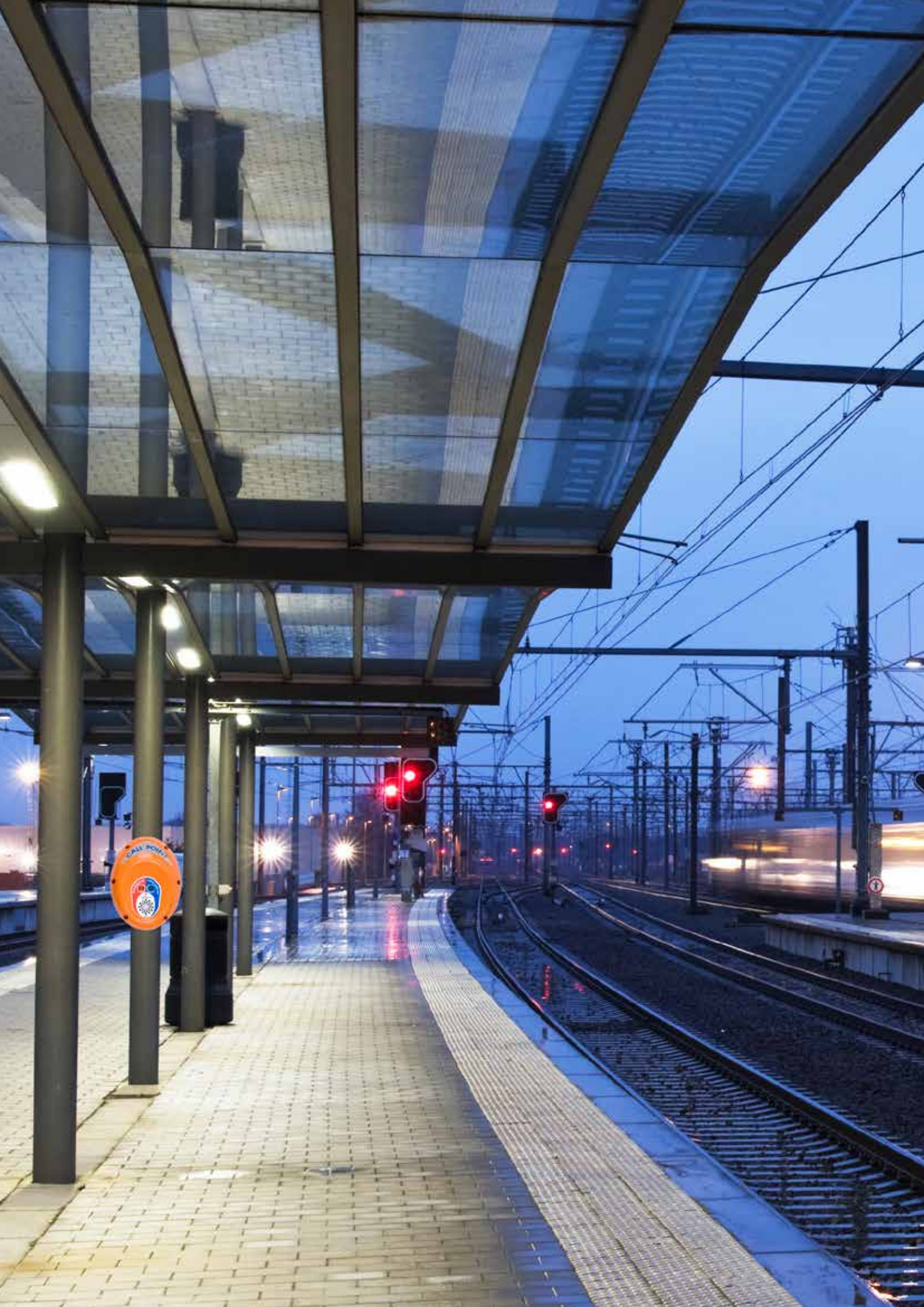
3.5" LCD screen

Call an unlimited number of master/monitor stations

SPECIFICATIONS

Material	Autotex F200 antimicrobial membrane 316 stainless steel 2mm	
Antimicrobial membrane inhibits growth of:	Staphylococcus aureus (MRSA) Escherichia coli 0157 Pseudomonas aeruginosa Salmonella enteritidis Bacillus cereus Streptococcus faecalis	Klebsiella pneumoniae Aspergillus niger Penicillium purpurogenum Phoma violacea Saccharmyces cerevisiae Listeria monocytogenes
Chemical Resistance	Alcohols Dilute acids Dilute alkalis Esters	Hydrocarbons Ketones Household cleaning agents
Screen	3.5" TFT colour LCD, 4:3 aspect ratio Active area: 70mm X 53mm Resolution: 320 X 240, 24-bit RGB LED backlight (white)	Contrast ratio: 400 Brightness: 350 cd/m² Viewing angle: 120° H, 115° V
Microphone	Electret condenser, omnidirectional, sensitivity -56 dB	
Speaker	1 x 4Ω 3W	
Configuration	Unlimited* number of clean room intercoms	
Dimensions (WxHxD)	140 mm x 335 mm x 45 mm	
Weight	1.9 kg	
Environment	Indoor use only	
Mounting Options	Flush mount backbox (FWE-17), Plasterboard (PWB-3)	
Power Input	IEEE.802.3af Power over Ethernet (PoE)	
Power Consumption	12 W max (2 W standby)	
Max. Acoustic Output	88 dBSPL @ 1 m, 0dBFS 1 kHz (non-clipped) sine wave signal	
Auxiliary Functions	Relay contacts (2 x NO/NC)	
Operating Temperature	(0 - 40)°C	
Operating Humidity	(20 - 90)% RH (non-condensing)	
Compliance Standards	EMC compliance to EN60601 standard EN 60601-1-2 : 2007+AC:2010, CISPR 11 : 2009+A1:2010 IEC 60601-1-2 : 2007, CISPR 22 : 2008(Clause 5.2) IEC 61000-4-2 : 2008, IEC 61000-4-3 : 2006+A1:2007+A2:2010 IEC 61000-4-4 : 2012,IEC 61000-4-6 : 2013, IEC 61000-4-8 : 2009	

**Dependent on server configuration and network bandwidth*


CALL POINT

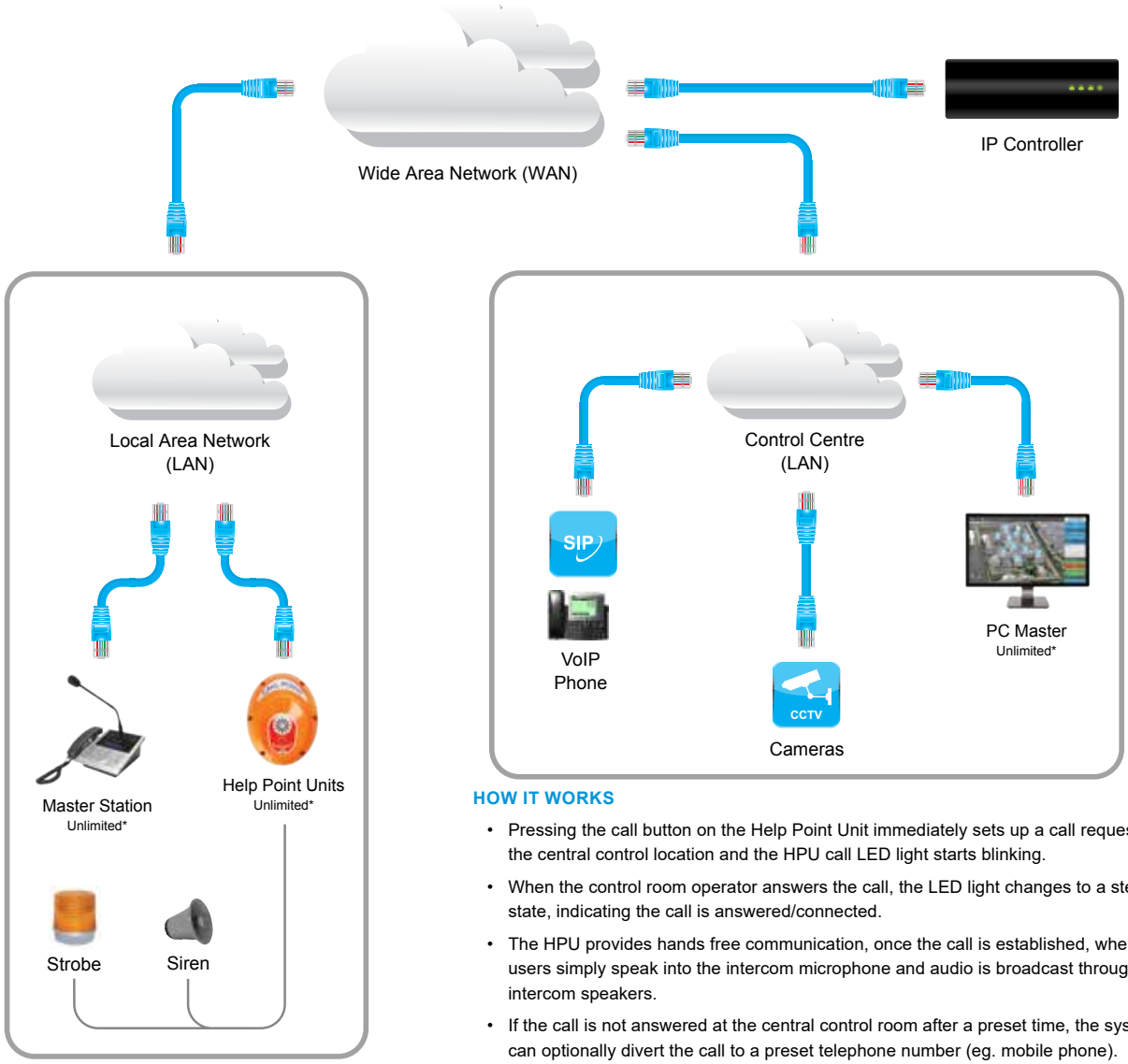
HELP POINT UNITSSYSTEM

HELP POINT UNITS SYSTEM

Jacques range of Help Point Units (HPUs) are user-friendly, reliable, robust IP call points, specifically designed for environments where public safety is important. The HPUs, as part of a Jacques IP integrated Communication System, offer one or two button calling systems, which connect to central control once the call button is pressed. Available with emergency or dual emergency and information buttons, the units are ideally suited to applications where assistance may be required in addition to emergency calling. On board configurable relays can be utilised to control lighting, duress alarms, CCTV or gate controls common within public safety and transport environments.

Help Point Units can easily be integrated into existing, shared or dedicated networks and connect directly into any Ethernet port. Units can automatically dial any master station on the network or be directed to a SIP enabled device/ telephone system.

