

**ComAp** 

The heart of smart control

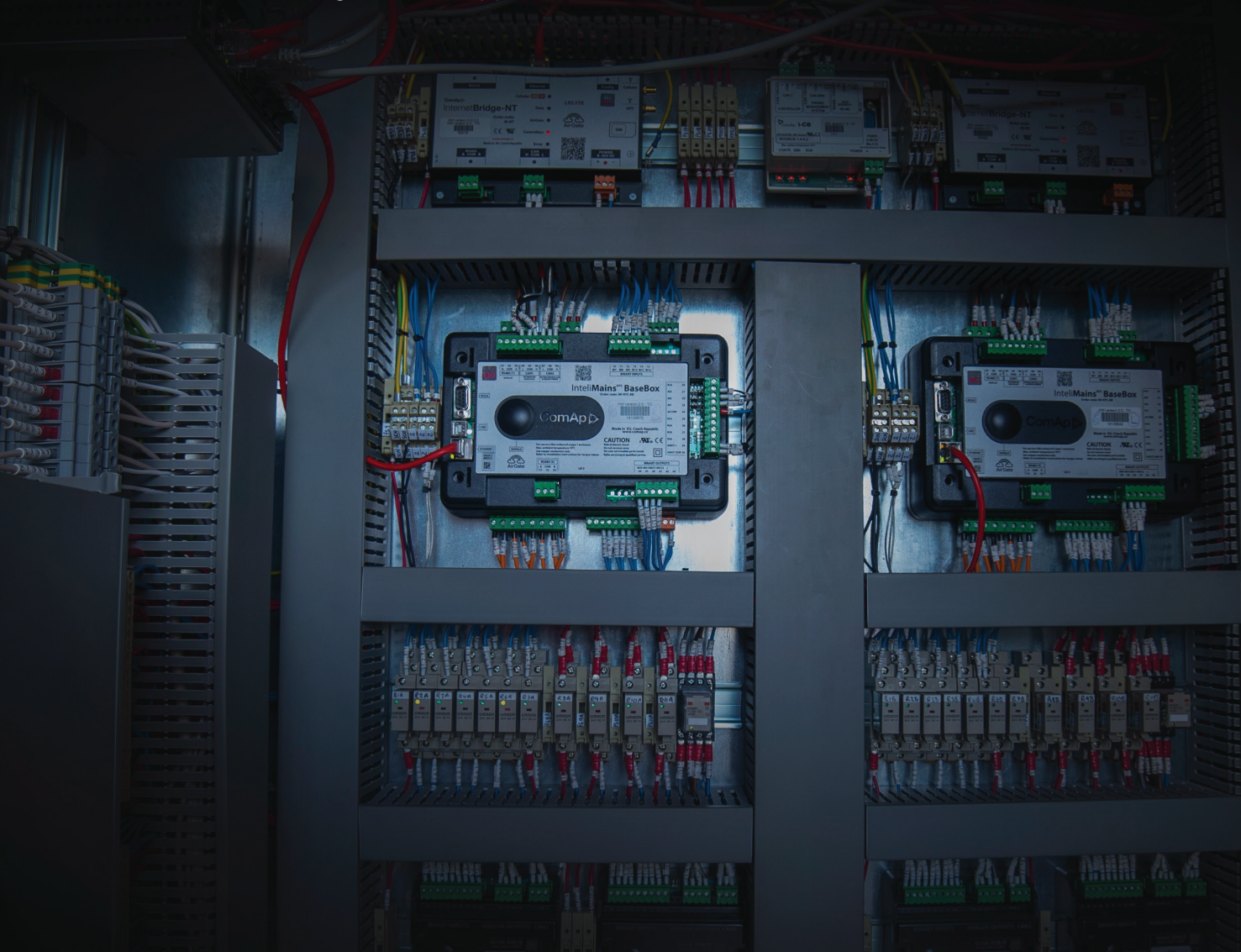


**CHP & Gas  
Control Solutions**

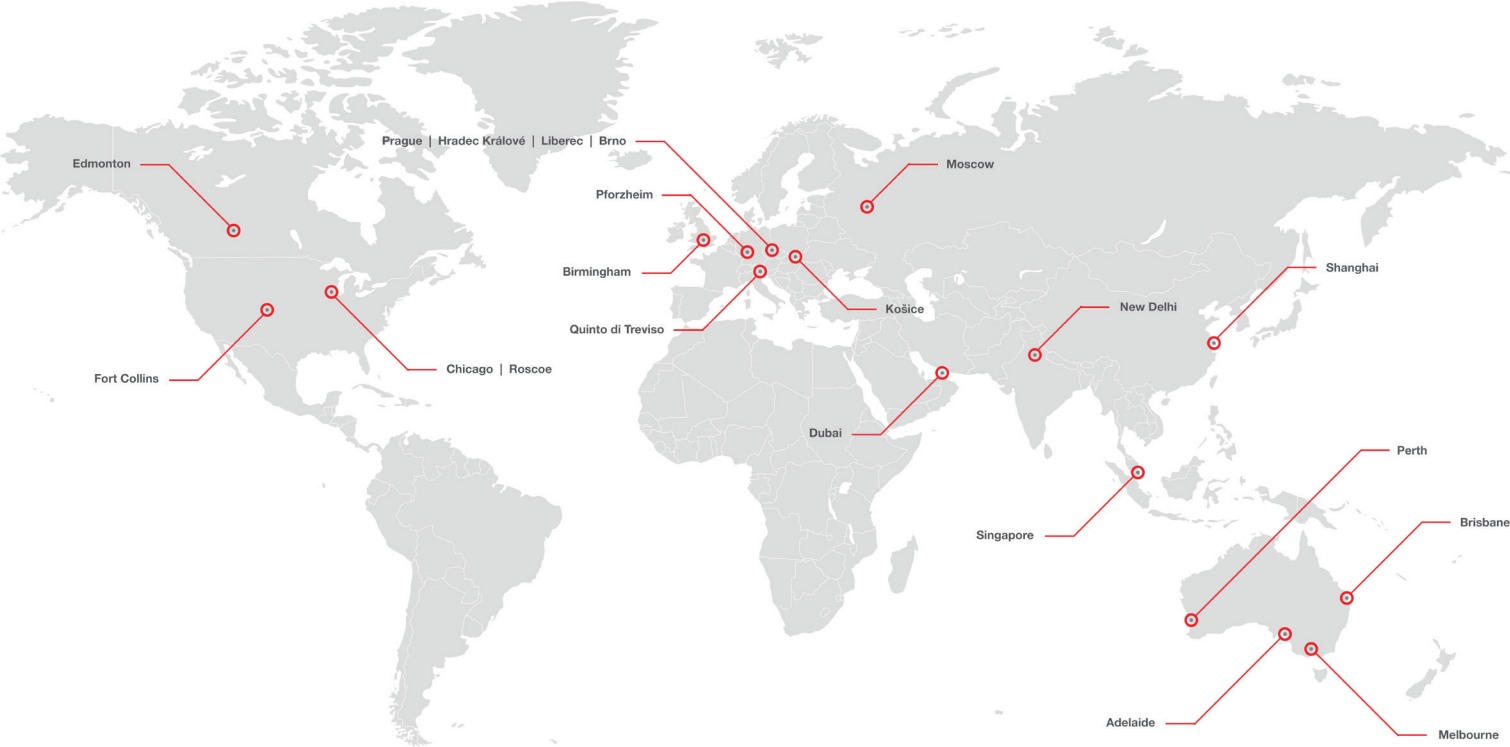


**When the heat  
is on – we'll keep  
