

**Constant source  
of power and  
peace-of-mind  
That's smart  
control**

The heart of smart control



**ComAp**  specialises in creating electronic control and management solutions for use in the power generation industries and also to help drive power markets. Our portfolio of products, software and accessories is designed to support emergency power, standby power generation and engine-driven applications all over the world.



# ComAp's Capabilities



Power generation system design and supply



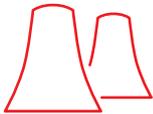
Complex standby systems, synchronisation and load share including multiple incoming mains



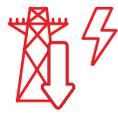
Co-generation, combined heat and power (CHP) and tri-generation control systems



Parallel with mains operation



Power stations



Mains, feeder and load shedding control systems



BMS, SCADA and remote monitoring



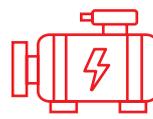
Mains protection (decoupling relays)



Aircraft ground power control systems



Hydraulic system control including power management



Engine driven compressors and pumps



Marine certified systems



Mining, agricultural and military vehicle control systems



Renewable hybrid systems (solar, wind, hydroelectric)



Water pump and dredging control systems



Bi-fuel (gas and diesel) conversion



Control systems



Design, supply and commissioning



Consultancy



Specification Development



Design



Engineering



Panel Building

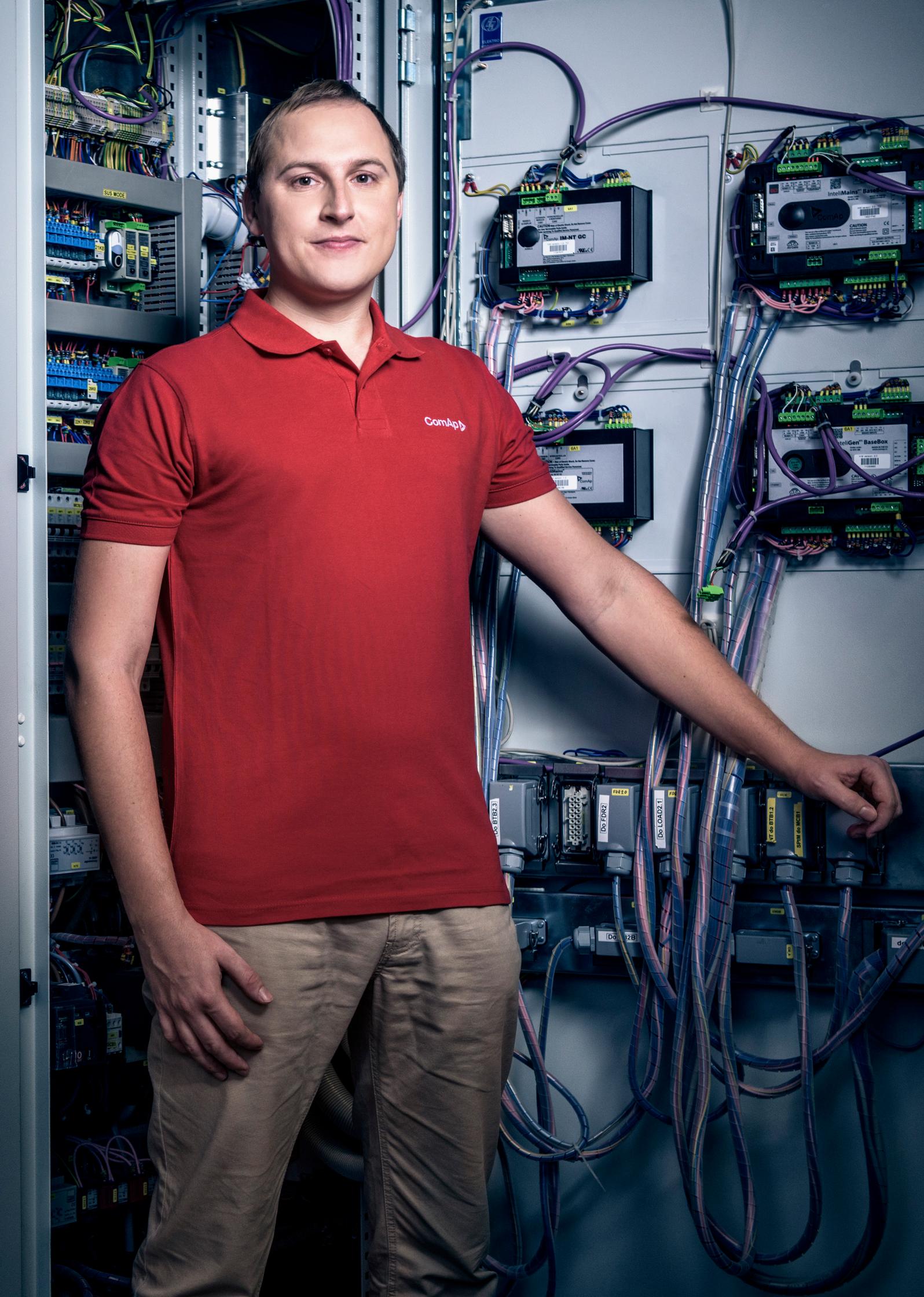


Training and technical support



# Parallel Solutions

At ComAp we understand that our customers want a solution for their paralleling requirements that is reliable and effective. It does not matter if this is a single backup gen-set or a complex installation for a hospital, bank or data centre. ComAp paralleling controllers represent reliable and easy to use products for every application, of any size, complexity and requirement from simple up to super-complex application.