HELP POINT UNITS SYSTEM DIAGRAM



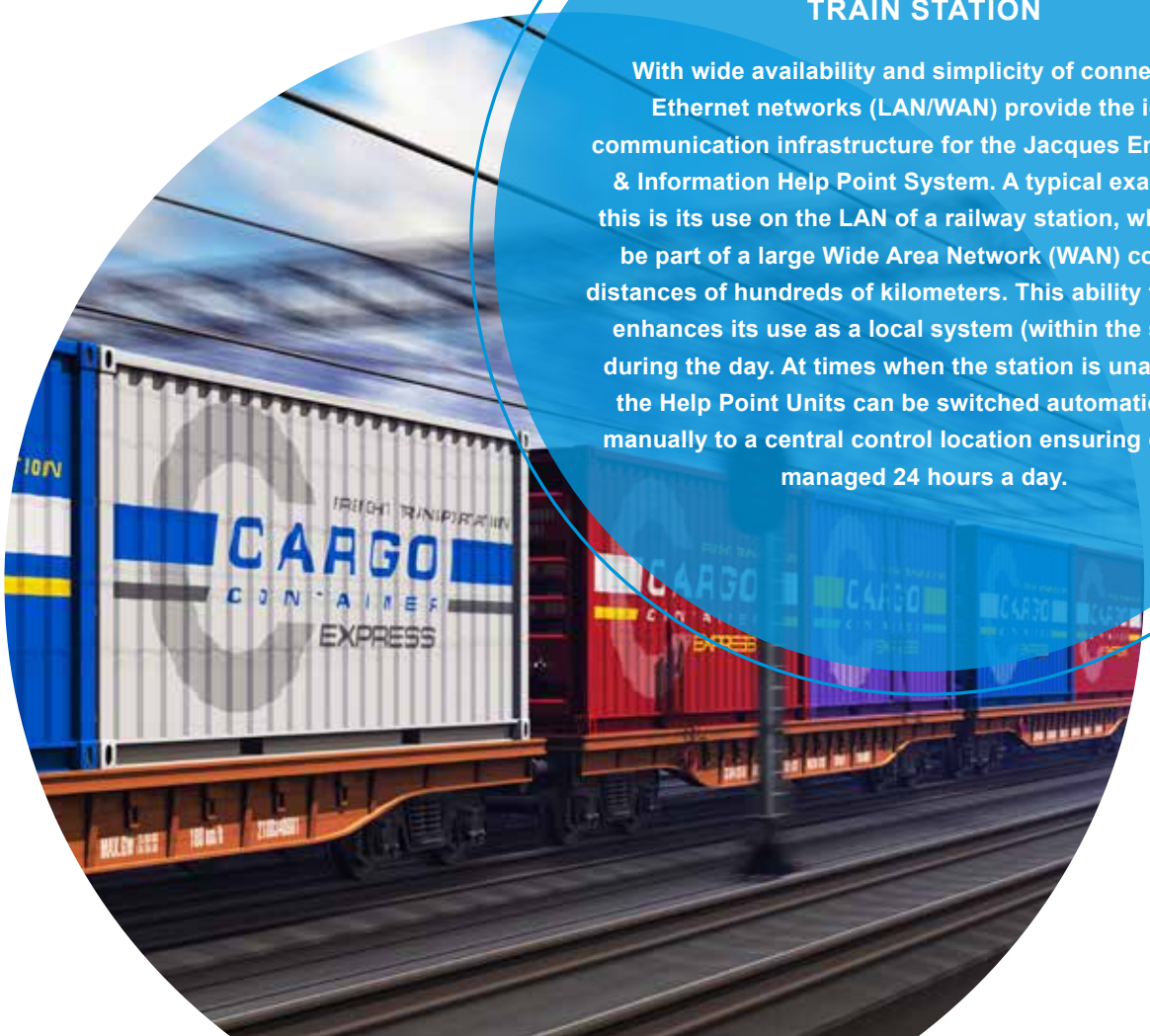
HOW IT WORKS

- Pressing the call button on the Help Point Unit immediately sets up a call request at the central control location and the HPU call LED light starts blinking.
- When the control room operator answers the call, the LED light changes to a steady state, indicating the call is answered/connected.
- The HPU provides hands free communication, once the call is established, whereby users simply speak into the intercom microphone and audio is broadcast through the intercom speakers.
- If the call is not answered at the central control room after a preset time, the system can optionally divert the call to a preset telephone number (eg. mobile phone).
- On completion of the call, the LED light will turn off.

*Virtually unlimited. Dependent on server configuration and network bandwidth.

FEATURES

- Highly visible, solid, vandal resistant unit, designed with public safety in mind
- Simple 1 or 2 button operation - emergency or emergency & information calls
- Environmentally sealed
- One-touch operation, with hands free communication once call is established
- Simple installation and low maintenance
- Extremely sensitive omnidirectional microphone
- In built tamper detection alarm
- Acoustic testing of HPU speaker and microphone
- Vandal and water resistant piezo electric call button(s)
- Anti-graffiti coating to protect against vandalism
- Two configurable relays
- Available in customised colours



TRAIN STATION

With wide availability and simplicity of connection, Ethernet networks (LAN/WAN) provide the ideal communication infrastructure for the Jacques Emergency & Information Help Point System. A typical example of this is its use on the LAN of a railway station, which may be part of a large Wide Area Network (WAN) covering distances of hundreds of kilometers. This ability to expand enhances its use as a local system (within the station) during the day. At times when the station is unattended, the Help Point Units can be switched automatically or manually to a central control location ensuring calls are managed 24 hours a day.

HELP POINT UNIT HPU-5E2+/HPU-5E2-i+

PRODUCT CODE 51687, 51688

FEATURES

- Highly visible, solid, vandal resistant unit, designed with public safety in mind
- Simple 1 or 2 button operation, emergency or emergency & information
- Environmentally sealed
- One-touch operation with hands-free communication, once call is established
- Standard PoE powered (IEEE 802.3af)
- Tamper detection and attempted device removal notification
- Automated testing of speaker and microphone
- Vandal and water resistant piezo electric call button(s)
- Anti-graffiti coating to protect against vandalism
- Two configurable relays

CUSTOMISATION

Custom artwork for shell, control surfaces and label

SPECIFICATIONS

Speaker	1 x 4 Ω 3 W RMS (power rating)
Speaker Amplifier	50 Hz – 7 kHz (output circuit frequency response -3 dB), 2.5 W
Max. Acoustic Output	88 dBSPL @ 1 m, 0 dBFS 1 kHz (non-clipped) sine wave signal
Speaker Hole Size	42 x 4 – 7 mm Ø holes
Microphone	Electret condenser, omnidirectional, sensitivity -56 dB 50 Hz – 7 kHz (input circuit frequency response ±3 dB mic)
Microphone Hole Size	6 x 3 & 5 mm Ø holes
Audio Streaming Bandwidth	128 kb/s one way, 256 kb/s both ways
Control Buttons	1 x piezo switch, red, 28 mm (HPU-5E2+) 2 x piezo switches, 1 x red, 1 x blue, 28 mm (HPU-5E2-i+)
Auxiliary Functions	Relay contacts (2 x NO/NC), 30 V d.c./2 A Tamper detection and attempted device removal notification Automated testing of speaker and microphone
Power Input	IEEE 802.3af Power over Ethernet (PoE)
Power Consumption	4.5 W max. (1.6 W standby) PoE Class 2 (3.84-6.49) W
Operating Temperature	(0 - 50)°C
Operating Humidity	(10 - 95) % relative humidity (non-condensing)
Cabling	4 pair UTP CAT-5, multi-strand, 24 AWG, max. 100 m
Dimensions (WxHxD)	320 mm x 420 mm x 120 mm
Weight	7.8 kg
Material	Front shell: 5 mm die cast aluminium Front control panel: 316 type stainless steel (3 mm) Back: 316 type stainless steel (3 mm)
Finishes	Dulux orange powder coated, with a clear anti-graffiti lacquer
Environment	Indoor and outdoor use
Vandal Resistant	Yes
Mounting Options	Wall mount (WMP-5), bollard (BOL-3xx)
Mounting Holes	6 x M6 stainless tapped standoffs (HPU to rear panel)
Fixings	6 x M6 security torx screws, 6 x nylon washers (HPU to rear panel)

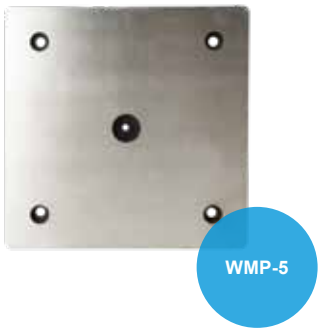
HPU not included

BOLLARD BOL-317A/BOL-320A/BOL-330A/BOL-340A

PRODUCT CODE 51662, 51663, 51664, 51665

SPECIFICATIONS

Suitable For	HPU-5xx
Dimensions (WxHxD)	250 mm x 1700 mm x 250 mm (BOL-317A) 250 mm x 2000 mm x 250 mm (BOL-320A) 250 mm x 3000 mm x 250 mm (BOL-330A) 250 mm x 4000 mm x 250 mm (BOL-340A)
Weight	24 kg (BOL-317A) 27 kg (BOL-320A) 36 kg (BOL-330A) 46 kg (BOL-340A)
Material	Carbon steel with Duragal™
Finishes	Powder coated, APO ripple grey
Environment	Outdoor
Vandal Resistant	Yes
Bollard Mounting	Concrete
HPU Mounting	4 x M8-M10 studs
Bollard Mounting Holes	4 x 15 mm Ø holes
Fixings	4 x Dynabolts
Cable Entry	Bottom entry with side access plate



WALL MOUNT PLATE WMP-5

PRODUCT CODE 51095

SPECIFICATIONS

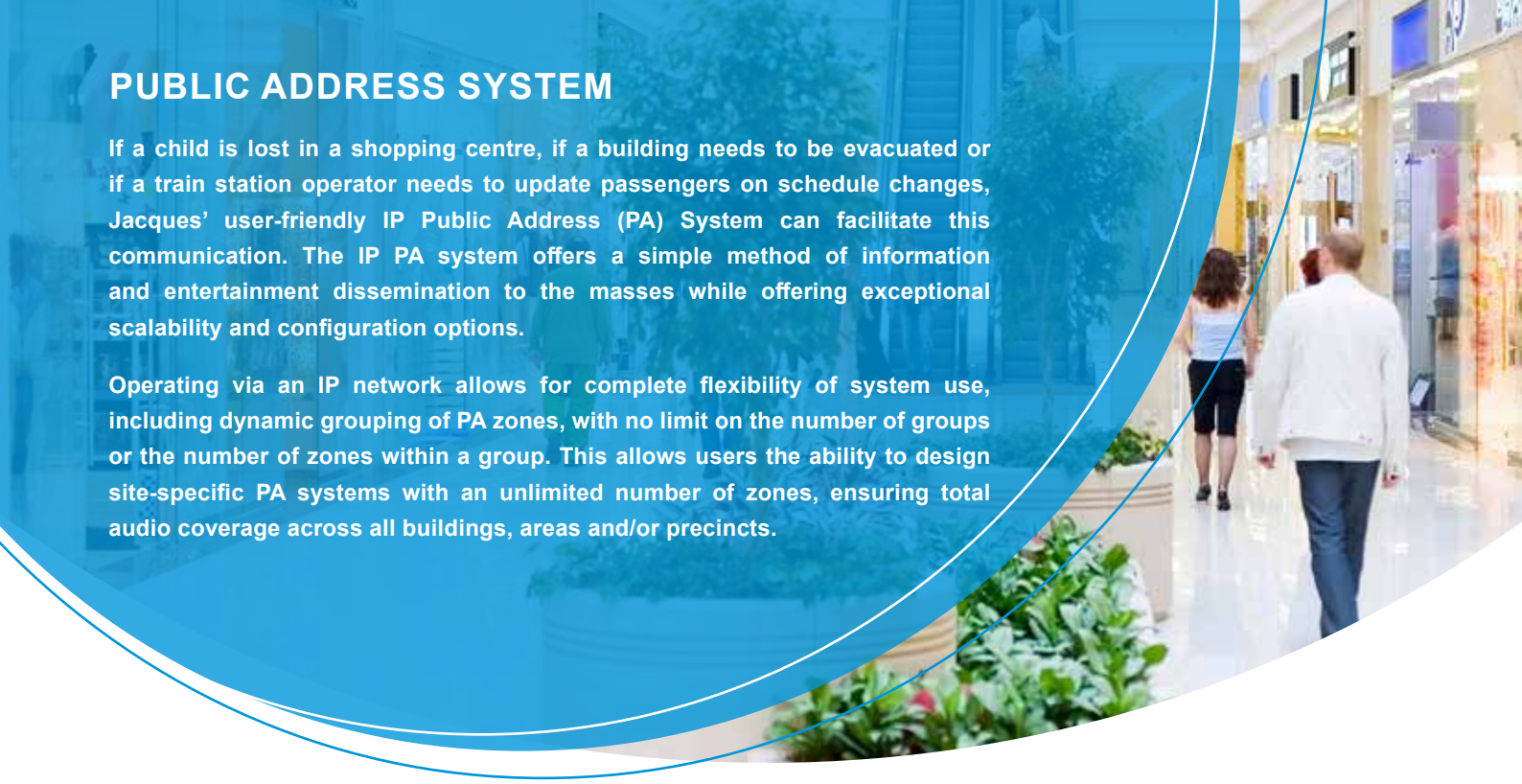
Suitable For	HPU-5xx
Dimensions (WxHxD)	175 mm x 175 mm x 6 mm
Weight	1.4 kg
Material	316 stainless steel
Finishes	Clean
Environment	Outdoor
HPU Mounting Holes	4 x 13 mm Ø holes
HPU Fixings	4 M8-M10 flat washers and M8-M10 bolts
Cable Entry	1 x 20 mm Ø hole