you in control**

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



# Offices



**400+** Employees

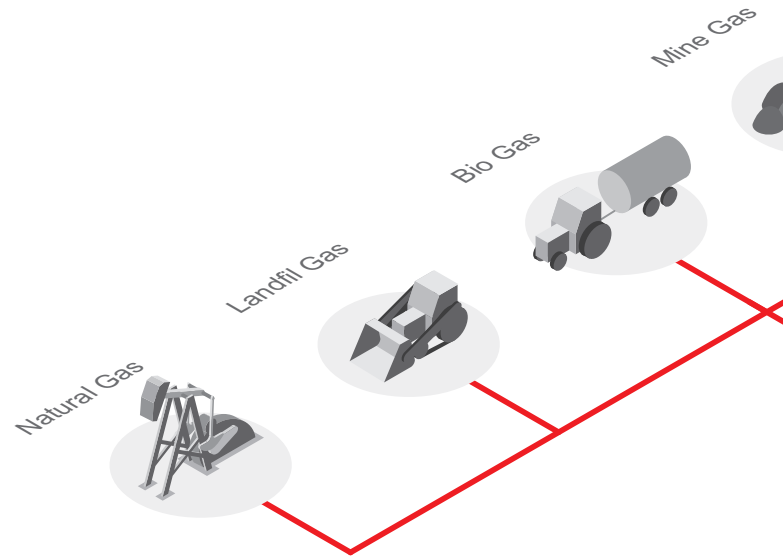
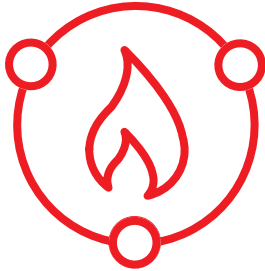