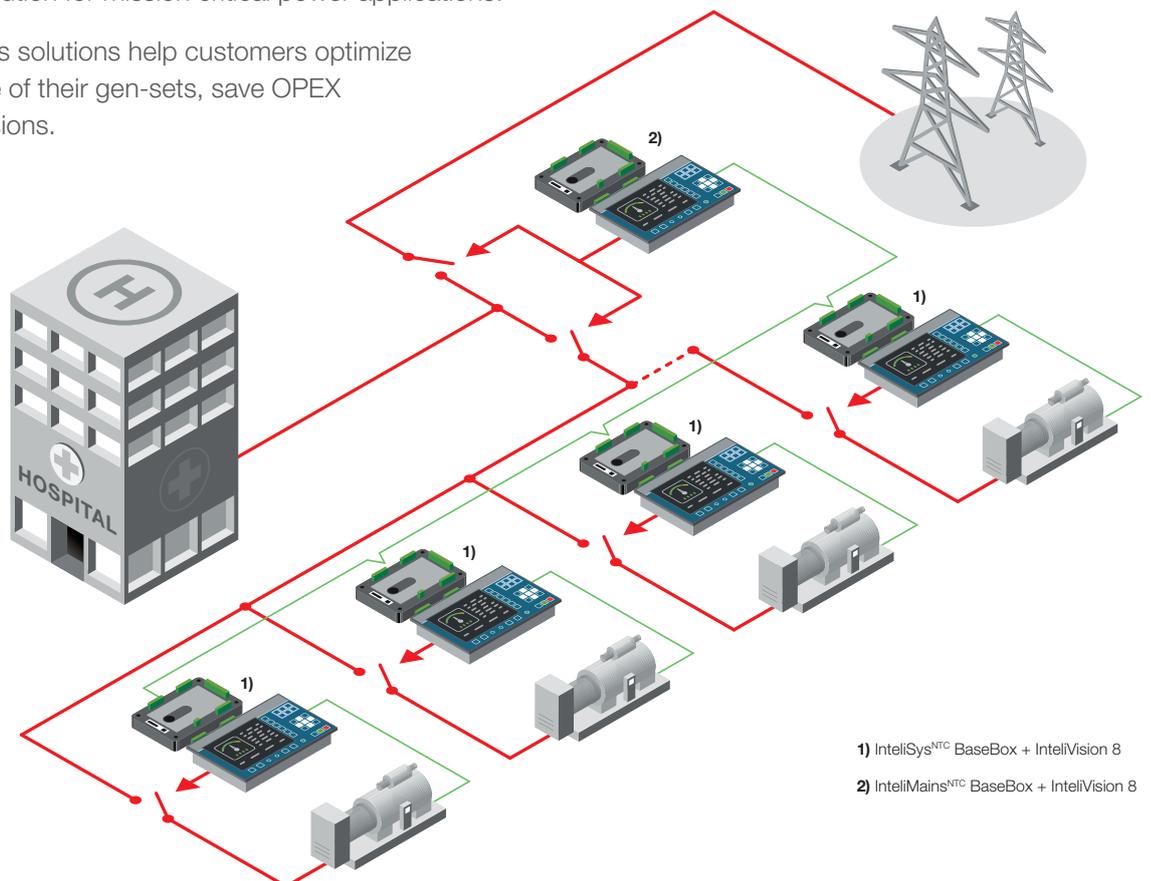
Mission Critical

## Backup Power System and Start-up Synchronisation

A backup power system is a mains-independent source of electricity for use when the mains power becomes unavailable due to a black-out event or other loss or instability in the mains power. A backup system is typically in use when a power outage represents a serious threat to people, property or controlled processes and applications. Examples of use include hospitals, data centres, shopping malls, and government infrastructure.

ComAp's paralleling controllers feature Start Up Synchronisation, which allows the system to recover power from a bank of gen-sets in a very short amount of time. ComAp products also allow seamless synchronisation and transfer back to the mains power once it becomes available again. ComAp's paralleling controllers are the perfect solution for mission critical power applications.

**Benefit:** ComAp's solutions help customers optimize the running profile of their gen-sets, save OPEX and reduce emissions.



