

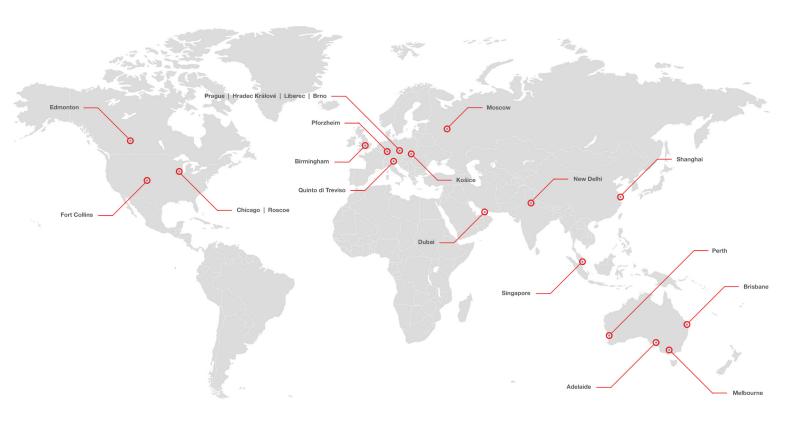


**Marine and Offshore Control Solutions** 





# **Offices**





400+ Employees



21 Offices



**60+** Distributors

## **Certified Solutions**

ComAp has invested heavily in obtaining IACS certificates from most of the larger societies around the world, thus ensuring compliance of your vessel to the IACS standard and a true mark of quality.



















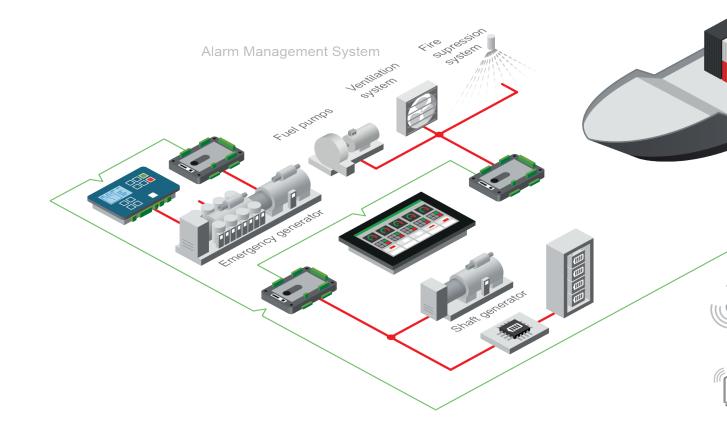


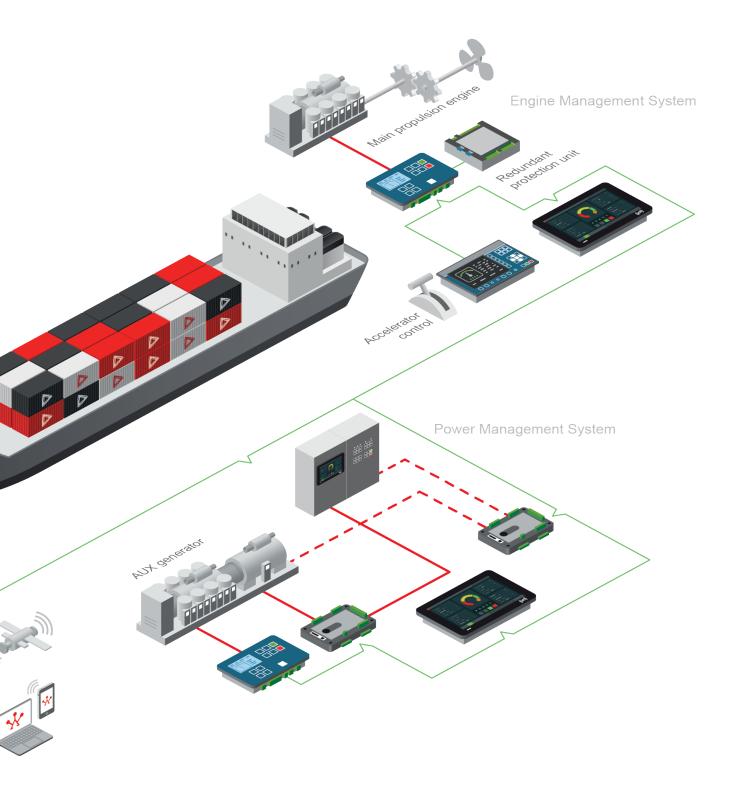
# **Marine Applications**

Engine, Power and Alarm Management System



ComAp is able to control ship propulsion/auxiliary/emergency engines as well as any on-board power generation sources and at the same time enabling shore connection when the ship is docked.







