

Data Socket

RJ45 Data Outlets

Standards and approvals

BS EN 50173.

IEC 11801.

TIA/EIA 568A.

TIA/EIA TSB40A.



Description

Modules suitable for use in LU6C, Euro and MK Modular frontplates in the Logic Plus range, Cat 5e/6 modules are suitable for use in structured cabling distribution systems.

Installation

- Maximum cable length 90m.
- Cable bend radii, 40mm during installation, 20mm after installation.
- Maximum pull force 8.7kg.
- Do not over tighten cable ties.
- Do not unwind the twists in the wire pairs by more than 13mm max.

BOX TYPES

Cat 6	Depth	Note
UTP	35mm	Edge/Insignia and Aspect require 46mm box depth
STP	35mm	Edge/Insignia and Aspect require 46mm box depth
Cat 5e	Depth	Note
UTP	35mm	Edge/Insignia and Aspect require 32mm box depth
STP	46mm	Edge/Insignia and Aspect require 45mm box depth

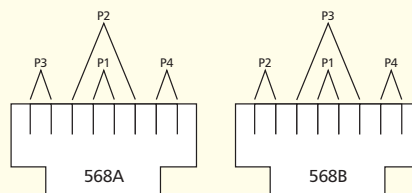
DIMENSIONS

Euro	25 x 50mm	Nominal
LU6C	22 x 37mm	Nominal
MK Modular:		
Logic Plus	25 x 58mm	(only fit into MK modular frontplates K191/2/3/4)

Installation details and wiring diagram illustrations

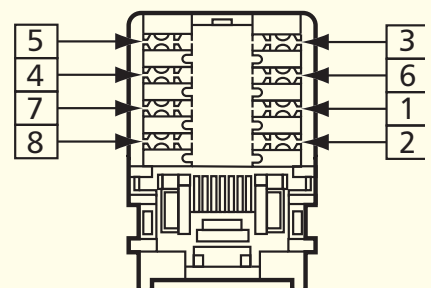
TIA WIRING SCHEME COLOUR CODES:

Pin No.	568A	568B
1	WHITE / green	WHITE / orange
2	GREEN / white	ORANGE / white
3	WHITE / orange	WHITE / green
4	BLUE / white	BLUE / white
5	WHITE / blue	WHITE / blue
6	ORANGE / white	GREEN / white
7	WHITE / brown	WHITE / brown
8	BROWN / white	BROWN / white



Pair 1 – BLUE/white & WHITE/blue
 Pair 2 – ORANGE/white & WHITE/orange
 Pair 3 – GREEN/white & WHITE/green
 Pair 4 – BROWN/white & WHITE/brown

Euro and LU6C modules are to be wired as follows



Telephone, RJ11/12, BNC Data and Blank Modules

Standards and approvals

Telephone sockets K5820 and K5821 comply with: BS 6312: 2.2,
Data sockets K5801, BS 5733:1995 (where applicable).
K5887 complies with FCC68.



Technical specification

Electrical

Cable types:
Telephone: CW1311, CW1293, CW1308, CW1316

No. of cables per termination:
Telephone: 2
RJ11/12: 1

BNC
50. impedance cable – RG58, RG141, URM43 Belden 9907

Frequency range:
BNC connector: 0 to 4GHz

Impedance:
BNC Connector: 50 Ohms nominal

Termination type:
Telephone module – IDC
BNC module – Crimped connection

Physical

Temperature range:
Ambient air –20°C to +60°C

IP rating:
IP2XD – K5820, K5821, K5801 and K5787.
IP4X – K180, K188, K186 and K170

Max. installation altitude:
2000 metres

Description

A range of telephone, data and blank modules to fit Euro and U6UC front plates. BNC Euro modules with a 500hm crimp connector suitable for use with RG58, URM43, URM76 and Belden 9907 type co-axial cables are also available.

Installation (Telephone socket modules)

Product performance, systems compatibility

Master Sockets: For use as the first socket outlet on a direct exchange. They contain the required surge protector (for line protection against electrical surges) and ringing capacitor.

Secondary Sockets: for use as extension sockets when connected on the same line as a Master Socket.

Installation tools required IDC Connectors (telephone & RJ45 outlets)

MK insertion tool List No. 400 or 22630.
Wire pull-out force: 10.5 Newtons when installed correctly.

Wiring regulation restrictions

Domestic Installations: The total REN (Ring Equivalent Number) value of all telephone equipment connected on a line must not exceed 4.