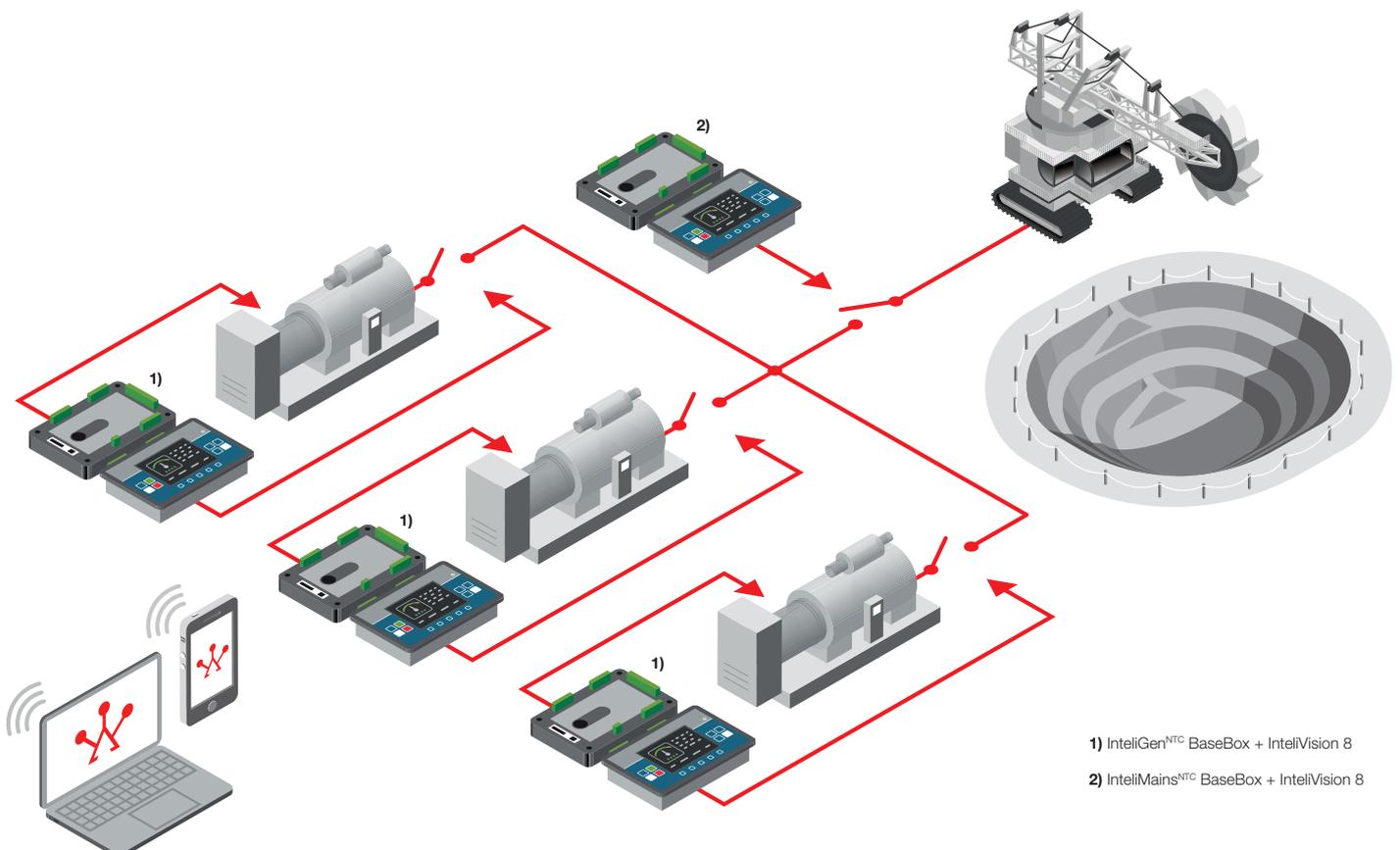


## Independent Power Production (IPP)

Independent Power Production (IPP) sites are being built in many places where the mains power infrastructure is not available or reliable, or does not provide enough power. These sorts of installations are typical in mines, remote villages, islands or holiday resorts.

ComAp paralleling controllers ensure that the correct amount of gen-sets are available based on the current power demand. This reduces unnecessary use of the gen-sets and also reduces the amount of fuel that is used. It is also possible to incorporate a renewable source of power into this type of application, further reducing operational expenses.

**Benefit:** ComAp's products help provide customers a reliable source of power when they don't have access to a dependable mains connection.