## **Case Studies**

We're always proud to showcase the innovative ways that our customers and staff utilize the full potential of our products, keeping ComAp at **the heart of smart control**.

100+

case studies via comap-control.com



Don't forget to subscribe to our YouTube Channel to see our latest reference videos.

## **InteliDrive Marine**

Engine controller for marine applications

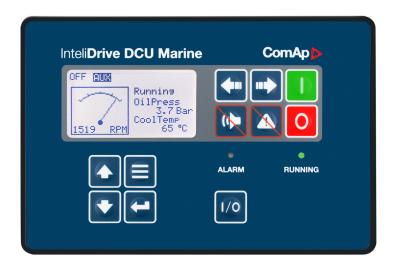


- Engine controller for marine Tier4 Final propulsion applications
- Control, monitoring and protection for any type of marine engine
- Support for EFI (ECU) engines via CAN/J1939 or Cummins Modbus
- Redundant architecture by using the backup redundant protection unit Inteli RPU
- Support of two independent power supplies via I-RPU module
- > 7 configurable binary inputs, 7 configurable binary outputs
- 9 configurable analogue inputs (3 resistive, 3 current 0-20mA, 3 voltage 0-10V)
- > Option for additional inputs/outputs
- > Selectable protections warning/cooling down/shutdown
- > 3 level of controller setting/operation password protection
- > Ethernet, USB, GSM/GPRS, RS485 or RS232/Modem/Modbus communication
- > Automatic SMS on alarm
- On-line control and monitoring over the internet (embedded web server)
- > Real time clock and event history log

- > Toggle button with additional features adjustments
- > Up/Down speed regulation buttons on the front facia
- > 2 languages (user changeable), Chinese language support
- Front panel sealed to IP65

## InteliDrive DCU Marine

Certified engine controller for marine applications

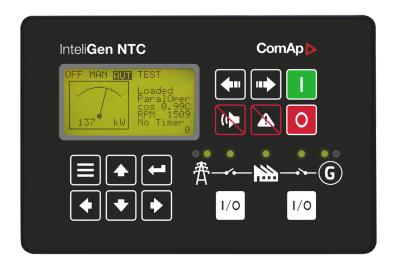


- Advanced IACS certified engine controller for marine applications
- Control, monitoring and protection for any type of marine engines
- Dedicated Emergency, Auxiliary, Harbour and Propulsion engines application
- Single speed application for generators and variable speed application for propulsion, pumps, and compressors
- Support of wide range of EFI (ECU) engines with Tier 4F support
- > Support of multi CANbus devices
- Connection to engine via primary J1939 and backup J1587 buses or Cummins Modbus
- > Remote monitoring via Modbus, Ethernet and AirGate
- > Configurable Modbus RTU and Modbus TCP
- > RS232, RS485, Ethernet communication support
- > WebSupervisor support for remote supervision and monitoring
- > Redundant architecture: main unit + backup module
- > Backup ID-RPU module with broken wire protections
- > Speed/load control via J1939 or J1587 buses

- Symmetrical load sharing for propulsion engines with J1939 (via CAN bus)
- Power management controller cooperation over CAN bus (IG/IS-NTC-BB)
- > Integrated clutch control
- > 14 binary inputs, 14 binary outputs, 8 analog inputs
- Marine certified extension modules for expandable number of Input/Outputs
- > 80× AIN, 32× AOUT, 112× BIN, 112× BOUT

## InteliGen<sup>NTC</sup> GeCon Marine

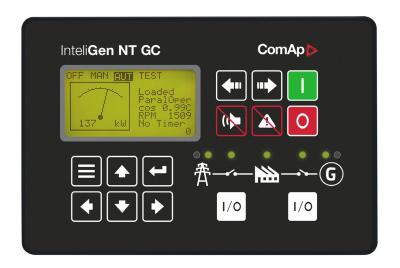
Advanced Marine Certified Generator Controller



- Marine certified generator controller for single or multiple generators operating in standby or parallel modes
- Many communication options full and intuitive remote supervision and monitoring
- > Generator performance log for easy problem tracing
- > Automatic synchronising and control breaker
- AMF function, baseload, import/export, peak shaving, voltage and PF control (AVR)
- > Generator measurement, mains measurement
- > Inputs and outputs configurable for various customer needs
- > Controller redundancy
- Event-based history (up to 500 records) with customer-selectable list of stored values; RTC; statistic values
- > Integrated PLC programmable functions
- > Integrated fixed and configurable protections
- Marine approved by DNV, GL, Lloyd's Register, CRS and more
- > Additional RS232 and RS485 port