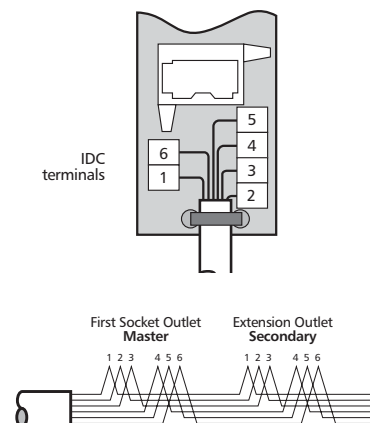
BOX TYPES

K5820 / K5821	16mm
K5801 / K5887 / K5787	25mm

BT Wiring Scheme

- 1 GREEN / white
- 2 BLUE / white
- 3 ORANGE / white
- 4 WHITE / orange
- 5 WHITE / blue
- 6 WHITE / green

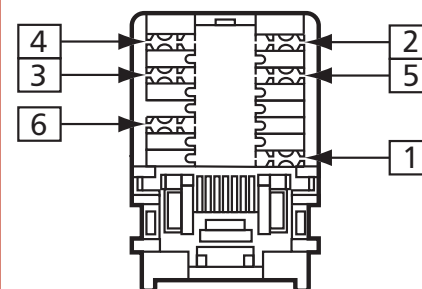
Note: Main wire colour is shown in capitals



RJ11/12 Wiring Scheme

PIN NO.	STRIPPED COLOUR WIRE	SOLID COLOUR WIRE
1	WHITE / green	White
2	WHITE / orange	Black
3	BLUE / white	Red
4	WHITE / blue	Green
5	ORANGE / white	Yellow
6	GREEN / white	Blue

Note: Main wire colour is shown in capitals



Features

- Meet all relevant BS, OFTEL and cabling standards
- Interchangeable modules clip into frontplates
- Front fixing facilitates easy exchange of modules
- Part of a complete range of products for telephone and data processing requirements

Telephone sockets

- 100% tested before delivery
- Quick, simple and reliable IDC connectors

- Can be specified for all applications
- Fit in plaster depth boxes

Data sockets

- Latest specification for high performance systems
- Made to stringent quality assurance procedures
- Wide range of data connectors available

For information on TV Satellite and FM Modules see pages 408

For a full range of corresponding products, see pages 48-52 in the product selector.

MK Modular Datacoms

Standards and approvals

Logic Plus Telephone and Data sockets comply with the following:

Telephone sockets K420 and K421

BS 6312: 2.2, OFTEL Approval NS/G/23/L/100005

Data sockets K190 to K194, K501

BS 5733: 1995 (where applicable)

Data sockets K545

Cat 5e performance to EIA/TIA TSB568, BS EN 50173, IEC11801

Technical specification

Electrical

Cable types:

Telephone CW1311, CW1293, CW1308, CW1316

RJ45: 20 to 26 AWG, 100 ohm Cat 5e UPT cable

No. of cables per termination (Telephone & RJ45):

Telephone: 2

RJ45: 1

BNC

50Ω impedance cable – RG58, RG141, URM43
Belden 9907

Frequency range:

BNC connector: 0 to 4GHz

Impedance:

BNC Connector: 50Ω nominal

Termination type:

RJ45 & telephone module – IDC

BNC module – Crimped connection

Physical

Temperature range:

Ambient air –20°C to +60°C

IP rating:

IP2XD

Max. installation altitude:

2000 metres



Description

A unique modular system in the distinctive Logic Plus style comprising a range of socket modules for Data and Telephone use, with 4 matching frontplates capable of accepting combinations of interchangeable modules. The 'clip-in' design provides a high degree of versatility, making the system ideal for use in all commercial and industrial applications.

Features

- Meet all relevant BS, OFTEL and cabling standards
- Interchangeable modules clip into frontplates
- Front fixing facilitates easy exchange of modules
- Part of a range of products for telephone and data processing requirements

Telephone sockets and frontplates

- Quick, simple and reliable IDC connectors
- Can be specified for all applications
- Fit in plaster depth boxes

Data sockets and frontplates

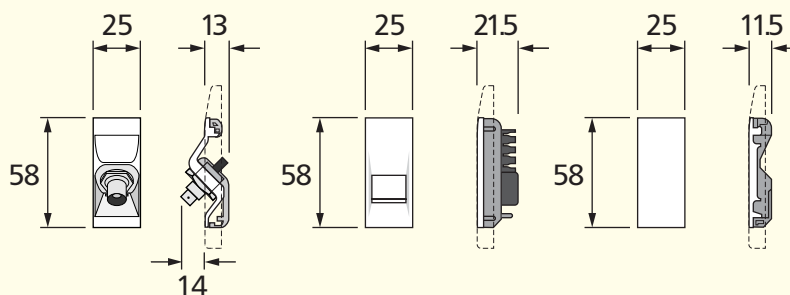
- Cat 5e specification performance
- Made to stringent quality assurance procedures

BOX TYPES

Where there is more than one module in a frontplate, the depth of the box is determined by the module with the deepest back projection.