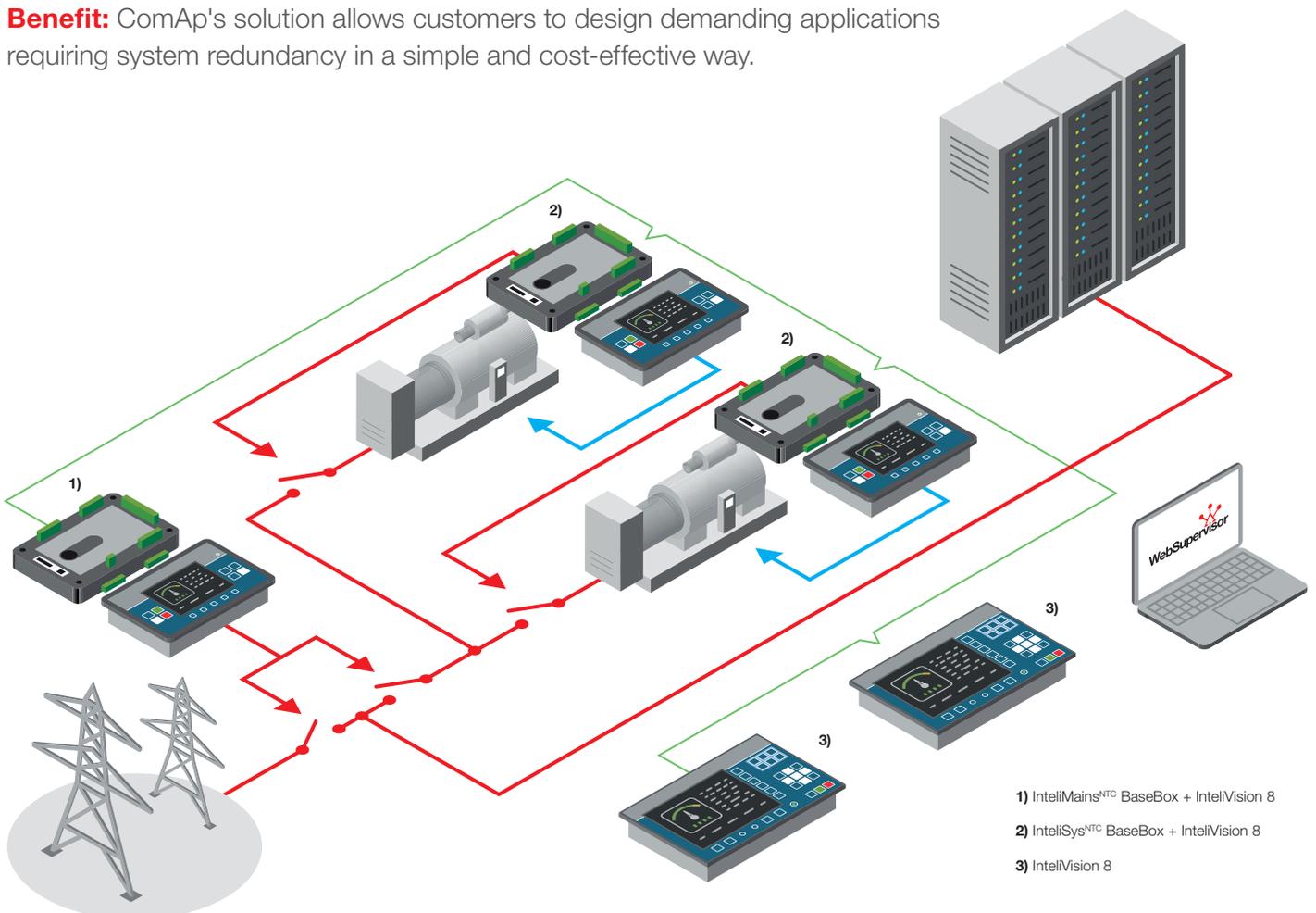


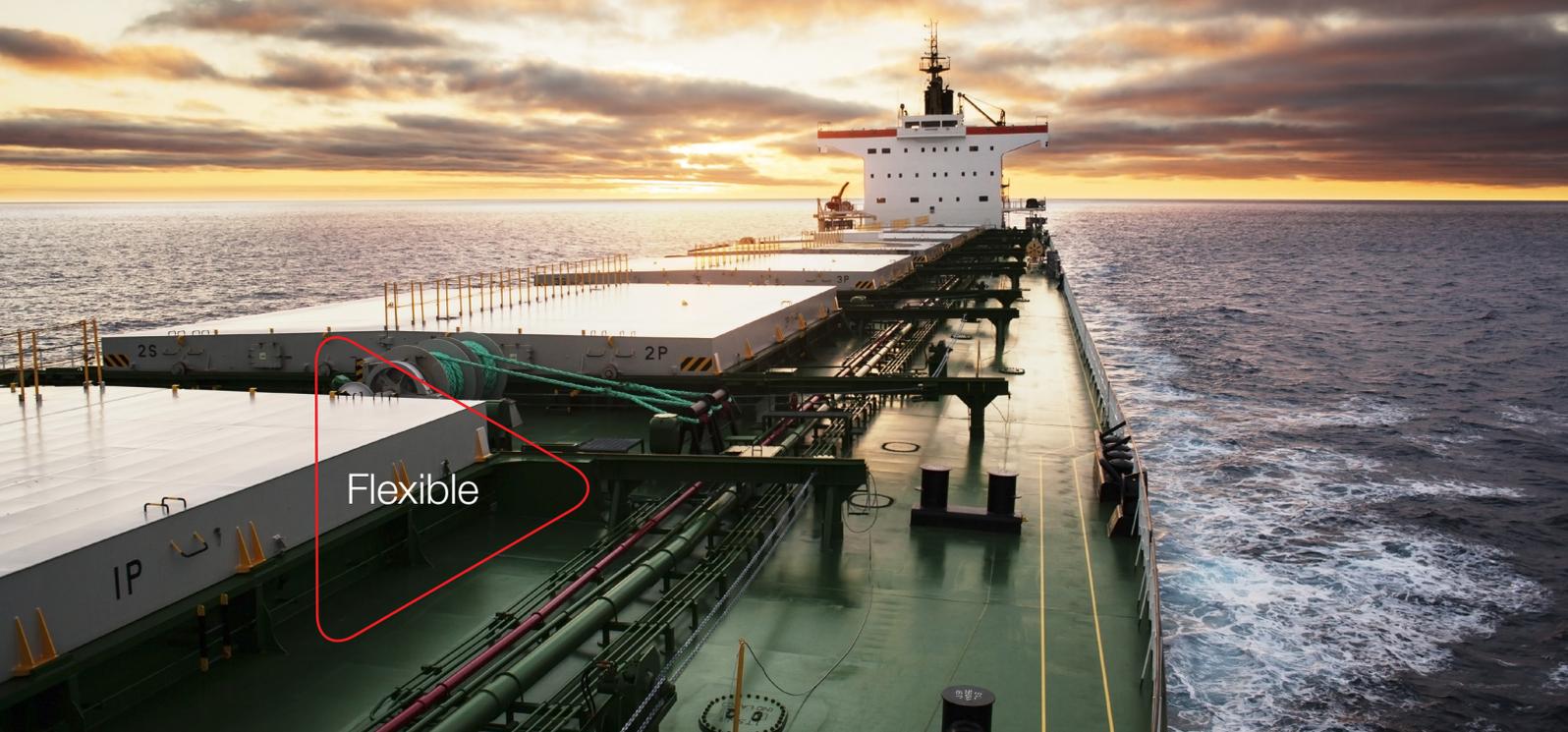


## Backup Power System with Redundancy

For applications where power loss or power interruption is simply not an option, power redundancy is a must. Redundancy can be of different levels depending on the application and customer requirements. ComAp's control systems are ready for high-level N+1 applications, essential inter-controller communication redundancy and even hot-standby applications to meet the demanding requirements typical for data centres.