## InteliGen NT GeCon Marine

Advanced Marine Certified Generator Controller



- Marine certified generator controller for single or multiple generators operating in standby or parallel modes
- Many communication options full and intuitive remote supervision and monitoring
- > Generator performance log for easy problem tracing
- > Automatic synchronising and control breaker
- AMF function, baseload, import/export, peak shaving, voltage and PF control (AVR)
- > Generator measurement, mains measurement
- Inputs and outputs configurable for various customer needs
- > Controller redundancy
- Event-based history (up to 500 records) with customer-selectable list of stored values; RTC; statistic values
- > Integrated PLC programmable functions
- > Integrated fixed and configurable protections
- Marine approved by DNV, GL, Lloyd's Register, CRS and more

## InteliGen<sup>NTC</sup> BaseBox GeCon Marine

Advanced Marine Certified Generator Controller



- Comprehensive generator controller for both single and multiple gen-sets operating in standby or paralleling modes
- > To be used in conjunction with InteliVision 8 or InteliVision 5 colour displays
- > Complete integrated gen-set solution and signal sharing via CAN bus minimum external components needed
- Many communication options full and intuitive remote supervising and monitoring
- > Generator performance log for fast and time-saving problem tracing
- > Automatic synchronising and control breaker
- AMF function, Baseload, import/export, peak shaving, voltage and PF control (AVR)
- Senerator measurement: U, I, Hz, kW, kVAr, kVA, PF, kWh, kVAhr
- > Mains measurement: U, I, Hz, kW, kVAr, PF
- > Selectable measurement ranges for AC voltages and currents 120 / 277 V, 0–1 / 0–5 A
- Inputs and outputs configurable for various customer needs
- Bipolar binary outputs can use BO as high or low side switch

- > 1x RS232 / 2x RS485 interface with Modbus protocol support; Analog/GSM/ISDN/CDMA modem communication support; SMS messages; secondary RS485 converter is isolated
- > AirGate support

# InteliSys<sup>NTC</sup> BaseBox GeCon Marine

Premium Marine Certified Generator Controller



- Advanced generator controller for both single and multiple gen-sets operating in standby or parallel modes
- > Support of cogeneration and other complex applications
- > To be used in conjunction with InteliVision 8 or InteliVision 5 colour displays
- Complete integrated generator solution and signal sharing via CAN bus – minimum external components needed
- Many communication options full and intuitive remote supervision and monitoring
- Senerator performance log for fast and time-saving problem tracing
- > Automatic synchronising and control breaker
- Baseload, Import / Export, TempByPower, Peak shaving, Voltage and PF control (AVR)
- > Generator measurement: U, I, Hz, kW, kVAr, kVA, PF, kWh, kVAhr
- > Mains measurement: U, I, Hz, kW, kVAr, PF
- Selectable measurement ranges for AC voltages and currents – 120 / 277 V, 0–1 / 0–5 A
- Inputs and outputs configurable for various customer needs

- Bipolar binary output can use BO as High or Low side switch
- > 1x RS232 / 2x RS485 interface with Modbus protocol support; Analog / GSM / ISDN / CDMA modem communication support; SMS messages; secondary RS485 converter is isolated

## InteliMains<sup>NTC</sup> BaseBox Marine

Breaker Controller for Shore and Bus Tie Marine application



- > Shore supervision controller base unit
- > Many different power control modes available:
  - > System Baseload with limited export or minimal import
  - > Import/Export power control of gen-set group
  - > Temperature of the system by power control
  - > Dynamic changes of required system power via analog input
- Reverse synchronisation of the loaded gen-set group to mains
- > Forward synchronisation of mains to gen-set group
- > Coupling of several synchronised mains to a common bus
- > Allows to build complex applications with more mains incomers, bus-tie breakers, and load management

## InteliVision 8 Marine

Marine approved 8" colour display for InteliGenNT/InteliSysNT and InteliDrive controllers



- Marine approved display for InteliGenNT, InteliSysNT, or InteliDrive controllers
- > 8" colour TFT display with resolution of 800  $\times$  600 pixels
- > Controlled by active buttons
- > Trends monitoring screen
- > Simpler, faster and more intuitive control
- > More information in less time
- > Same language support as InteliGenNT/InteliSysNT and InteliDrive controller
- > Easy Drag and Drop screen configuration in graphical editor
- > Direct connection to the controller (converters are not needed)
- It is possible to mount InteliSysNT BaseBox to the rear side of InteliVision 8