PUBLIC
ADDRESS
SYSTEM

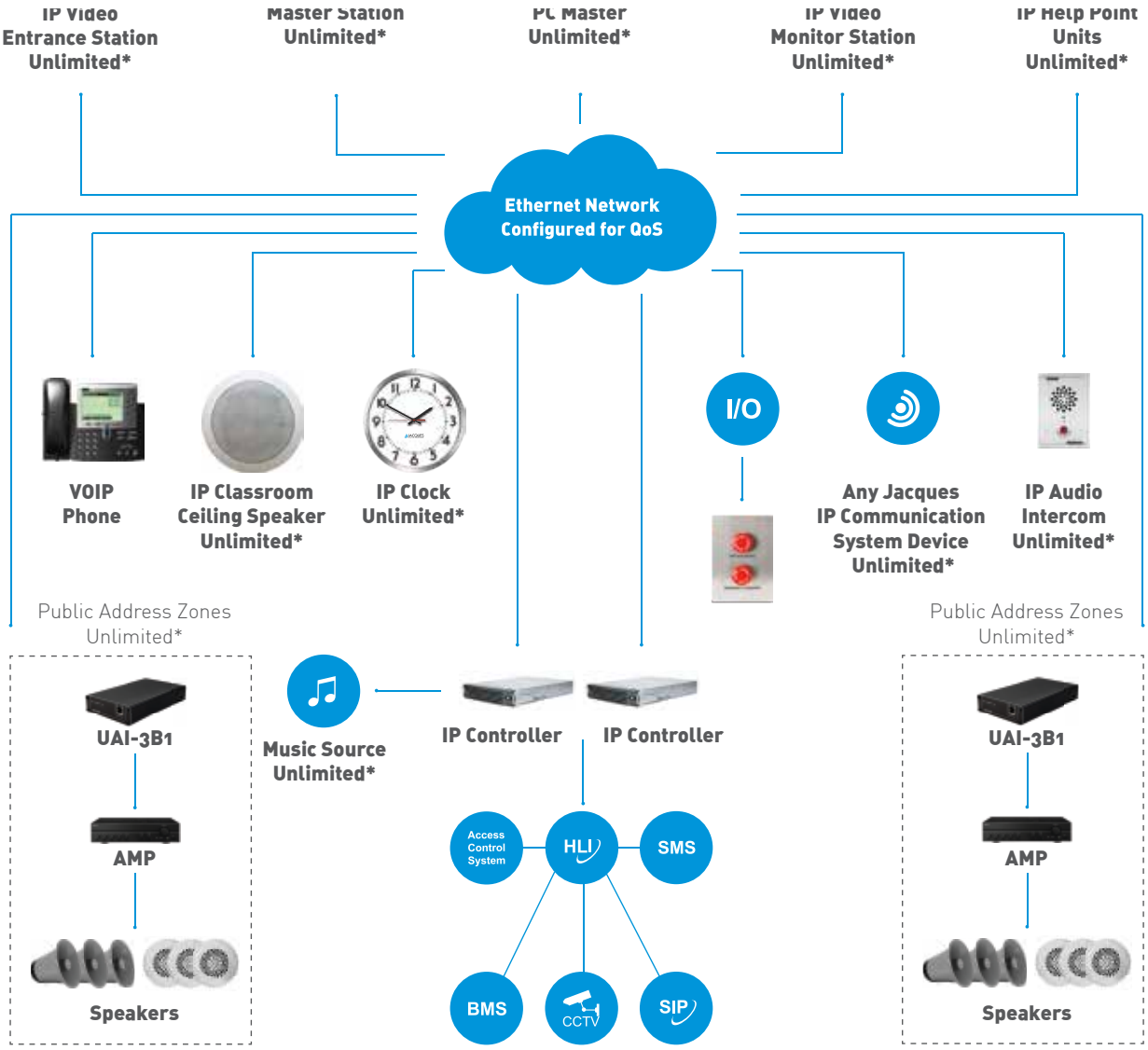
PUBLIC ADDRESS SYSTEM

If a child is lost in a shopping centre, if a building needs to be evacuated or if a train station operator needs to update passengers on schedule changes, Jacques' user-friendly IP Public Address (PA) System can facilitate this communication. The IP PA system offers a simple method of information and entertainment dissemination to the masses while offering exceptional scalability and configuration options.

Operating via an IP network allows for complete flexibility of system use, including dynamic grouping of PA zones, with no limit on the number of groups or the number of zones within a group. This allows users the ability to design site-specific PA systems with an unlimited number of zones, ensuring total audio coverage across all buildings, areas and/or precincts.



PUBLICADDRESSSYSTEMDIAGRAM



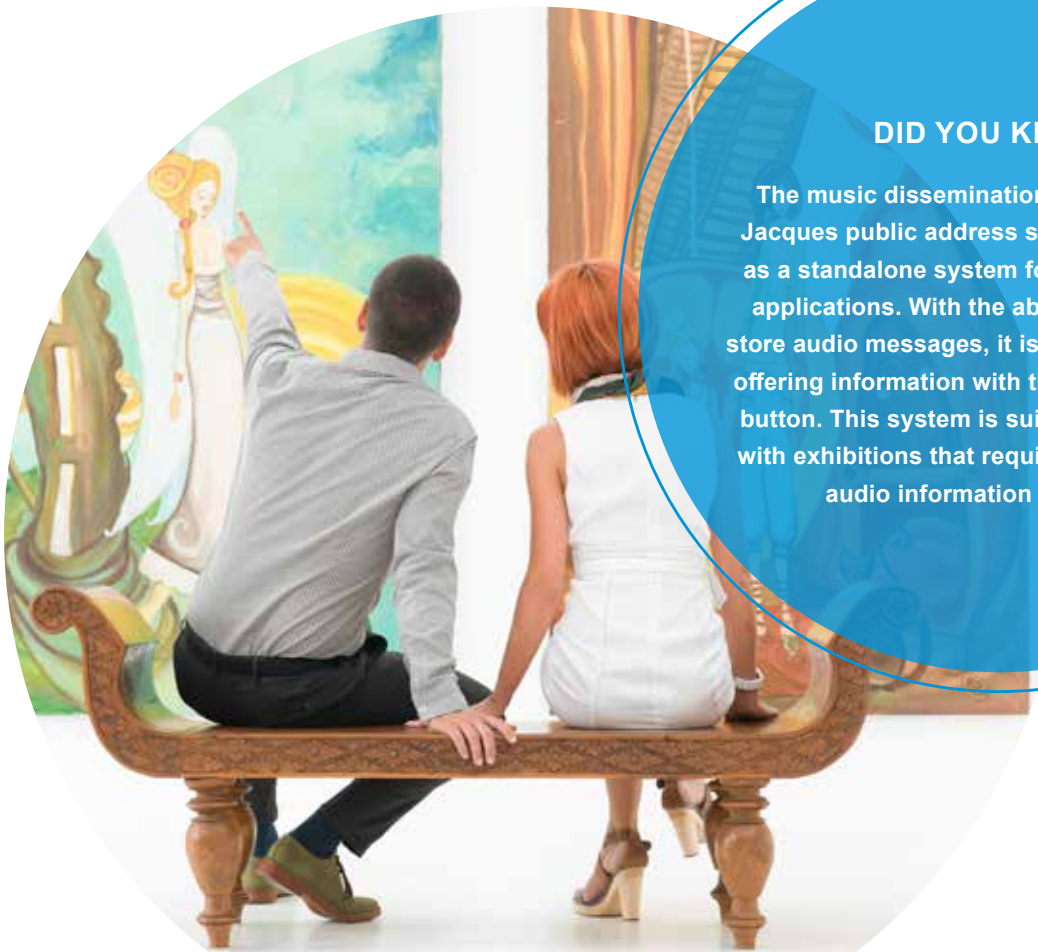
The Jacques IP PA system is easy to use. Announcements can be made using any Jacques master station or via our SIP interface. Using the Jacques SIP interface allows total broadcast control via any digital telephone system in the building, area or precinct.

The use of a digital signal processor allows total user control of the PA system. Users have the flexibility to broadcast background music to a number of selected PA zones, while making an audio announcement to other individual or selected zones simultaneously. Zone selection is particularly important in the instance of an emergency which may require audio tone alerts or the activation of an evacuation procedure. The digital signal processor also manages the delivery of remote, pre-recorded and time-scheduled announcements and tones to required zones. This is beneficial to a number of industry applications, as the PA system can automatically make a pre-recorded announcement outside of normal business hours, or for sites operating 24/7.

The Jacques IP PA system has the added ability to monitor and interrogate the system for faults via the network. If an amplifier on the network fails, the system will report the failure allowing for timely maintenance and repair. Importantly, the integrity of the entire PA system is not affected allowing for broadcasts to continue to all other zones on the network.

If a site expands additional PA zones can easily be added to a new or existing network infrastructure, ensuring system longevity. Therefore, sites operating a Jacques IP PA system have total confidence in knowing the system can expand and adapt to any operational and environmental changes in the future.

Audio and video intercom devices can seamlessly integrate into a Jacques IP PA system to create a comprehensive communications system. Jacques offers a variety of robust intercom endpoints that are vandal and weather resistant, making them ideal for both indoor and outdoor environments, while being able to easily manage the demands of high public usage. Jacques' IP PA systems can be designed to meet specific requirements and can integrate to a large number of third party systems, ultimately providing end users with a highly flexible and cohesive solution.



DID YOU KNOW?

The music dissemination feature from the Jacques public address system can be used as a standalone system for various industry applications. With the ability to record and store audio messages, it is an ideal method for offering information with the simple push of a button. This system is suitable for museums with exhibitions that require readily available audio information for visitors.

UNIVERSAL AUDIO INTERFACE UAI-3B1/UAI-3E1

PRODUCT CODE 51196, 51195

FEATURES

Multifunctional device

- Interface between Jacques IP Communication System and analogue audio device
- 650 and 550 system interface (hybrid intercom system)
- Public address interface

OPTIONAL ACCOMPANYING PRODUCTS

SVR-100 (used in conjunction with line amplifier)

SPECIFICATIONS

Microphone	200 Hz – 7 kHz (input circuit frequency response ±3 dB)
Max. Audio Input (Balanced)	+13 dBu (10 V p-p, max. input level)
Max. Audio Output (Balanced)	+13 dBu (10 V p-p, max. output level)
Max. Audio Output (Unbalanced)	+7 dBu (5 V p-p, max. output level)
Audio Streaming Bandwidth	128 kb/s each way
Input Impedance	50 kΩ
Max. Audio Output Load	600 Ω
Auxiliary Functions	Relay contacts (2 x NO/NC)
Power Input	(12 – 32) V d.c., 24 V d.c. nominal, JPoE
Power Consumption	2.4 W max.
Indicators	Power, +5 V, status, RS485 (TX, RX), LAN link and activity
Cabling	Ethernet: 4 pair UTP CAT-5/5e/6, 100 m max. Balanced audio, RS-485 - twisted pairs, CAT-5/5e/6 screen pair cable may be used. Unbalanced audio: screened single core, braided preferable Relays/Power: 0.75 mm², multi-strand, 100 m max.
Connectors	LAN/Power: RJ45 Power: 2 way 3.81 mm combicon screw terminal block Audio out/in: RS-485, 8 way 3.81 mm combicon screw terminal block Relays: 6 way 3.81 mm combicon screw terminal block
Operating Temperature	(0 - 70)˚C
Operating Humidity	(10 - 90) % relative humidity (non-condensing)
Compliance	EMC: EN55022 Class A
Form Factor	Rectangular box (UAI-3B1) 3U Eurocard, 12 HP, 160 mm (UAI-3E1)
Dimensions (WxHxD)	103 mm x 30.5 mm 168 mm (UAI-3B1) 30.5 mm x 129 mm 179 mm (UAI-3E1)
Weight	0.35 kg (UAI-3B1) 0.15 kg (UAI-3E1)
Material	Extruded aluminium (UAI-3B1) Aluminium plate & handle on card front (UAI-3E1)
Finishes	Anodised, black (UAI-3B1) Powder coated, magnolia gloss (UAI-3E1)
Environment	Indoor use only
Mounting Options	Mounting bracket, 120 mm spacing for 2 screws

PA SPEAKER SVR-100 5/15 W

PRODUCT CODE 50909, 51706

FEATURES

100 V line vandal resistant speaker

Marine grade 316 stainless steel face plate

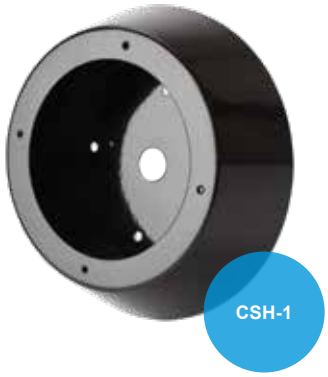
Quality audio output

OPTIONAL ACCOMPANYING PRODUCTS

Universal Audio Interface (UAI-3B1)