**Benefit:** ComAp's solution allows customers to design demanding applications requiring system redundancy in a simple and cost-effective way.





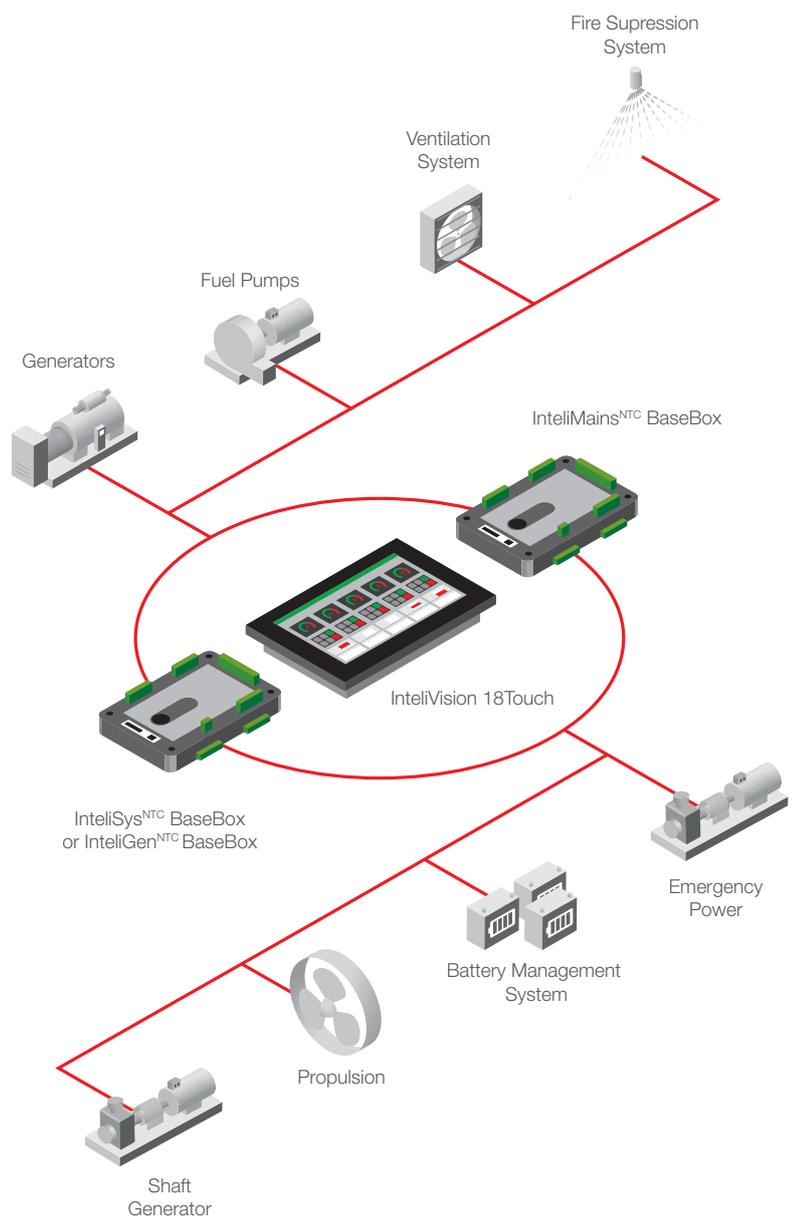
# Power Generation in Marine Applications

ComAp's paralleling controllers extend to use on marine vessels. ComAp's products can be used to control the ship's essential systems, such as HVAC, lighting and fire suppression as well as for the ship's propulsion systems.