## InteliVision 5 CAN Backlit

Marine approved 5.7" colour display with backlit buttons and CAN bus interface



- > Colour display for localised visualisation
- InteliVision 5 is compatible with the following product lines: InteliGenNT, InteliSysNT and InteliMainsNT
- > 5,7" Colour TFT Display with resolution of 320 × 240 pixels
- > Local and/or remote display for single controller monitoring
- Plug and Play operation (auto configuration based on controller application)
- > Direct connection to the controller (converters are not needed)
- > Simple, fast and intuitive control
- > Easy drag and drop screen configuration in graphical editor
- > Five active buttons fast access to important data
- > Configurable active buttons
- > Support of Tiers 4 icons
- Mounting screw available at the rear face to mount a compatible controller
- Same language support as the controller including graphic languages
- Communication connection via RS-485 (galvanically separated)
- Operating temperature: –30°C to +70°C

## InteliVision 12Touch OEM

#### 12.1" colour touchscreen display



- Marine Approved 12.1" Colour Display Unit with no ComAp branding on fascia
- > 12.1" colour, multi-touch screen, TFT display unit with resolution of 1280  $\times$  800 pixels
- > Touch based user interface, support for multi-touch gestures
- Plug and Play operation (auto configuration based on controller application)
- > Complete access to all control and monitoring functions
- > Fast and intuitive navigation
- > Extended trends monitoring screen
- > Compatible with ScreenEditor software
- USB flash disk file storage (export/import trends, history, archive of controller and InteliVision 12Touch firmware and others to USB stick)
- > User photo import
- > Adaptive and colour alarm list
- > Large history screen
- > Adjustable setpoints help
- > Multi language support
- > Communication connection via RS-485, CAN or Ethernet
- > Integrated, easy to use mounting system

- Designed to be mounted in either monitoring or engine room
- > Industrial and robust design

# **Remote Touch Displays**

Control breakers and much more using just your finger.



Inteli**Vision 18Touch** is an industrial grade display equipped with a 18.5 inch multi-touch screen for use with compatible ComAp controllers to monitor and control many different applications. From the screen, you can monitor one gen-set, or an entire site.



Inteli**Vision 13Touch** is a high-quality easy-to-use 13.3" Marine certified Panel PC with multi-controller support and buttons for brightness change on its front face.



Inteli**Vision 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.



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



### Inteli IO8/8



- > 8 binary inputs (pull up/pull down), 8 binary outputs (high side switch/low side switch)
- > Alternatively 16 binary inputs, 0 binary outputs (switchable inside the module)
- 2 analog outputs (voltage 0-10V, current 0-20mA, PWM (5V, 200–2400 Hz)

### **Inteli AIN8**



- > 8 analog inputs (sensors)
- Resistance (PT100, PT1000, Ni100, Ni1000, 0-250Ω,0-2400Ω, 0-10kΩ)
- > Current (±20mA, 0-20mA, 4-20mA)
- Voltage (±1V, 0-2,4V, 0-5V, 0-10V)
- > Lambda probes

### **ID-RPU**



- > Redundant engine protection unit for InteliDrive DCU Marine controller
- > Backup module for marine engines
- Automatic switchover between primary and secondary power supply
- > Monitors function of main InteliDrive unit
- In case of main unit failure switches to the backup mode and protects the engine
- > RPM input with hardwired overspeed protection
- > 5 shutdown channels with Broken Wire detection
- > Fuel and Stop solenoids with BW detection

### Inteli RPU



- > Redundant engine protection unit for InteliDrive Marine controller
- > Backup module for marine engines
- Automatic switchover between primary and secondary power supply
- > Monitors function of main InteliDrive Marine controller
- In case of main unit failure switches to the backup mode and protects the engine
- > RPM input with hardwired overspeed protection
- > Fuel and Stop solenoids with BW detection
- > Built-in self-diagnostics feature







Find more modules, battery charges, simulators, dongles, spare parts and other products at

comap-control.com

## **WebSupervisor**

ComAp's cloud-based application that enables remote monitoring, management and analysis of a gen-set fleet and 3<sup>rd</sup> party devices from anywhere.