**21** Offices

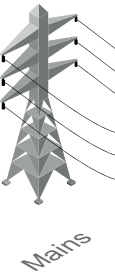


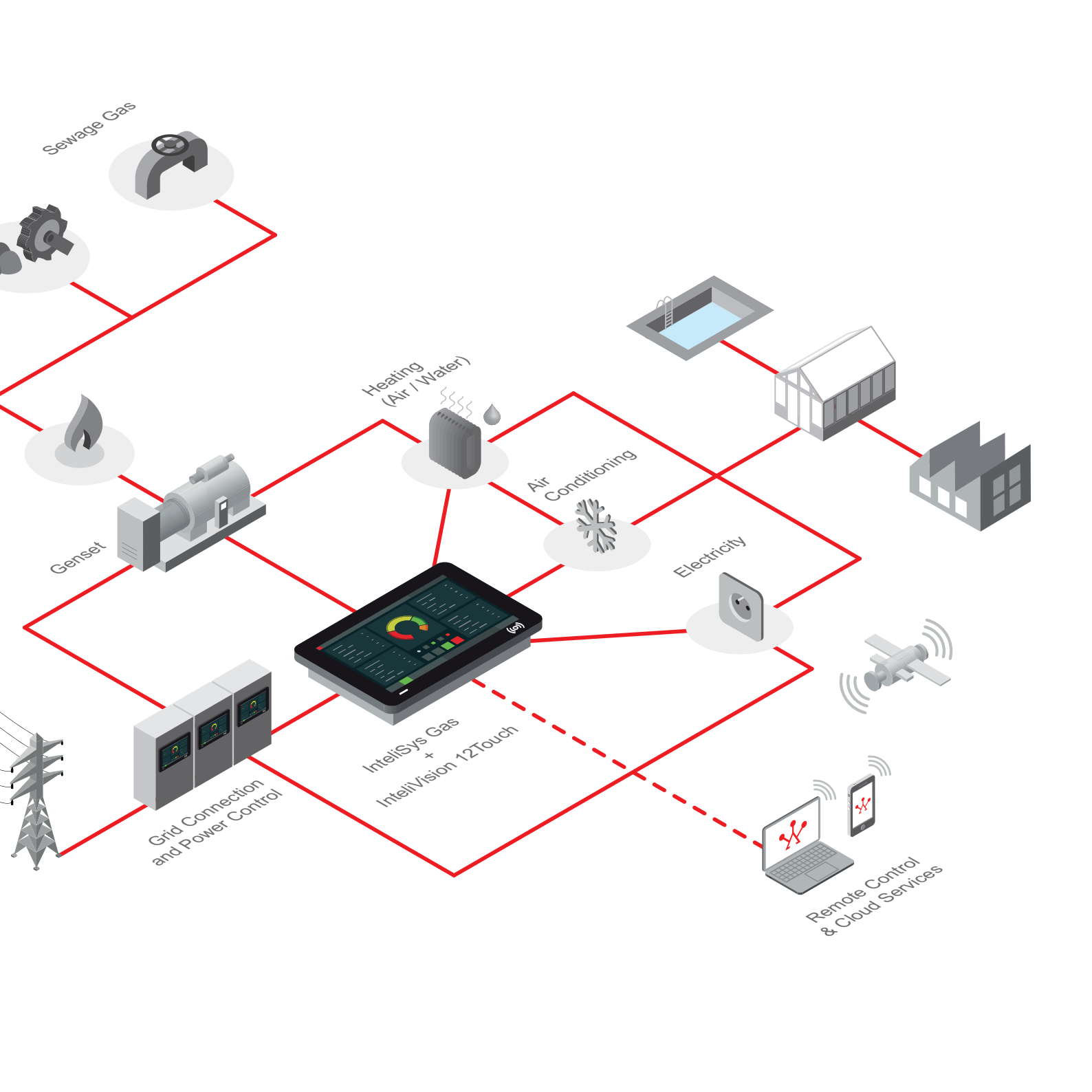
**60+** Distributors

# Combined heat and power (CHP)



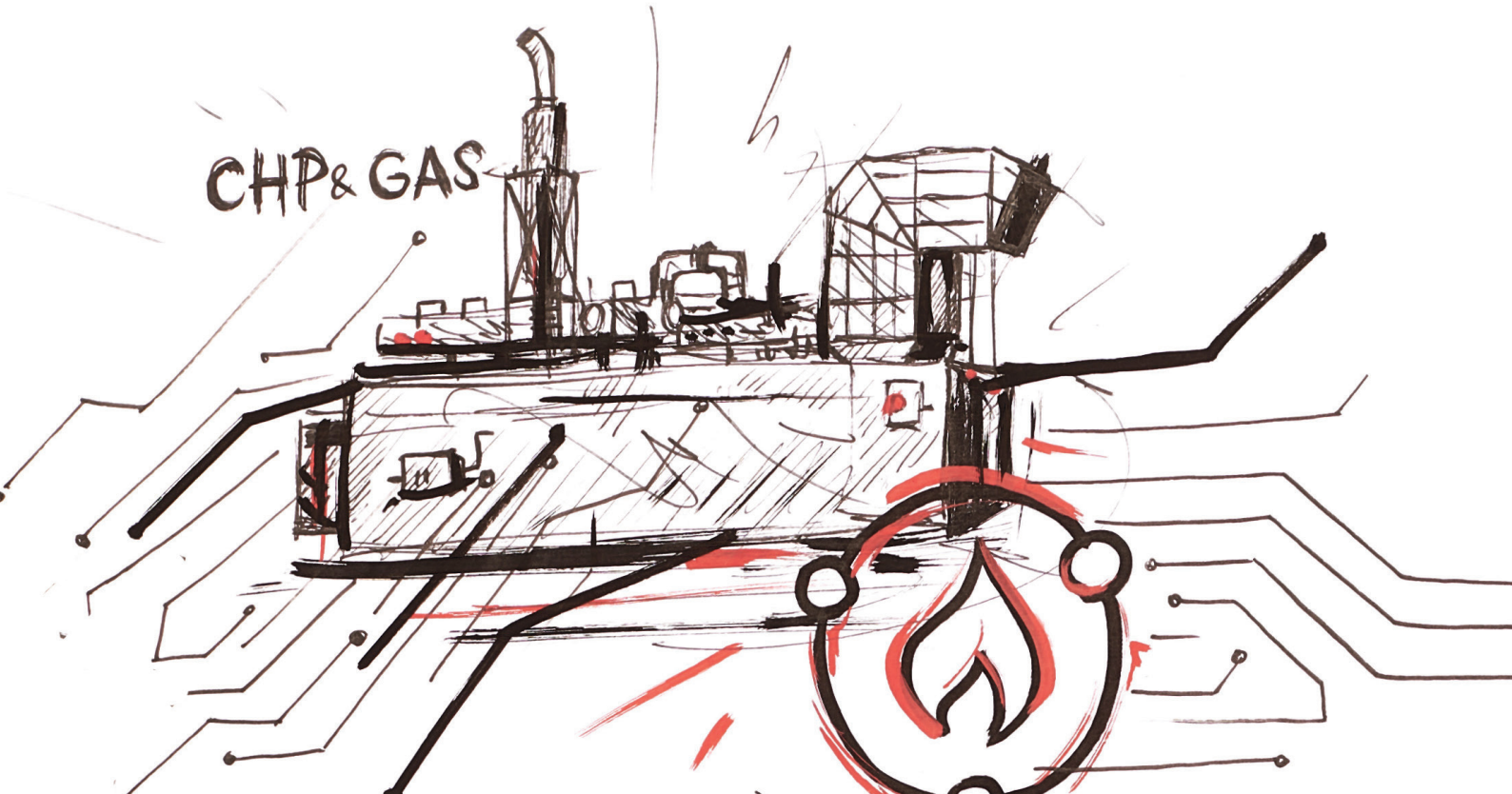
- > CHP (or cogeneration) is the use of a gen-set to produce both electricity and useful heat at the same time.
- > CHP is a more efficient use of generating electricity as it uses the heat produced from the electricity generation which is usually discarded as waste heat.
- > Similarly, CCHP, (combined cooling, heating and power) or trigeneration is the use of a gen-set to produce cooling, as well as heat and electricity.
- > CHP reduces carbon emissions and fuel consumption significantly compared to the separate means of conventional generation via a boiler and power station.
- > CHP is often the measure that offers the most significant single opportunity to reduce energy costs, to improve environmental performance and to meet energy efficiency requirements.