SPECIFICATIONS

Speaker	1 x 8 Ω, 8 W RMS, 4” dual cone
Frequency Response	100 Hz – 15 kHz (±6 dB)
Sensitivity	90 db SPL, 1 kHz, 1 W, 1 m
100 V Line Power Taps	(0.33, 0.66, 1.25, 2.5, 5) W (SVR-100 5 W) (1.25, 2.5, 5, 10, 15) W (SVR-100 15 W)
Operating Temperature	(-20 - 55) ˚C
Operating Humidity	(10 - 95) % relative humidity (non-condensing)
Cabling	Figure 8, 0.75 mm² multi-strand (typical)
Connectors	4 way screw terminal block (SVR-100 5 W) 2 way screw terminal block (SVR-100 15 W)
Compliance	AS1670.4 EWIS standard (SVR-100/5W)
Form Factor	Circular flush wall panel or surface mount with CSH-1
Dimensions (Ø x D)	170 mm x 64-109 mm (SVR-100 5 W) 170 mm x 125 mm (SVR-100 15 W)
Weight	1.2 kg (SVR-100 5 W) 1.3 kg (SVR-100 15 W)
Material	316 stainless steel
Finishes	Linish, chamfered edge
Environment	Non rain exposed area
Vandal Resistant	Yes
Mounting Options	Flush mount direct into ceiling or wall, surface mount backbox (CSH-1)



SURFACE MOUNT BACK BOX CSH-1

PRODUCT CODE 50620

SPECIFICATIONS

Suitable For	SVR-100 series
Dimensions (Ø x D)	231 mm x 71 mm
Weight	1.2 kg
Material	304 stainless steel
Finishes	Powder coated, gloss, black
Environment	Non rain exposed area
Vandal Resistant	Yes
Speaker Mounting Holes	4 x M4 threaded holes
Speaker Fixings	4 x M4 security torx screws
Cable Entry	2 x 25 mm hole rear

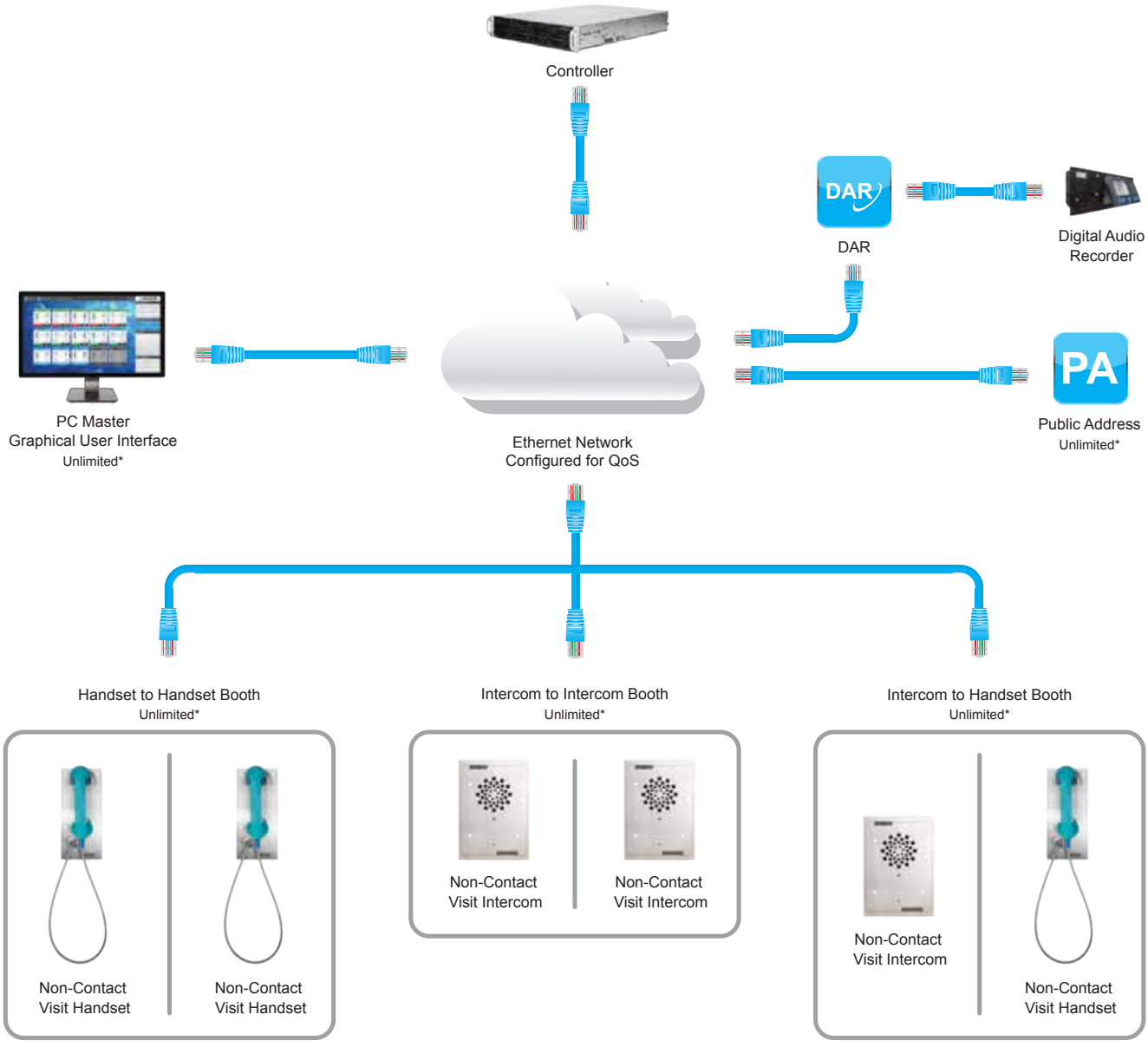
NON-CONTACT VISITSSYSTEM

NON-CONTACT VISITS SYSTEM

Jacques Non-Contact Visits System (NCV) allows prison visitors to communicate with individual inmates with no physical contact. Separated by a glass or perspex barrier, visitors and inmates are able to communicate using a pair of intercom terminals (hands-free or handset options available) on either side, without physical contact. The system simultaneously records all conversations between visitors, inmates and operators.

Communication over intercom booth pairs are supervised using the Non-Contact Visits System graphical user interface (GUI) ensuring ultimate call control and flexibility. The NCV GUI also facilitates group or single endpoint public address announcements, intrusion and instant playback of recorded audio files and call monitoring from any master station within the network, ensuring a cooperative prisoner visiting environment.

NON-CONTACTVISITSSYSTEMDIAGRAM



MAIN FEATURES

- Enhanced covert monitoring of any booth conversation
- Multiple simultaneous booth conversations running concurrently
- All booth conversations are automatically recorded and ready for instant play back
- Vandal resistant audio handset
- Intuitive GUI touchscreen control

OPERATIONS VIA TOUCHSCREEN GUI MASTER STATION:

- Enable/disable booth/s
- Connect/disconnect calls between intercom units in a booth/s
- Monitor conversation in booth/s
- Intrude on conversation in booth/s
- Call booth/s
- Make PA announcements to booth/s

Fully customisable Non-Contact Visits System GUI


The NCV system allows prison visitors to clearly communicate with individual inmates while preventing physical contact.

NCV IP HANDSET VSL-341H

PRODUCT CODE 52128

FEATURES

Robust vandal resistant handset with armoured cord and anchoring

SPECIFICATIONS

Speaker (earpiece)	1 x 130 Ω
Speaker Amplifier	50 Hz – 7 kHz (output circuit frequency response -3 dB), 2.5 W
Max. Acoustic Output	115 dB SPL with closed ear coupling 1 kHz full scale sine wave and default gain settings
Microphone (mouthpiece)	1 x 130 Ω dynamic
Power Input	IEEE 802.3af Power over Ethernet (PoE)
Power Consumption	1.8 W max. (1.6 W standby) PoE Class 2 (3.84-6.49) W
Operating Temperature	(0 – 55) °C
Operating Humidity	(10 – 95) % relative humidity (non-condensing)
Cabling	4 pair UTP CAT-5/6, multi-strand, 24 AWG, max. 100 m
Dimensions (WxHxD)	130 mm x 290 mm x 58 mm (depth excludes handset, cord and cradle)
Weight	1.55 kg
Material	304 stainless steel panel (2 mm)
Finishes	Linish
Environment	Indoor
Vandal Resistant	Yes
Mounting Options	Flush mount backbox (FWE-1), surface mount backbox (SWE-1)
Mounting Holes	8 x 5.5 mm Ø screw holes
Fixings	8 x M4 security torx screws

ACCESSORIES

BOXED INTERCOM JIB-3B1

PRODUCT CODE 51460

FEATURES

Hardware for creating a customised intercom panel

Speaker input, microphone output

Power via either Ethernet (JPoE) or separate input connector

OPTIONAL ACCOMPANYING PRODUCTS

Mic Assembly (-56 dB)

Speaker Assembly (4 Ω)

SPECIFICATIONS

Speaker Amplifier	150 Hz - 7 kHz (output circuit frequency response -3 dB), 2 W RMS into 4 Ω
Microphone	200 Hz – 7 kHz (input circuit frequency response ±3 dB)
Audio Streaming Bandwidth	128 kb/s each way
Button Inputs	4 x button inputs (call, volume up/down and aux channel select) All button inputs reconfigurable for other uses.
Auxiliary Functions	2 relays (3 terminals per relay: COM, NO, NC), capable of controlling gates, lights and doors etc, max. 1 A at 30 V d.c.
Power Input	(12 – 32) V d.c., 24 V d.c. nominal 2 way 3.81 mm pluggable terminal block or JPoE through RJ45 LAN port
Power Consumption	5 W max.
Operating Temperature	(0 – 50) °C
Operating Humidity	(10 – 95) % relative humidity (non-condensing)
Indicators	Power, +5 V, status (call activity), LAN link and activity
LED Outputs	2 x open drain outputs, limited to max. 15 mA LED1: call, LED2 - reconfigurable
Cabling	Ethernet: CAT-5, 5e, 6 UTP 100 m max. Relay & speaker: figure 8 0.75 mm2, multi-strand (100 m max.) Microphone: shielded single core or single twisted pair
Connectors	RJ45 data Ethernet, 3.81 mm pluggable connectors: • 2 way: power • 12 way: speaker (2), microphone (2), LED outputs (3) button inputs (5) • 6 way combicon: 2 x relay outputs (3 each)
Form Factor	Rectangular box, LAN, indicators on front, connections on rear
Dimensions (WxHxD)	103 mm x 30.5 mm x 168 mm
Weight	0.35 kg
Material	Extruded aluminium
Finishes	Anodised, black
Environment	Indoor use only
Mounting Options	Mounting bracket, 120 mm spacing for 2 screws

SPEAKER MICROPHONE INTERFACE SMI-3B1

PRODUCT CODE 51215

FEATURES

- Provides the connection of a speaker, microphone and handset to any PC to achieve master station functionality
- Balanced microphone input with built in phantom power feed
- Control inputs for push-to-talk, volume control & other functions
- Handset/headset connection
- Automatic Gain Control (AGC)
- Balanced audio output for recording conversations
- Configurable NC/NO relay output
- Optional streaming audio upgrade

OPTIONAL ACCOMPANYING PRODUCTS

- Speaker Microphone Interface Console
- PC Master (PCC-650MX/PCC-650MXTS)

SPECIFICATIONS

Microphone	200 Hz – 7 kHz (input circuit frequency response ±3 dB)
Output Distortion (Line to Speaker)	0.2 % (0.5 W RMS speaker output)
Input Distortion (Microphone to Line)	< 1 % @ mic. input of -50 dBu
Recording Output Type	Electronically balanced, non-isolated
Audio Streaming Bandwidth	128 kb/s each way
Button Inputs	Push-to-talk, volume up/down Button inputs 2 & 3 configurable for other uses
Auxiliary Functions	Relay contacts (1 x NO/NC) max. 2 A @ 24 V d.c.
Power Input	(12 – 32) V d.c., 24 V d.c. nominal
Power Consumption	5 W max.
Indicators	Power, +5 V, status, LAN link and activity
Cabling	Ethernet: 4 pair UTP CAT-5/5e/6, max. 100 m Connectors: 0.75 mm², multi-strand
Connectors	LAN/Power: RJ45 Power: 2 way 3.81 mm combicon screw terminal block Speaker, mic in, recording out and control inputs: 12 way 3.81 mm combicon screw terminal block Relay : 3 way 3.81 mm combicon screw terminal block Handset/Headset: RJ45
Operating Temperature	(0 - 50) ˚C
Operating Humidity	(10 – 90) % relative humidity (non-condensing)
Compliance	EMC: EN 55022, AS/NZS CISPR 22 Class A
Form Factor	Rectangular box, LAN and indicators on front, connections on rear
Dimensions (WxHxD)	103 mm x 30.5 mm x 168 mm
Weight	0.35 kg
Material	Extruded aluminium
Finishes	Anodised, black
Environment	Indoor use only
Mounting Options	Mounting bracket: 120 mm spacing for 2 screws

SPEAKER MICROPHONE INTERFACE CONSOLE

PRODUCT CODE 51673

FEATURES

Audio communications console with push-to-talk functionality

Tactile mechanical stainless steel buttons

Gooseneck microphone

Volume control

Push-to-talk button

OPTIONAL ACCOMPANYING PRODUCTS

Speaker Microphone Interface (SMI-3B1)

SPECIFICATIONS

Speaker	4 Ω 3 W RMS
Microphone	Form factor: gooseneck Type: Uni-Directional electret condenser Freq. Resp.: 50 Hz – 18 kHz Sensitivity: -70 dB ± 3 dB @ 1 kHz
Control Buttons	Stainless steel mechanical: push-to-talk, volume up/down
Cabling	Audio: twisted pairs, CAT-5/5e/6 screened
Connectors	12 way 3.81 mm pluggable screw terminal block
Operating Temperature	(0 - 50) ˚C
Operating Humidity	(10 – 95) % relative humidity (non-condensing)
Form Factor	Desktop console
Dimensions (WxHxD)	130 mm x 145 mm x 68 mm
Weight	1.5 kg
Material	Face: stainless steel Base: mild steel
Finishes	Face: bead blasted Base: powder coated, black
Environment	Indoor use only
Vandal Resistant	Yes (console body only)
Mounting Options	Desk mount only

SMI-3B1 and SMI Console can be purchased as an SMI Console Package.