ComAp's products ensure that if a ship has multiple onboard generators, they are all operating in parallel so the ship is operating at peak efficiency at all times – essential when a ship is out to sea for weeks at a time.

When a ship returns to port, they usually want to use mains power to power the ship's onboard systems, so the onboard gen-sets aren't running unnecessarily. ComAp's system allows the ships onboard generators to transfer their load to the mains from the ships onboard generators without any loss of power. When the ship is ready to leave port, the system transfers power back to the ships onboard generators without any interruption to power delivery.

**Benefit:** ComAp is able to control both the ships propulsion system, as well as any onboard power generation requirements, whilst also enabling parallel operation when the ship is docked.





## Light and Power Control at the Singapore Grand Prix

Genpower Generator's gen-sets were commissioned by the Grand Prix organizers to provide lighting solutions for the race. Armed with ComAp control systems they shone the spotlight on the world's top drivers over three nights.

The race was illuminated by 24 individual 500-kVA generators, powering 1,500 special lighting rigs. To control all of this power Genpower's Managing Director Bahadir Celim and his experienced events team carefully considered all available systems on the market and chose the ComAp's **InteliGen NTC BaseBox** and **InteliVision 8** combination. An event of this magnitude doesn't just need lighting. Beyond the track, 12 additional 50-kVA, **InteliLite NT AMF 25** controlled Genpower generators were used to supply the monitoring system around the track while the 500-kVA generators were not running during the daytime.

“ When the world's spotlight is on us  
we need to be certain the lights stay on! ”

**Bahadir Celim**, Genpower Generator



## Emergency Backup Power System for Hvidovre Hospital Copenhagen, Denmark

The hospital is one of Denmark's largest, with over 40,000 patients admitted each year. It has 35 different departments spread over 300,000 square metres of land. This posed quite a challenge when installing a backup power system for the hospital complex.

The backup system included five FG Wilson diesel generators, all equipped with **InteliSys NTC BaseBox** controllers and **InteliVision 8** displays for monitoring and control. Although the entire backup system was monitored from a control room using an **InteliVision 17Touch**, an **InteliVision 5** display attached to each generator allowed for individual monitoring, to ensure the generators were all available for use, should an emergency arise. In the event of a power outage, the ComAp system that was installed has the generators up and running within eight seconds, and on-load within 15 seconds. This ensures that any grid failure or interruption has minimal effect on the running of the hospital.

“ ComAp displays are very user-friendly and show an overview of the entire site, making them suitable for any complex installation. ”

**Peter Aaby**, Coromatic

# InteliGen 200



## InteliGen power in a "compact" package

A parallel gen-set controller suitable for all standard parallel applications offering a new design, high flexibility and extendibility, while maintaining intuitive configuration, operation and compatibility with its predecessors.

- > **Synchronising - Optimize your gen-set usage or parallel different sizes and brands of generators**
- > **Utilise our unique, and easy to use PLC drag-and-drop blocks for configuration**
- > **Flexibility to change the application e.g. SPtM and MINT**
- > **Built in AVRi**
- > **4G/LTE connection capability**
- > **Geofencing and tracking via WebSupervisor**
- > **Easy switching between parallel to mains or multiple gen-set applications**
- > **Load shedding and dummy load capability**
- > **Read the full description on [comap-control.com](http://comap-control.com)**

### Typical Usage



Mining



Rental



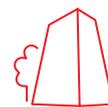
Industrial



Events



Construction



Commercial



Defence

# InteliGen 500



## More Power, More Control, More Colour

The IntelliGen 500 is a parallel gen-set controller suitable for more complex parallel applications. It is the first ComAp controller to feature a full colour 5-inch display, making it is easy to see more information on the screen at the same time.

- > 5-inch full colour display with 800x480 resolution
- > Easy switching between parallel to mains or multiple gen-set applications
- > Multiple gen-sets in parallel to mains available together with InteliMains 210 controller
- > Two types of synchronisations: Phase Match or Slip Synchro
- > 4G/LTE connection capability
- > Geofencing and tracking via WebSupervisor
- > Easy switching between parallel to mains or multiple gen-set applications
- > Load shedding, dummy load capability
- > Read the full description on [comap-control.com](http://comap-control.com)

### Typical Usage



Mining



Rental



Industrial



Events



Construction



Commercial



Defence

# InteliGen NTC BaseBox



## Complex Parallel Gen-set Controller (Marine certified)

InteliGen NTC BaseBox is the perfect solution for complex paralleling applications. The IntelliGen NTC BaseBox's flexibility allows control over just one gen-set, or can control many gen-sets of many different sizes and from different manufacturers. Simple configuration and installation makes IntelliGen NTC BaseBox the ideal solution for most parallel power generation applications.