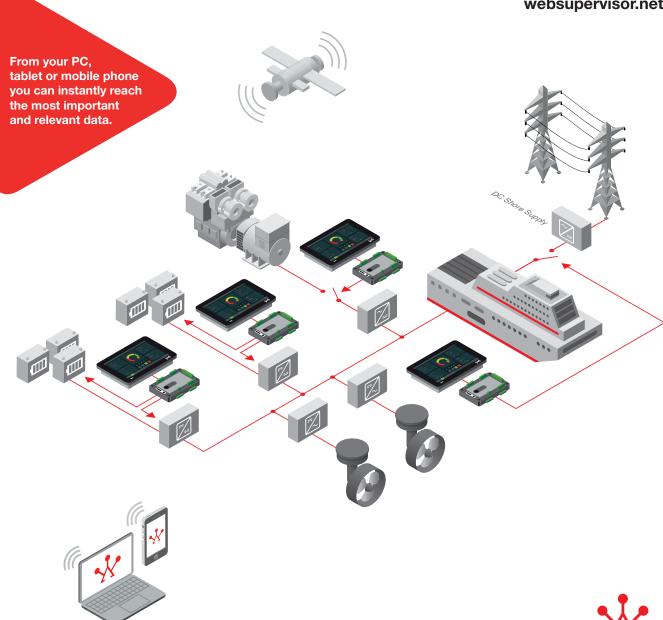
#### **Main Features**

- > Data logging and efficiency analysis
- List and map views of devices and alerts on one screen
- Device tracking and geofencing\*
- Dashboard with fleet and group of devices statistics
- > Automatic reports for each device, or a group of devices, with customisation options.
- > Alarm Analyser which can help reduce maintenance costs
- > Advanced trend representation (bar graphs, heat maps and more)
- 3rd party device monitoring
- > API: able to download data and integrate in CRM, ERP, PowerBI or other 3rd party software
- > Screen Editor: modify the data that is displayed according to your needs
- > Web camera support
- > User activity logger: logs all user activity for a device or fleet
- > Download controller's history files (event-based history)
- > Customisable look with your logo and URL
- > User management with several levels of permission



<sup>\*</sup>Tracking and geofencing requires an additional GPS card.

### websupervisor.net





## **InteliSCADA**

PC based configuration and monitoring

InteliSCADA is a PC software for monitoring and management of ComAp controllers and accessories. It is PC software with a modern look and feel that has been developed with current web technologies, so the interface and overall user experience are much more intuitive.

#### Easy to use

SCADA systems can be very complicated. They require a lot of programming knowledge and can take a lot of time to master even the basics. InteliSCADA makes it easy. It comes with pre-configured templates for different ComAp devices – users can just add devices and controllers and just one-click is needed to get InteliSCADA programmed and start monitoring the site.

Users can add different monitoring instruments including start/stop buttons, gauges, alarm lists, and even a video feed from a web-connected camera. Then, InteliSCADA automatically connects the particular instrument to a controller. Going through a long list of all possible options is not needed.

#### Secure and reliable

InteliSCADA brings security that meets industrial standards. What's more, InteliSCADA has been tested heavily and went through a long validation process. So, it makes InteliSCADA is suitable for complex projects.



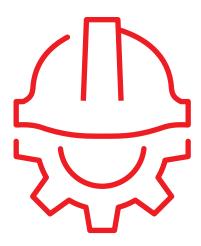


## **Full Support of Your Projects**

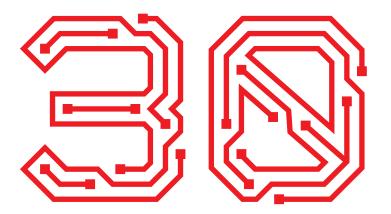
At ComAp, we closely cooperate with you to fulfil your project requirements. It is our knowledge of the various markets, which we gain through unrivalled local expertise, that allows us to deliver smart electronic control products and solutions.

We are able to assist you at every stage of your project. We can help you design the system, along with wiring and installation, programming and commissioning, in addition to providing enclosed solutions and other services. We deliver all of this through our specialist network of solution partners around the world.

Please contact your local ComAp representative for more information regarding these services.







#### **30 Years of Smart Control:**

ComAp celebrates 3 decades of success through continuous innovation and growth.

Scan the QR code >>>

Founded in a one-room office in Prague, Czech Republic in 1991 by three friends, ComAp has since become a successful global company with a strong local presence supported by 13 subsidiaries, more than 450 employees, and a network of more than 60 distributors. The company is still in the hands of its founders who have an ambitious vision for further growth and investment in acquisitions and partnerships. But it is the trusted relationships with our customers that is the central focus of ComAp.

Watch the video to see the milestones of our astonishing company journey, starting back in the early 1990s in central Europe, to becoming a global leader in the world of independent and backup power generation, whilst always remaining at **the heart of smart control.** 















Propulsion

Power Management

DC Hybrid

Shore Connection