IP POE NETWORK CLOCK

PRODUCT CODE CLOCK241

FEATURES

- IP PoE internal wall clock
- Standard PoE powered (IEEE 802.3af)
- Supports up to 10 SNTP servers for redundancy
- DHCP or static IP addressing
- Support for any time zone
- Automatic Daylight Saving Time adjustment
- Polycarbonate crystal

SPECIFICATIONS

Dimensions	face 30.48 cm (12”) height 34 cm (13 3/8”), width 6.66 cm (2 5/8”)
Operating Temperature	(0 - 40) °C
Operating Humidity	95 % maximum (non-condensing)
Accuracy	± 1 second
Power Input	IEEE 802.3af Power over Ethernet (PoE)
Power Consumption	1 W, 48 v
Cabling	4 pair UTP CAT-5/6, multi-strand, 24 AWG
Environment	Indoor
Weight	0.9 kg
Finish	Aluminum case

IP ETHERNET EXTENDER MODULE JCE-225/260

PRODUCT CODE 51872 51873

FEATURES

- Pair of full-duplex high speed Ethernet data signal over 2Wire cable
- Extends data signal 10/100 Base T up to 350m
- Anti-Vibration terminal block feature for harsh installation sites
- IEEE 802.3 af/at compliant PoE
- Easy configuration, no IP address or network setup required
- LED indicators for installation - power, link and data traffic status
- Compact size
- Can be sold individually
- Powers up to 4 devices (contact Jacques for options)

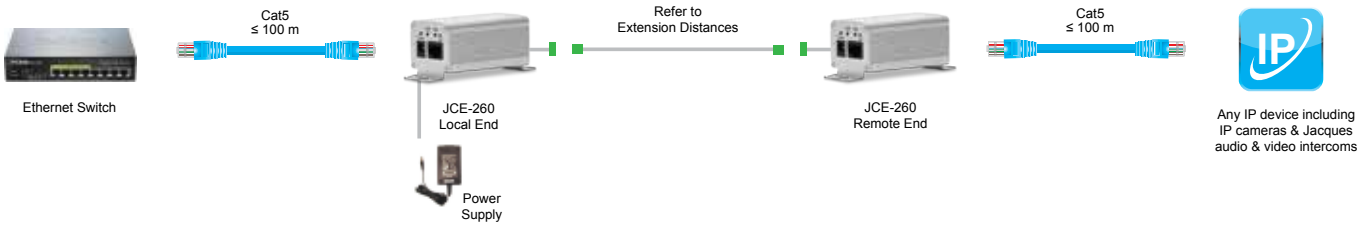
PACKAGE CONTENTS

- Pair of IP Ethernet Extender Modules JCE-225/260
- Power supply unit 25 W (51872), 60 W (51873)

SPECIFICATIONS

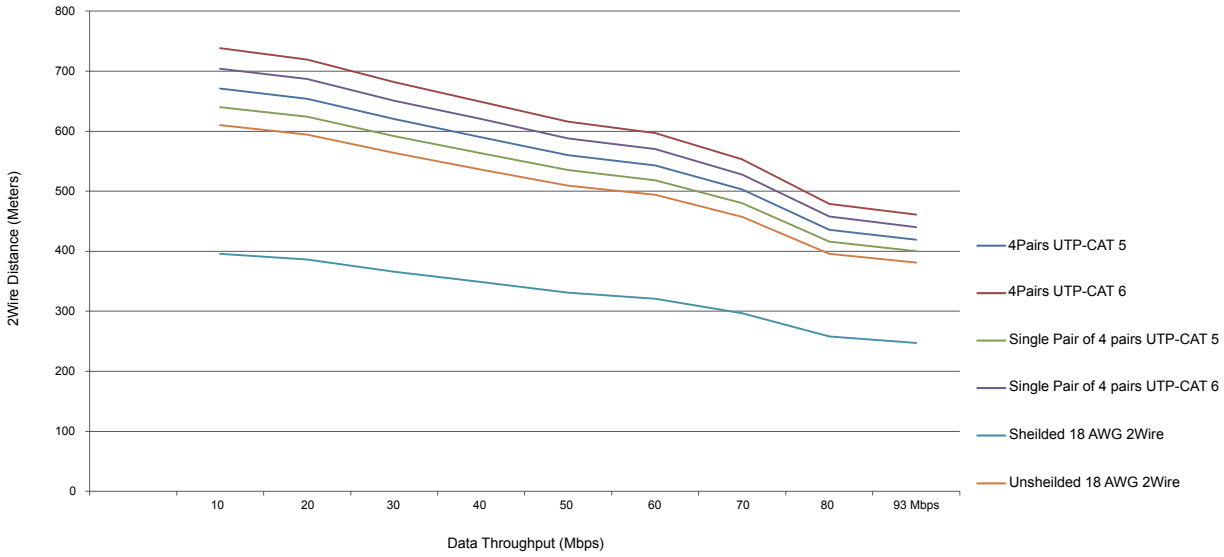
Housing	Extruded Aluminium
Power Requirements	48 VDC / 1.3A
Ethernet Interface	Connector Type : RJ45 Speed: 10/100 Base T, half/full duplex, auto-negotiation IEE 802.3 af/at compliant PoE
2Wire Terminal Block Interface	Connector Type: 18 AWG 2Wire, Cat 5, Cat 6 Impedance: 25 to 100 Ω Transmit Coverage: 1,000 feet (305m) @ 4 pair Cat 6 cable
Transmission Method	Access method : CSMA / CA and TDMA Modulation method : Windowed OFDM Frequency band : 1.8 MHz to 30 MHz
Power Input	48 V d.c., (0.52 - 1.2) A Centre Positive Barrel Plug, 5.5mm Outer, 2.1 mm Inner
Weight	120 g
Dimensions (W x H x D)	102 mm x 43 mm x 40 mm
LED Indicators	Power : Blue - Power ON TWP : Green - Link ON PoE : Green - Link ON
Operating Temperature	-10° C to +50° C
Compliance	CE, Complies with FCC part 15B limits, ✓ RoHs

TYPICAL APPLICATION DIAGRAM

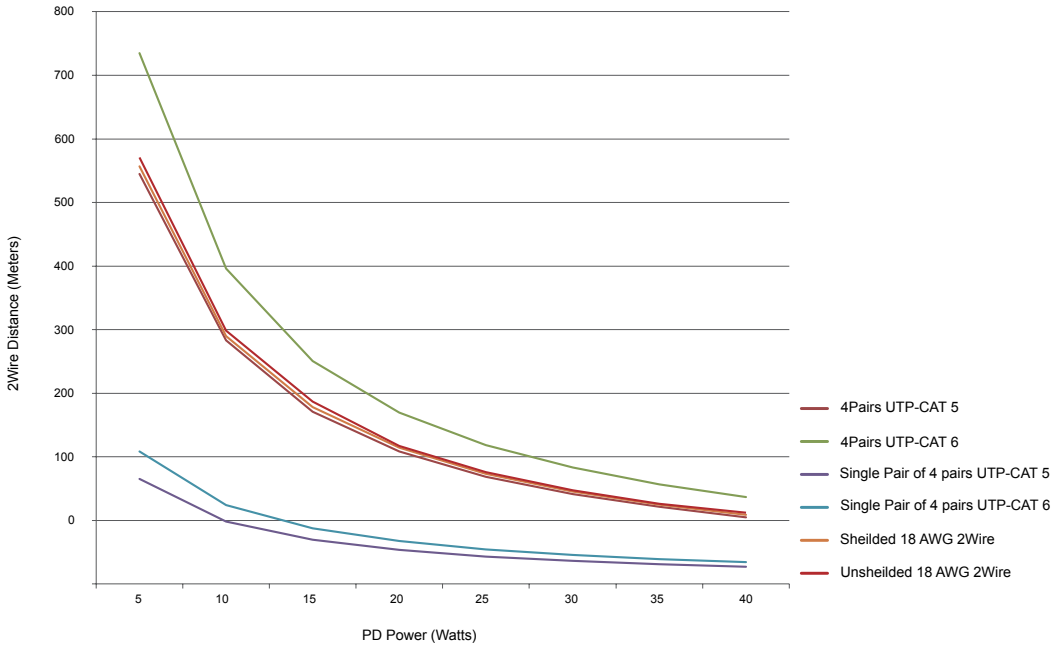


EXTENSION DISTANCES

DISTANCE & DATA THROUGHPUT CHART



DISTANCE & DATA THROUGHPUT CHART



JACQUES PRODUCTS DISTANCE SUMMARY

The following are recommended extenstion distances for Jacques typical endpoints.

220 m 4 pair Cat 6 (Audio Intercom, Video Intercom)
200 m 4 pair Cat 5 (Audio Intercom, Video Intercom)
175 m 1 pair Cat 5 (Audio Intercom), 130 m 1 pair Cat 5 (Video Intercom)
250 m Unshielded 18AWG 2Wire (Video Intercom)
350 m Unshielded 18AWG 2Wire (Audio Intercom)

MWM-7C1

MWM-7C1/P

PANEL MICROPHONE MWM-7C1/MWM-7C1/P

PRODUCT CODE 51158, 51157

FEATURES

Surface mounted microphone with balanced, line level output

Used for recording audio, covert monitoring, audio input for CCTV cameras

Two options available: stainless panel with activate button or Clipsal wall plate.