- > **Saves commissioning time with the preprogrammed gen-set functions**
- > **Compatible with ComAp's IntelliVision family of displays**
- > **Connect with electronic engines due our support with ECU communication**
- > **A reliable solution for all kind of industries from marine to hospitals**
- > **Customize and create complex solutions with the internal PLC**
- > **A redundancy solution is available if you need 100% reliable power control**
- > **Monitor and control online with WebSupervisor or via our iOS or Android apps**
- > **Read the full description on [comap-control.com](http://comap-control.com)**

Typical  
Usage



Mining



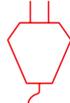
Rental



Industrial



Events



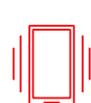
Construction



Defence



Commercial



Telecom



Hospital



Datacenter



Banks

# InteliSys NTC BaseBox



## Premium Gen-set Controller (Marine certified)

InteliSys NTC BaseBox is ComAp's high-end complex paralleling controller. Useful for the most complex paralleling operations, including groups of up to 992 other controllers. With a large, easily programable PLC, a wide range of accessories, and full compatibility with ComAp's InteliVision display family, InteliSys NTC BaseBox is the solution for the most complex of paralleling operations.

- > **Intuitive and fast commissioning**
- > **A single controller or up to 992 units working (and anything between is possible)**
- > **Ideal for high-redundancy applications**
- > **Local and remote management and monitoring**
- > **Monitor and control online with WebSupervisor or via our iOS or Android apps.**
- > **Large internal PLC interpreter allows greater flexibility and customisation**
- > **Configurable inter-controller messages simplifies design of complex projects**
- > **Extensive history files for monitoring and troubleshooting**
- > **Fully compatible with the InteliVision family of displays**
- > **Read the full description on [comap-control.com](http://comap-control.com)**

### Typical Usage



Industrial



Marine



Commercial



Hospital



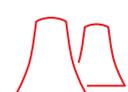
Datacenter



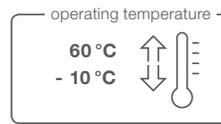
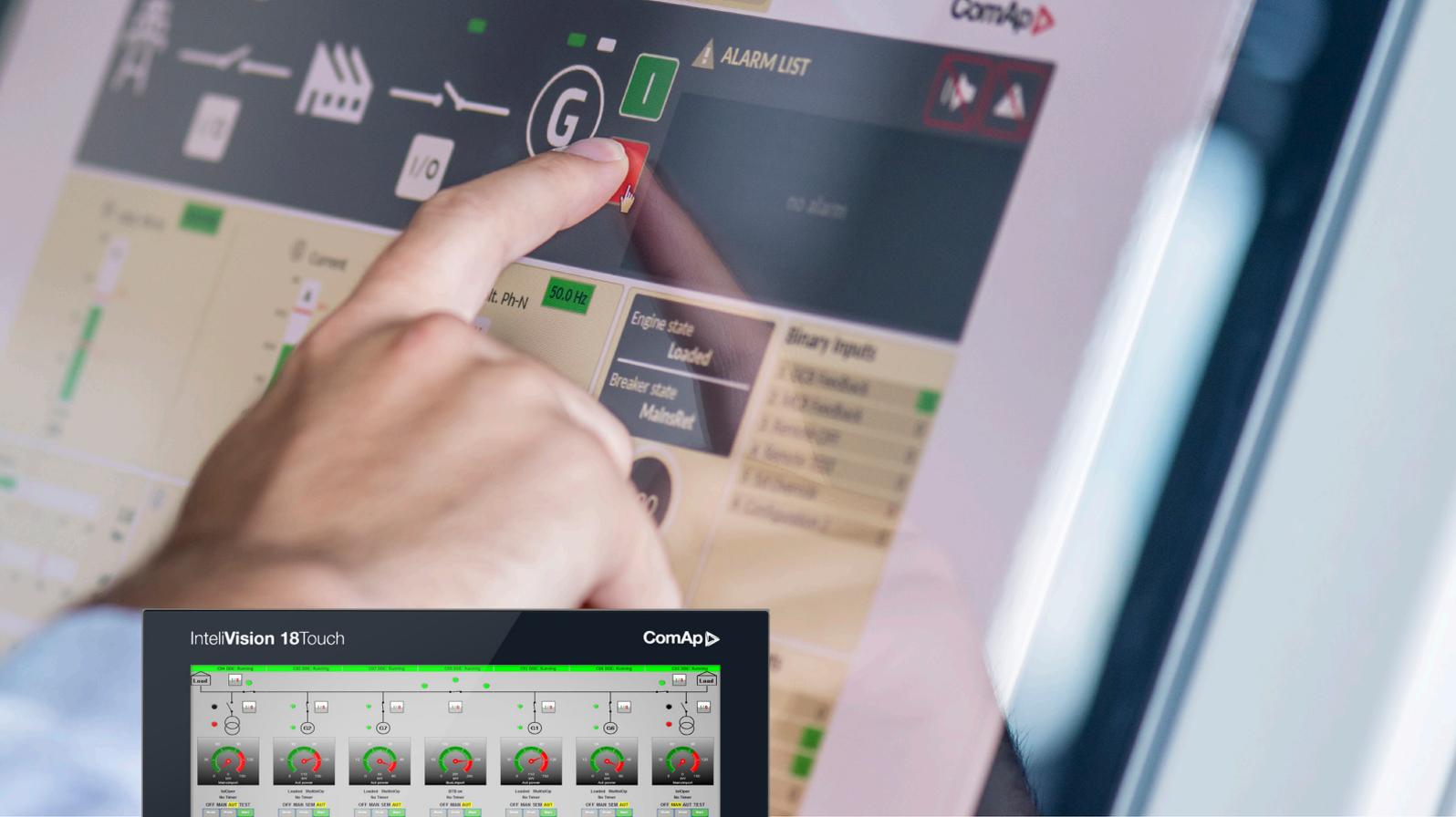
Banks