Ref.	Min. box depth mm	Flush box List No.	Surface box List No.
K420	16	3995 ZIC	K2160 & 2161 WHI
K421	16	3995 ZIC	K2160 & 2161 WHI
K190	16	3995 ZIC	K2160 & 2161 WHI
K501	16	3995 ZIC	K2160 & 2161 WHI
K545			
(min.)	16	3995 ZIC	K2160 & 2161 WHI
(recommend)	25	861 & 862 ZIC	K2140 & 2142 WHI

Dimensions – Data and TV modules (mm)



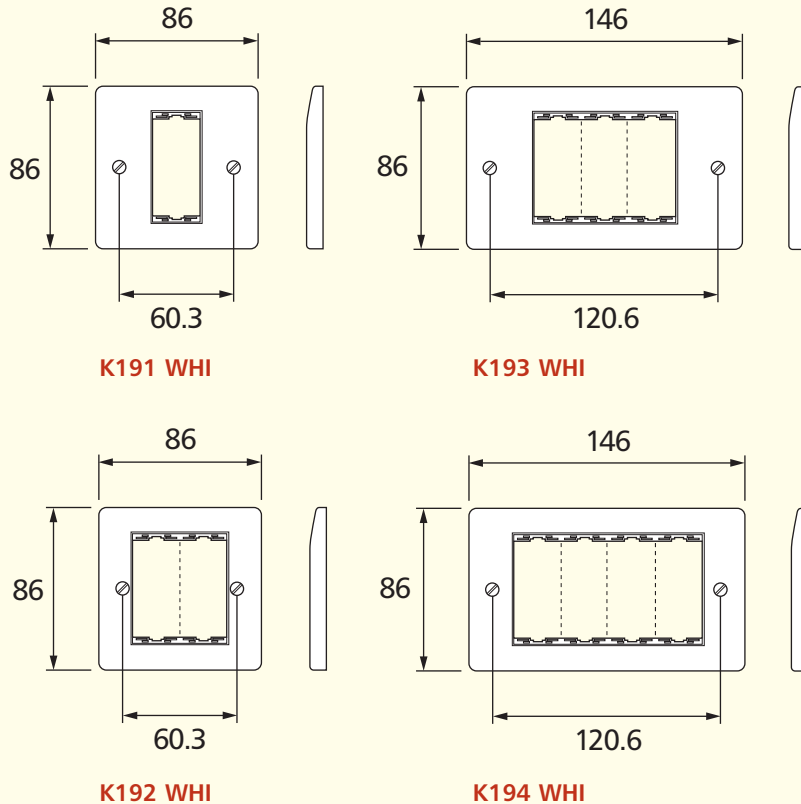
K501 WHI

K420 / K421 /
K545 WHI

K190 WHI

MK Modular Datacoms

Dimensions – Modular frontplates (mm)



Installation (Data sockets)

RJ45 modules

In order to maintain Category 5e performance, install cabling in accordance EIA/TIA or ISO General Cabling Standards.

Installation (Telephone socket modules)

Product performance, systems compatibility

Master Sockets: For use as the first socket outlet on a direct exchange. They contain the required surge protector (for line protection against electrical surges) and ringing capacitor.

Secondary Sockets: for use as extension sockets when connected on the same line as a Master Socket.

Installation tools required IDC Connectors (telephone & RJ45 outlets)

MK insertion tool List No. 400 or 22630.

Wire pull-out force: 10.5 Newtons when installed correctly.

Wiring regulation restrictions

Domestic Installations: The total REN (Ring Equivalent Number) value of all telephone equipment connected on a line must not exceed 4.

Industrial and commercial installations: MK telephone sockets are suitable in all situations after the PBX/PABX has been installed by a recognised installer. For key systems and other 'special' systems, the manufacturer's instructions should be referred to.

Safety information

None of the above products should be installed into the same fixing or mounting boxes as mains rated equipment or cable.

Note: For BT and RJ45 wiring scheme diagrams see page 402.

Cable management

Logic Plus Modular Data and Telephone Sockets can be mounted in a variety of MK trunking systems. See main catalogue for further details.

RJ11 Wiring Scheme

PIN NO.	STRIPPED COLOUR WIRE	SOLID COLOUR WIRE
1	WHITE / green	White
2	WHITE / orange	Black
3	BLUE / white	Red
4	WHITE / blue	Green
5	ORANGE / white	Yellow
6	GREEN / white	Blue

Note: Main wire colour is shown in capitals