LED indicator for activity feedback

OPTIONAL ACCOMPANYING PRODUCTS

Audio Monitoring Device (UAI-AMD)
Power Supply Unit (PSU-242)

SPECIFICATIONS

Microphone	160 Hz – 16 kHz (input circuit frequency response ±3 dB)
Output Level	-4 dBu nominal
Output Impedance	600 Ω
Control Buttons	1 x stainless steel mechanical configurable PTT or toggle on/off
Auxiliary Functions	Relay contacts (1 x NO/NC) max. 2 A @ 24 V d.c.
Power Input	(12 – 32) V d.c., 24 V d.c. nominal
Power Consumption	1.8 W max. @ 24 V d.c. (MWM-7C1) 0.9 W max. @ 12 V d.c. (MWM-7C1/P)
Operating Temperature	(0 - 50) ˚C
Operating Humidity	(10 – 90) % RH (non-condensing)
Indicators	Green indicator (MWM-7C1)
Cabling	Audio: single screened pair cable Power: 0.75 mm², multi-strand (max. 100 m)
Connectors	Power: 2 way 3.81 mm pluggable screw terminal block Signal: 8 way 3.81 mm pluggable screw terminal block
Form Factor	Flush wall panel
Dimensions (WxHxD)	116 mm x 70 mm x 50 mm
Weight	0.25 kg (MWM-7C1) 0.2 kg (MWM-7C1/P)
Material	Stainless steel (MWM-7C1) Plastic, white (MWM-7C1/P)
Finishes	Linish (MWM-7C1) Clipsal single gang plate (MWM-7C1/P)
Environment	Indoor use only
Vandal Resistant	Yes (MWM-7C1 only)
Mounting Options	Flush mount direct into ceiling or wall (MWM-7C1), mounting hole pitch suits single gang electrical plate (MWM-7C1/P)
Fixings	M3.5, M4 or self tapping screws (MWM-7C1) M3.5 screws (MWM-7C1/P) (included with purchase)

PoE MODULE PoEC-1

PRODUCT CODE 51704

FEATURES

Provides low power to Jacques devices via a PoE switch/RJ45 connection

JPoE & data or voltage output versions available

SPECIFICATIONS

Power Input	IEEE PoE through RJ45 LAN
Power Output	24 V d.c. / 250 mA
Power & Data	JPoE and data through RJ45
Power Consumption	10 W max. (1 W standby)
Electrical Isolation	All outputs have galvanic isolation from PoE input
Operating Temperature	(0 – 50) °C
Operating Humidity	(10 – 95) % relative humidity (non-condensing)
Indicators	Green power LED
Cabling	Ethernet: CAT-5, 5e, 6 UTP, max. 100 m
Connectors	RJ45: Ethernet in/out
Form Factor	Rectangular box; LAN/power connections and indicators on top
Dimensions (WxHxD)	54 mm x 35 mm x 120 mm
Weight	0.1 kg
Material	Plastic enclosure with metal mounting bracket
Environment	Indoor use only
Mounting Options	Mounting bracket, 100 mm spacing with 2 x 4G screws, horizontal or vertical

FLUSH MOUNT BACKBOX FWE-1

PRODUCT CODE 60701

SPECIFICATIONS

Suitable For	VSL/VDL/VMI/VES-x4x series
Dimensions (WxHxD)	110 mm x 270 mm x 80 mm
Weight	1 kg
Material	Zincanneal steel
Finishes	Zinc plated and passivated
Environment	Indoor use only
Intercom Mounting Holes	10 x M4 threaded holes
Intercom Fixings	10 x M4 security torx screws (included with purchase of backbox)
Cable Entry	2 x 25 mm Ø holes centred top and bottom

FLUSH MOUNT BACKBOX FWE-14

PRODUCT CODE 51274

SPECIFICATIONS

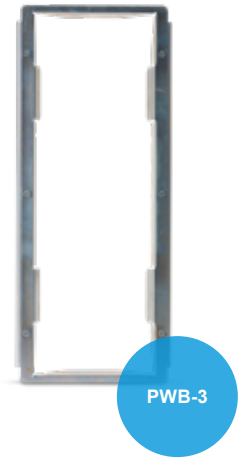
Suitable For	VSL-x5x series
Dimensions (WxHxD)	98 mm x 142 mm x 57 mm
Weight	0.5 kg
Material	Zincanneal steel
Finishes	Zinc plated and passivated
Environment	Indoor use only
Intercom Mounting Holes	4 x M4 threaded hole
Intercom Fixings	4 x M4 security torx screws (included with purchase of backbox)
Cable Entry	5 x 28 mm Ø holes centred top, bottom, right, left and rear

FWE-17

PRODUCT CODE 51781

SPECIFICATIONS

Suitable For	VSA-76K Clean Room Intercom
Dimensions (WxHxD)	127 mm x 329 mm x 65 mm
Weight	1.54 kg
Material	Zinc plated steel
Environment	Indoor use
Intercom Mounting Holes	2 each top, bottom and side edges + 6 rear for fixings as appropriate to wall stud work or masonry
Intercom Fixings	6x rare earth cup magnets
Cable Entry	By press out blanks, 1 each top and bottom + 3 rear



PLASTERBOARD MOUNT KIT PWB-3

PRODUCT CODE 51782

SPECIFICATIONS

Suitable For	VSA-76K Clean Room Intercom
Dimensions (WxHxD)	135 mm x 338 mm x 30 mm
Weight	0.28 kg
Material	Zinc plated steel
Environment	Indoor use
Intercom Fixings	Press/friction fit
Cable Entry	Open to the exposed rear of the intercom

SURFACE MOUNT BACKBOX SWE-1

PRODUCT CODE 60709

SPECIFICATIONS

Suitable For	VDL/VES/VMI/VSL-x4x series
Dimensions (WxHxD)	130 mm x 290 mm x 80 mm
Weight	1.3 kg
Material	Zincanneal steel
Finishes	Powder coated, APO ripple grey
Environment	Indoor and outdoor
Intercom Mounting Holes	6 x M4 threaded hole
Intercom Fixings	6 x M4 security torx screws (included with purchase of backbox)
Cable Entry	Drill or cut upon installation

SURFACE MOUNT BACKBOX SWE-4SS

PRODUCT CODE 60714

SPECIFICATIONS

Suitable For	VSL-x5x series
Dimensions (WxHxD)	125 mm x 180 mm x 60 mm
Weight	0.9 kg
Material	316 stainless steel
Finishes	Linish
Environment	Indoor and outdoor
Intercom Mounting Holes	4 x M4 threaded hole
Intercom Fixings	4 x M4 security torx screws (included with purchase of backbox)
Cable Entry	1 x 25 mm Ø hole centre of rear

SURFACE MOUNT BACKBOX SWE-6

PRODUCT CODE 60712

SPECIFICATIONS

Suitable For	VSL-x5x series
Dimensions (WxHxD)	125 mm x 180 mm x 60 mm
Weight	0.9 kg
Material	Zincanneal steel
Finishes	Powder coated, APO ripple grey
Environment	Indoor and outdoor
Intercom Mounting Holes	4 x M4 threaded hole
Intercom Fixings	4 x M4 security torx screws (included with purchase of backbox)
Cable Entry	1 x 25 mm Ø hole centre of rear

SURFACE MOUNT BACKBOX SWE-9SS

PRODUCT CODE 60708

SPECIFICATIONS

Suitable For	VDL/VES /VMI/VSL-x4x series
Dimensions (WxHxD)	130 mm x 290 mm x 79 mm
Weight	1.2 kg
Material	316 stainless steel
Finishes	Linish
Environment	Indoor and outdoor
Intercom Mounting Holes	10 x M4 threaded hole
Intercom Fixings	10 x M4 security torx screws (included with purchase of backbox)
Cable Entry	3 x 25 mm Ø holes centred top, centre and bottom of rear

SURFACE MOUNT BACKBOX SWE-12

PRODUCT CODE 51445

SPECIFICATIONS

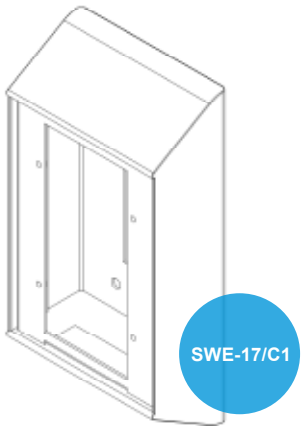
Suitable For	VES-75K
Dimensions (WxHxD)	170 mm x 372 mm x 50 mm
Weight	1.4 kg
Material	Zincanneal steel
Finishes	Powder coated, matte, dark grey
Environment	Indoor and outdoor
Intercom Mounting Holes	6 x M3 threaded holes
Intercom Fixings	6 x M3 CSK stainless steel hex (included with purchase of backbox)
Cable Entry	Drill or cut at installation

SURFACE MOUNT BACKBOX SWE-15SS

PRODUCT CODE 60720

SPECIFICATIONS

Suitable For	VSL-x6x series
Dimensions (WxHxD)	125 mm x 180 mm x 60 mm
Weight	0.8 kg
Material	316 stainless steel
Finishes	Linish
Environment	Indoor and outdoor
Intercom Mounting Holes	6 x M4 threaded hole
Intercom Fixings	6 x M4 security torx screws (included with purchase of backbox)
Cable Entry	3 x 25 mm Ø holes centred top, centre and bottom of rear



SURFACE MOUNT BACKBOX ANTI LIGATURE SWE-17/C1

PRODUCT CODE 60721

SPECIFICATIONS

Suitable For	VSL-x5x series
Dimensions (WxHxD)	263.3 mm x 129.5 mm x 66 mm
Weight	0.6 kg
Material	316 stainless steel
Finishes	Linish
Environment	Indoor and outdoor
Intercom Mounting Holes	4 x M4 threaded hole
Intercom Fixings	4 x M4 security torx screws (included with purchase of backbox)
Cable Entry	1 x 100 mm x 64 mm rectangular rear cut out

SURFACE MOUNT BACKBOX SWE-13/SWE-14

PRODUCT CODE 60716, 60717

SPECIFICATIONS

Suitable For	VMS-750 (SWE-13) VMS-750 with JHS-1 (SWE-14)
Dimensions (WxHxD)	274 mm x 165 mm x 35 mm (excluding VMS-750 mounting tabs) (SWE-13) 334 mm x 165 mm x 35 mm (excluding VMS-750 mounting tabs) (SWE-14)
Weight	0.6 kg (SWE-13) 0.7 kg (SWE-14)
Material	Zincanneal steel
Finishes	Powder coated, matte, dark grey
Environment	Indoor use only
Intercom Mounting Holes	1 x M3 threaded hole
Intercom Fixings	1 x M3 CSK black machine screw (included with purchase of backbox)
Cable Entry	214 mm x 115 mm cut out (SWE-13) 273 mm x 115 mm cut out(SWE-14)

DESK MOUNT KIT DMS-1/DMS-2

PRODUCT CODE 51400, 51461

SPECIFICATIONS

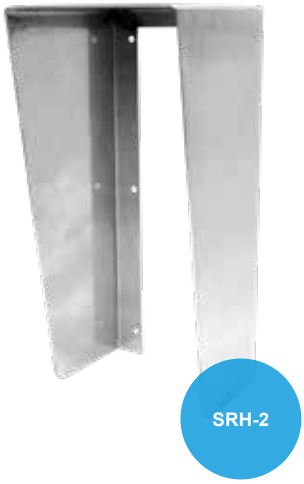
Suitable For	VMS-750 (DMS-1) VMS-750 with JHS-1 (DMS-2)
Dimensions (WxHxD)	267 mm x 156 mm x 88 mm (DMS-1) 327 mm x 156 mm x 88 mm (DMS-2)
Weight	0.4 kg (DMS-1) 0.5 kg (DMS-2)
Material	Electro gal
Finishes	Powder coated satin black
Environment	Indoor use only
Intercom Mounting Holes	1 x M3 threaded hole
Intercom Fixings	1 x M3 CSK black machine screw (included with purchase of kit)
Cable Entry	100 mm x 88 mm cut out

RAINHOOD SRH-1

PRODUCT CODE 50213

SPECIFICATIONS

Suitable For	VSL-x5xW+ series
Dimensions (WxHxD)	156 mm x 201 mm x 135 mm
Weight	1.3 kg
Material	316 stainless steel
Finishes	Linish
Environment	Outdoor
Intercom Mounting Holes	4 x M4 threaded hole
Intercom Fixings	4 x M4 security torx screws (included with purchase of backbox)



RAINHOOD SRH-2

PRODUCT CODE 51190

SPECIFICATIONS

Suitable For	VES-741/VSL-x4xW+ series
Dimensions (WxHxD)	138 mm x 296 mm x 135 mm
Weight	1.7 kg
Material	316 stainless steel
Finishes	Linish
Environment	Outdoor
Intercom Mounting Holes	6 x M4 threaded hole
Intercom Fixings	6 x M4 security torx screws (included with purchase of backbox)

RAINHOOD SRH-4

PRODUCT CODE 51053

SPECIFICATIONS

Suitable For	VSL-37xW+ series
Dimensions (WxHxD)	82 mm x 264.5 mm x 90 mm
Weight	0.9 kg
Material	316 stainless steel
Finishes	Linish
Environment	Outdoor
Intercom Mounting Holes	4 x M4 threaded hole
Intercom Fixings	4 x M4 security torx screws (included with purchase of backbox)

POWER SUPPLY UNIT PSU-242

PRODUCT CODE 50971

SPECIFICATIONS

Power Input	90 – 264 V a.c., 3 pin IEC-C14 connector for standard IEC-C13 cable connection
Power Output	24 V d.c. 2.5 A
Cables	Input: 2m lead IEC-C13 to AU 3 pin mains plug supplied Output: (2.5/5.5 x 11) mm d.c. jack on 1.8m lead
Dimensions (WxLxD)	50 mm x 125 mm x 32 mm (excluding cables)
Weight	0.35 kg

POWER SUPPLY UNIT PSU-246A

PRODUCT CODE 51412

FEATURES

Power supply unit for JPoE-24 (Jacques 24 Port PoE Adaptor)

SPECIFICATIONS

Power Input	90-265 V a.c.
Power Output	24 V d.c. 6.3 A
Cables	Input: 1.2m lead with IEC-C14 plug allows for direct connection to typical UPS outlets as well as standard IEC-C13 mains cable connection. 2m lead supplied. Output: 1.2m flying lead bare ends
Dimensions (WxLxD)	68 mm x 223 mm x 39 mm (excluding cables)
Weight	1 kg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STANDALONE INTERCOM SYSTEMS

DIRECT DIALLING INTERCOMS

The Jacques Direct Dial intercom range (VDL Series) is designed for easy connection to new and existing PSTN/PABX telephony systems. These intercom terminals can dial 1, 4 or up to 999 pre-configured telephone numbers, making them ideal entrance intercoms.