Oil & Gas



Power Plants



# IntelliVision 18Touch

IntelliVision 18Touch is an industrial grade display equipped with an 18.5-inch multi-touch screen for use with compatible ComAp controllers to monitor and control many different applications. You can monitor one gen-set, or an entire site, from your screen.



From one device you can configure set-points of your controllers, control breakers and much more using just your fingers. Fast response combined with projected capacitive touch technology ensure pleasant user experience.



## IntelliVision 12Touch

IntelliVision 12Touch is an industrial grade display equipped with a 12.1 inch multi-touch screen for use with compatible ComAp controllers to monitor and control many different applications.

The screens of IntelliVision 12Touch are fully customisable through ComAp's ScreenEditor software, allowing users to create a complete site overview or single line diagrams very easily. This is especially needed on complex installations like CHPs, or datacentres, where the complete process overview is essential for the local team of operators.

[intellivisiontouch.com](http://intellivisiontouch.com)

# Mains Controllers

A family of mains protection modules that provide the necessary protection functions to meet the requirements of all applications where generators operate in parallel with the mains.

## InteliMains 210



> Our New Generation of Mains Supervision Controller

## InteliMains NT BaseBox



> A Mains Supervision Controller Base Unit for Use with Detachable Colour Displays

## InteliMains NTC BaseBox

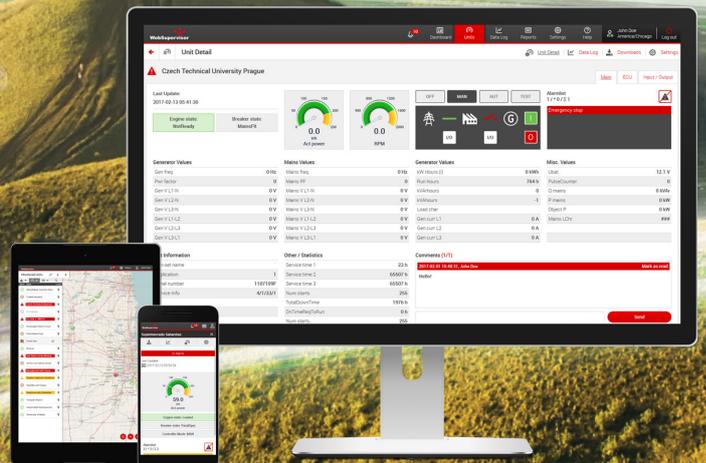


> A Mains Supervision Controller Base Unit with Extended Communications for Use with Detachable Colour Display

WebSupervisor is a cloud-based system designed for managing ComAp controllers via the internet.

This system offers a number of beneficial features that help optimize revenue for machinery fleets, as each piece of equipment can be individually monitored for all important operation values.

Manage  
your fleet  
wherever  
you are



# Product overview



## IntelGen 200

- > IntelGen power in a "compact" package. Parallel Gen-set Controller.



## IntelGen 500

- > Parallel Gen-set controller. The first ComAp controller to feature a full colour 5-inch display



## IntelGen<sup>NTC</sup> BaseBox

- > High-end marine certified gen-set controller for single or multiple generating sets operating in standby or parallel modes



## IntelSys<sup>NTC</sup> BaseBox

- > Premium marine certified gen-set controller for single or multiple generating sets operating in standby or parallel modes



## IntelVision 5 CAN Backlit

- > Marine approved 5,7-inch colour display unit with CAN bus interface and backlit buttons



## IntelVision 12Touch

- > 12-inch industrial grade touch Plug & Play display



## IntelVision 18Touch

- > 18-inch industrial grade touch Plug & Play display



## IntelMains<sup>NTC</sup> BaseBox

- > Controller for mains application (shore connection) or bus tie breaker application



You can find more brochures online now at [publications.comap-control.com](http://publications.comap-control.com)

### Manufacturer:

ComAp a.s.

Czech Republic  
Phone: + 420 246 012 111  
E-mail: [info@comap-control.com](mailto:info@comap-control.com)  
Web: [comap-control.com](http://comap-control.com)



### Local distributor / partner:



© ComAp. Features and specification are subject to change without prior notice.