Analogue Direct Dial Help Point Units automatically dial a preconfigured telephone number via a PSTN or PABX network once the call button is pressed.

The intercoms feature enabled noise reduction and echo cancellation technology for quality audio and clear conversations. The Direct Dial series intercom terminals include configurable relays ideal for door or gate access. The VDL range of intercoms offer simple installation and require low maintenance, ideal for industrial, marine or commercial applications.

DIRECTDIALLINGINTERCOMDIAGRAM

VDL-441

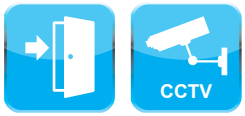
Phone Line

PABX or PBX

HOW IT WORKS

The Direct Dial Intercom (VDL-441) is used to call a remote telephone, which in turn controls the intercom relays via a PABX/PBX connection.

Relays



Relay contacts activate CCTV cameras and/or door/gate access

Answering Telephone

Intercom relay operations are controlled by the telephone keypad

VDL-441

VDL-444

VDL-44K

DIRECT DIAL INTERCOM TERMINAL VDL-441/VDL-444/VDL-44K

PRODUCT CODE 51109, 51150, 51269

FEATURES

- Standalone analogue intercom
- Direct dialling to a pre-configured phone number via telephone or PABX line.
- Vandal resistant design
- One-touch operation with hands-free communication, once call is established
- Microphone aperture deters insect nesting and water beads

SPECIFICATIONS

Speaker	4 Ω, 3 W RMS (power rating)
Speaker Amplifier	150 Hz to 4000 kHz, 2 W RMS
Max. Acoustic Output	88 dB SPL @ 1 m
Speaker Hole Size	42 x 4 – 7 mm Ø holes
Microphone	Electret condenser, omnidirectional, sensitivity -55 dB
Microphone Hole Size	1 x “koala nose”, 6 x 10 mm
Audio Bandwidth	300 Hz - 3.4 kHz (telephone bandwidth)
Telephone Interface	**On Hook** REN 0.1 **Off Hook** Termination impedance - 600 Ω @ 1800Hz Line current limit setting - 62 mA Minimum line operation current - 15 mA Dialing - DTMF only
Control Buttons	1 x piezo switch, red, 28 mm (VDL-441) 4 x piezo switch, red,19 mm (VDL-444) 3 x 4 metal keypad, silver, 47 x 64 mm buttons (VDL-44K)
Auxiliary Functions	2 x relays NC/NO type – 2 A @ 24 V d.c.
Power Input	(12 – 32) V d.c. (24 V d.c. nominal)
Power Consumption	300 mA max.
Operating Temperature	(0 – 50) °C
Operating Humidity	(10 – 95) % relative humidity (non-condensing)
Cabling	Telephone Line: 1 pair UTP Power: Figure 8, 0.75 mm² multi-strand
Configuration	Programmed using remote telephone via DTMF, max. 15 digits Dial 1 telephone number (VDL-441) Dial 4 telephone numbers (VDL-444) Dial up to 999 telephone numbers (VDL-44K)
Compliance	Telecommunications: ACIF S002:2001,2004:2001 Safety: AS/NZS 60950:2000 EMC: AS/NZS CISPR22:2002, class B Labelling A-tick label, N12046
Dimensions (WxHxD)	130 mm x 290 mm x 45 mm
Weight	1.35 kg
Material	316 stainless steel (2 mm)
Finishes	Linish
Environment	Indoor and outdoor
Vandal Resistant	Yes
Mounting Options	Flush mount backbox (FWE-1), surface mount backbox (SWE-1/SWE-9SS)
Mounting Holes	6 x 5 mm Ø screw holes
Fixings	6 x M4 security torx screws


CALL POINT
EMERGENCY

HPU-5D2

HPU-5D2-i

DIRECT DIAL HELP POINT UNIT HPU-5D2/HPU-5D2-i

PRODUCT CODE 51151, 51229

FEATURES

- Standalone analogue intercom
- Direct dialling to a pre-configured phone number via telephone or PABX line
- Highly visible unit, designed with public safety in mind
- Solid, vandal resistant design
- One-touch operation with hands-free communication, once call is established
- Microphone aperture deters insect nesting and water beads

CUSTOMISATION

- Call button colour
- Intercom face colour and etching
- Shell colour
- Top emblem sticker

SPECIFICATIONS

Speaker	1 x 4 Ω, 3 W RMS (power rating)
Speaker Amplifier	150 Hz - 4000 Hz, 2 W RMS
Max. Acoustic Output	88 dBSPL @ 1 m
Speaker Hole Size	42 x 4 – 7 mm Ø holes
Microphone	Electret condenser, omnidirectional, sensitivity -55 dB
Microphone Hole Size	6 x 3 & 5 mm Ø holes
Audio Bandwidth	300 Hz – 3.4 kHz (telephone bandwidth)
Telephone Interface	**On Hook** REN 0.1 **Off Hook** Termination impedance - 600 Ω @ 1800Hz Line current limit setting - 62 mA Minimum line operation current - 15 mA Dialing - DTMF only
Control Buttons	1 x piezo switch, red, 28 mm (HPU-5D2) 2 x piezo switch, 1 x red, 1 x blue, 28 mm (HPU-52-i)
Auxiliary Functions	2 x relays NC/NO type – 24 V d.c. / 2 A max.
Power Input	(12 – 32) V d.c. (24 V d.c. nominal)
Power Consumption	300 mA max.
Operating Temperature	(0 – 55) °C
Operating Humidity	(10 – 95) % relative humidity (non-condensing)
Cabling	Telephone Line: 1 pair UTP Power: Figure 8, 0.75 mm² multi-strand
Configuration	Programmed using remote telephone via DTMF, max. 15 digits Dial 1 telephone number (HPU-5D2) Dial 2 telephone numbers (HPU-5D2-i)
Dimensions (WxHxD)	320 mm x 420 mm x 120 mm
Weight	8.1 kg
Material	Front shell: 5 mm die cast aluminium Front control panel: 316 type stainless steel (3 mm) Back: 316 type stainless steel (3 mm)
Finishes	Dulux™ orange powder coated, with a clear anti-graffiti lacquer
Environment	Indoor and outdoor
Vandal Resistant	Yes
Mounting Options	Wall mount (WMP-5), bollard (BOL-3xx)
Mounting Holes	6 x M6 stainless steel tapped standoffs
Fixings	6 x M6 security torx screws

VMI SERIES INTERCOMS

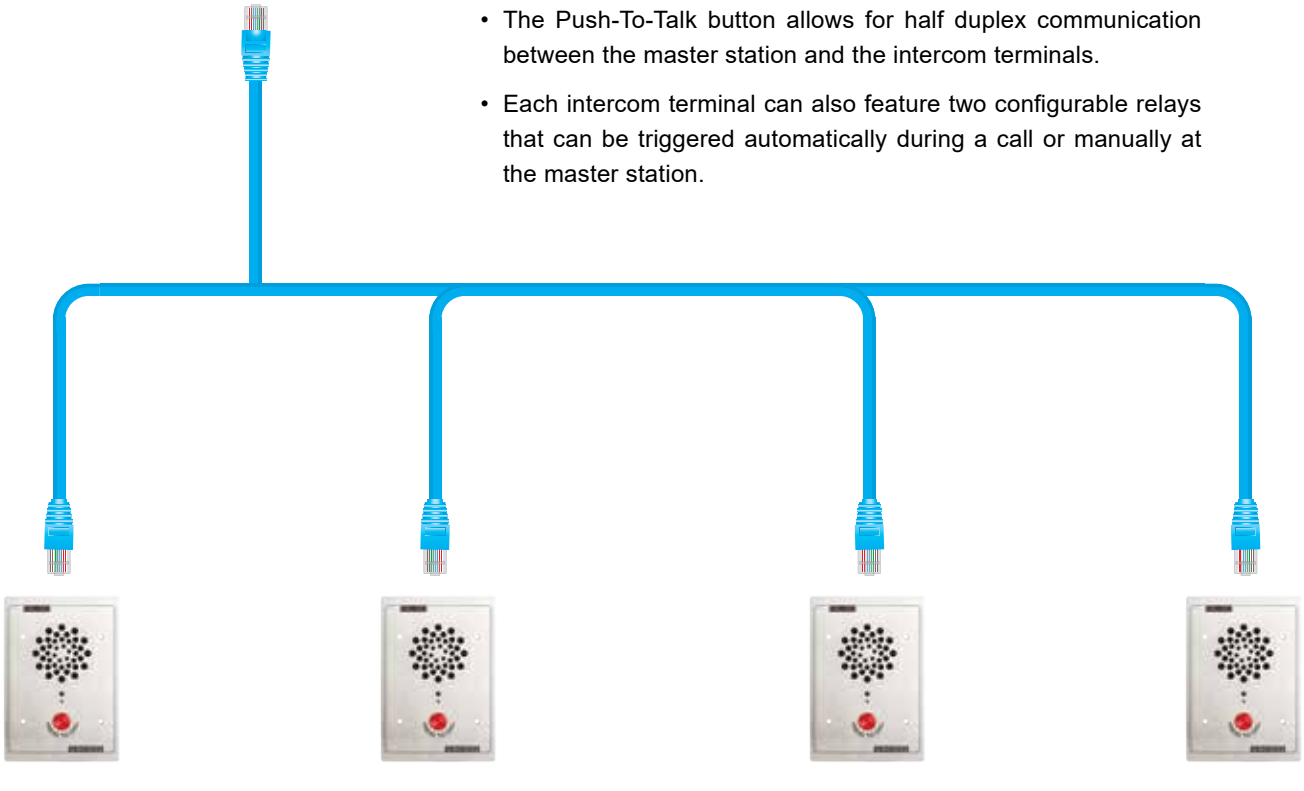
The Jacques VMI standalone intercom system is a ready-to-use, complete intercom system that has been especially designed for areas requiring up to 4 vandal resistant intercom terminals. Ideal for police stations, industrial, commercial and government sites.

VMI SERIES DIAGRAM

VMI-155M

HOW IT WORKS

- The VMI Series Master Station (VMI-155M) combined with four intercom terminals (VSL-251) makes a complete standalone intercom system.
- The master station communicates with the intercom stations via the four separate call buttons.
- The Push-To-Talk button allows for half duplex communication between the master station and the intercom terminals.
- Each intercom terminal can also feature two configurable relays that can be triggered automatically during a call or manually at the master station.



VSL-251 VSL-251 VSL-251 VSL-251

VMI-155M

VMI STANDALONE MASTER STATION VMI-155M

PRODUCT CODE 50634

FEATURES

- Standalone intercom system
- Master station supports up to 4 slave intercoms
- Balanced line out for recording
- Vandal resistant design
- Dry relay contact output for door/gate control

CUSTOMISATION

- Intercom face etching

SPECIFICATIONS

Speaker	4 Ω, 3 W RMS (power rating)
Speaker Amplifier	60 Hz to 12 kHz, 1 W RMS
Max. Acoustic Output	88 dBSPL @ 1 m, 1 kHz (non-clipped) sine wave signal
Speaker Hole Size	42 x 4 – 7 mm Ø holes
Microphone	Electret condenser, omnidirectional, sensitivity -55 dB 160 Hz – 16 kHz (input circuit frequency response ±3 dB)
Microphone Hole Size	1 x 2.5 mm Ø hole
Audio Bandwidth	160 Hz - 12 kHz
Control Buttons	4 x stainless steel call push buttons, 19 mm 1 x stainless steel push-to-talk button, 19 mm
Auxiliary Functions	Electronically balanced signal, -4 dBu nominal
Power Input	(12 – 32) V d.c. (24 V nominal)
Power Consumption	5 W max.
Operating Temperature	(0 – 50) °C
Operating Humidity	(10 – 95) % relative humidity (non-condensing)
Cabling	Audio & Data: UTP CAT-5/6, multi-strand, 24 AWG Recording Audio: single pair screened cable Power: Figure 8, 0.75 mm² multi-strand
Configuration	1-4 Jacques VSL-251 intercom terminals (daisy chained)
Dimensions (WxHxD)	130 mm x 290 mm x 45 mm
Weight	1.0 kg
Material	316 stainless steel (2 mm)
Finishes	Linish
Environment	Indoor and outdoor
Vandal Resistant	Yes
Mounting Options	Flush mount backbox (FWE-1), surface mount backbox (SWE-1/SWE-9SS)
Mounting Holes	6 x 5 mm Ø screw holes
Fixings	6 x M4 security torx screws


VSL-251
PRESS TO CALL
JACQUES

VSL-251

ANALOGUE INTERCOM TERMINAL VSL-251

PRODUCT CODE 50330

FEATURES

Vandal resistant design

One-touch operation with hands-free communication, once call is established

SPECIFICATIONS

Speaker	1 x 8 Ω, 3 W
Speaker Amplifier	1 W
Max. Acoustic Output	88 dBSPL @ 1 m, 1 kHz (non-clipped) sine wave signal
Speaker Hole Size	42 x 4 – 7 mm Ø holes
Microphone	Electret condenser, omnidirectional, sensitivity -56 dB
Microphone Hole Size	1 x 2.5 mm Ø hole
Audio Bandwidth	160 Hz – 16 kHz, -3 dB
Control Buttons	1 x piezo switch, red, 19 mm
Auxiliary Functions	Optional 1 x relay NC/NO type - 24 V d.c. / 2 A max (DR-1)
Power Input	(12 – 32) V d.c.
Power Consumption	3 W max.
Operating Temperature	(0 - 50) °C
Operating Humidity	(10 – 95) % non-condensing
Cabling	Bus (daisy-chain) topology, up to 1 km depending on supply voltage, power cable gauge and distribution 1 x 4 pair Cat5/5e/6 (RS-485 + Intercom Audio) 1 x Figure 8 (2 conductor) 0.75 mm² minimum (Power) 1 x 2 pair individually screened 0.2 mm² (Auxiliary channels if required)
Configuration	Up to 255 VSL-251s addressed per bus, up to 8000 devices total in a hierarchical system
Dimensions (WxHxD)	125 mm x 180 mm x 58 mm 58 mm min. mounted depth
Weight	0.67 kg
Material	304 stainless steel (2 mm)
Finishes	Linish
Environment	Indoor and outdoor
Vandal Resistant	Yes, strong front panel, staggered speaker holes to prevent speaker damage
Mounting Options	Flush mount backbox (FWE-14), surface mount backbox (SWE-6\SWE-4SS), rainhood (SRH-1)
Mounting Holes	4 x 4.5 mm Ø screw holes
Fixings	4 x M4 security torx screws

GLOSSARY

ADAM RELAY MODULE

Advantech Data Acquisition Module; A network enabled input/output module that works in conjunction with Jacques Event Controller software to provide the control of up to 6 relays in a system. The ADAM module supports multiple protocols including MODbus TCP, TCP/IP, UDP, HTTP and DHCP protocols.

AEC

Acoustic Echo Cancellation; Refers to a method in telephony to improve voice quality by preventing echo from being created or removing it after it is already present. In addition to improving subjective quality, this process increases the capacity achieved through silence suppression by preventing echo from traveling across a network.

AGC

Automatic Gain Control; A signal processing method whereby a signal's magnitude is automatically adjusted such that it remains within a specified range.

ALARM

A notification when a predefined event, state or limit has occurred in a system.

ANALOGUE

Systems where signals or information represent continually changing physical quantities, for example voltage or sound pressure.

AUDIO FOLLOW VIDEO

An operational mode in which audio and video switchers are tied together, so that when the operator selects the video source the audio automatically switches to the same source.

BANDWIDTH

When used in an analogue domain, it typically refers to the frequency range in which a device can operate with a less than -3 dB (half power) signal loss. When used in a digital domain it typically refers to bitrate data throughput requirements/characteristics of a particular device or application.

CCTV

Closed Circuit Television; A TV system in which signals are not publicly distributed but are monitored, primarily for surveillance and security purposes.

CODEC

A portmanteau of "coder-decoder"; A device or computer program capable of encoding or decoding a digital data stream or signal.

DHCP

Dynamic Host Configuration Protocol; A client/server protocol that automatically provides an Internet Protocol (IP) host with its IP address and other related configuration information such as the subnet mask and default gateway.

DIFFSERV

Differentiated Services; A protocol for specifying and controlling network traffic by class so that certain types of traffic are given precedence over others.

DIGITAL

Systems where signals or information are expressed as combinations of discrete logical levels, for example binary ones (1) and zeroes (0).

DTMF

Dual-tone multi-frequency; A global standard for audible tones that represent the digits on a phone keypad. Pressing a key on the keypad generates the corresponding DTMF tone which is used to identify that key.

DURESS BUTTON

Sometimes referred to as a panic button; alerts necessary parties to the presence of an individual in danger, or in need of help.

ENDPOINT

A device in the system used by the end user e.g. intercoms.

EVENT

Action that occurs or is regarded as occurring within the system.

FULL DUPLEX

Refers to the transmission of data in two directions simultaneously. Within telecommunications, the phrase typically refers to a system which allows both parties to communicate with the other simultaneously.

GALVANIC ISOLATION

A method of isolating functional sections of electrical systems to prevent current flow, such that no direct conduction path is permitted.

GUI

Graphical User Interface; A type of interface that allows users to interact with electronic devices through graphical icons and visual indicators such as secondary notation, as opposed to text-based interfaces, typed command labels or text navigation.

HALF DUPLEX

Within telecommunications, the phrase typically refers to a system which allows both parties to communicate with the other but not simultaneously.

HYBRID SYSTEMS

Refers to a Jacques communication system which employs the use of both 550-series (analogue) and 650-series (VoIP) products.

IEEE PoE

Institute of Electrical and Electronic Engineers Power over Ethernet; A recognised standard for providing both data and power connections in one Ethernet cable, so equipment doesn't require a separate cable for each need.

IGMP

Internet Group Management Protocol; A communications protocol used by hosts and adjacent routers on IP networks to establish multicast group memberships.

IP

Internet Protocol; A method by which data is sent from one computer to another on the Internet.

JEM

Jacques Ethernet Module; Refers to the main circuit board used within a majority of Jacques VoIP products. The word is typically followed by a number (e.g. JEM-2, JEM-3) used to identify which product generation the board relates to.

JPoE

Jacques Power over Ethernet; Refers to a method used by Jacques for providing both data and power connections in one Ethernet cable, so equipment doesn't require a separate cable for each need.

LAN

Local Area Network; A computer network that interconnects computers within a limited area, such as a home, school, computer laboratory, or office building, using network media.

MASTER STATION

Controls and coordinates the activities of other stations in the system. Typically a master station can make and receive calls, place calls on hold, make PA announcements, trigger events and relays.

NTP

Network Time Protocol; A networking protocol that is used to synchronise computer clock times.

PIN

Personal Identification Number; Refers to a numerical code typically used within security applications to identify or verify the identity of an operator.

PSTN

Public Switched Telephone Network; Refers to the world's collection of interconnected voice-oriented public telephone networks, both commercial and government-owned.

PTT

Push To Talk; A means of instantaneous communication that uses a button to switch a device between voice transmission mode to voice reception mode.

QoS

Quality of Service; Refers to a broad collection of networking technologies and techniques used to provide guarantees on the ability of a network to deliver predictable results. Elements of network performance within the scope of Quality of Service often include availability (uptime), bandwidth (throughput), latency (delay) and error rate.

RELAY

An electrical device, typically incorporating an electromagnet, which is activated by a current or signal in one circuit to open or close another circuit.

RJ45

Registered Jack 45; Refers to a cable termination specification that defines physical male and female connectors and the pin assignments of cables used to typically connect computers on local area networks.

RTP

Real-Time Transport Protocol; An Internet protocol standard that specifies a way for programs to manage the real-time transmission of multimedia data over unicast or multicast network services.

STANDALONE

Refers to the capability of a device to operate self-contained independently of other hardware or software.

STANDBY

Refers to a state of waiting, ready for duty or immediate deployment.

STB

Self-Testing Button; Refers to a Jacques custom designed push button which is capable of being remotely tested to confirm its functional status.

SIP

Session Initiation Protocol; A signaling communications protocol, widely used for controlling multimedia communication sessions such as voice and video calls over IP networks.

TCP/IP

Transmission Control Protocol / Internet Protocol; Refers to a suite of communications protocols used to connect hosts within a network.

THRESHOLD ALARM MONITORING

A method used to determine when an intercom's audio levels exceed a predefined level.

ToS

Type of Service; Refers to a concept of governing how a network packet is treated with regards to priority. IPv4 uses the TOS field to specify DiffServ (deprecating TOS) values.

UCARP

Userland Common Address Redundancy Protocol; A protocol employed to allow multiple hosts to share common virtual IP addresses in order to provide automatic failover.

VGA

Video Graphics Array; Refers to a graphics display system for PCs developed by IBM. It has become one of the most common display standards for computers.

VIDEO FOLLOW AUDIO

An operational mode in which audio and video switchers are tied together, so that when the operator selects the audio source the video automatically switches to a camera associated with the selected audio source.

VIRTUAL

When used in computing, the term refers to software which is not tied to any physical hardware, however appears and operates in an identical manner to an external observer.

VLAN

Virtual Local Area Network; Refers to a group of devices on one or more LANs that are configured to communicate as if they were attached to the same wire, when in fact they are located on a number of different LAN segments. Because VLANs are based on logical instead of physical connections, they are extremely flexible.

VoIP

Voice over Internet Protocol; Refers to a category of hardware and software that enables people to use the Internet as the transmission medium for telephone calls by sending voice data in packets using IP rather than by traditional circuit transmissions of the PSTN.

WAN

Wide Area Network; Refers to a network that covers a broad area (i.e., any telecommunications network that links across metropolitan, regional, national or international boundaries) using leased telecommunication lines.

PRODUCT INDEX

SYSTEM SPECIFICATIONS

SYSTEM CAPACITY

Intercom Stations	Unlimited*
Master Stations	Unlimited*
Stored Announcements	Unlimited*
Call Queue Size	Unlimited*
Groups	Unlimited*
Simultaneous Conversations	Unlimited*
Audio Communication Between any endpoint	Yes +
Auxiliary Channels	16 (typically up to 4 live captured sources)

AUDIO CHARACTERISTICS

Frequency Response	200 Hz - 7 kHz ± 3 dB
Transmission Format	Real-Time Transport Protocol (RTP) Streaming
Digital Audio Format - Voice	A-law compressed PCM 16 kHz sampling rate
Audio Streaming Bandwidth	128 kb/s one way, 256 kb/s full duplex
Acoustic Echo Cancellation	Yes

VIDEO CHARACTERISTICS

Multi-Standard Video Codec	MPEG-4 part 2, simple profile; H.264 baseline profile; H.263 part 3
Video Streaming Bandwidth	500 kb/s - 6 Mb/s

CALL HANDLING

Call Topologies	Intercom/hierarchical/peer/public address/zoned
Call Priorities	256 priority levels
Call Features (Basic)	Auto-answer, hold, forward, diversion, directory, group call, caller-ID, bridged call appearance
Call Features (Specialised)	Isolate nuisance callers, covert monitor, dynamic group call, stored announcements, master call, remote mode, priority queuing, selective answer of call waiting

NETWORK

Addressing	TCP/IP IPV4, static or dynamic (DHCP)
Interface Media	IEEE 802.3 10/100 Mb/s Ethernet
Standards	IEEE802.1P LAN Layer 2 prioritisation IEEE802.1Q Virtual LAN RTP - Real-Time Transport Protocol (RFC3550/3551) TOS - IPV4 Type of Service (RFC791) DTMF - RTP payload for DTMF digits (RFC2833) Multicast - IP Multicasting (RFC1112) Diffserv - Differentiated Services (RFC2474/2475) NTP - Network Time Protocol (RFC1305) IGMPv2 - Internet Group Management Protocol v2 (RFC2236) DHCP - Dynamic Host Configuration Protocol (RFC1531)

CABLING

Power Input/Ethernet	4 pair UTP CAT-5/5e/6, multi-strand, 24 AWG - max. 100m

**Dependent on server configuration and network bandwidth*

+Dependent on system configuration and permissions granted

YOURPROJECTPARTNER

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