# How ComAp fits into your CHP application?

- > ComAp offers globally recognized control solutions for gas engine gen-set applications in the range of about 10 kW to 2 MW.
- > Our controls perfectly suit packager and aftermarket requirements for safe and reliable operation and efficient utilization of heat, cold, and electrical power.







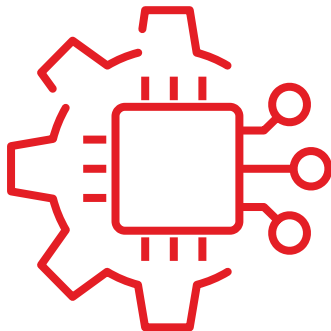


# Configure the system to your needs

- > Full access to control, monitoring and protection of the gen-set and the heat circuits
- > Control all required peripherals like fans, coolers, pumps, and valves
- > Run precise diagnostics by using our alarm and event tracker
- > Remote control and data management features fully integrates the CHP into the overall system
- > Adjust the system behavior using a powerful PLC, or simply use pre-defined functions
- > Scale the system based on your application
- > Multiple display language options
- > Get your installation safely connected to the grid, with our mains protection features
- > Communication protocols like J1939, Modbus or CAN are ready for implementation of supplementary CHP products like: ignitions, AFR control, exhaust gas analyzers, etc.
- > Always stay connected with your application using ComAp's range of monitoring capabilities: IntelliMonitor, WebSupervisor, or our iPhone or Android application

# What ComAp's solution brings to you

- > Preconfigured, ready-to-run solution package with industrial grade hardware
- > Flexibility for your own customization with less effort
- > Easy integration into your CHP application, meeting all relevant industrial standards
- > Easy-to-use tools for configuration, scaling and operation of the control system
- > Central SCADA system including communication to engine and plant
- > Integrated remote control features for data and alarm management
- > Time saving for configuration
- > Cost saving during commissioning
- > Dedicated products and services for safe and efficient plant operation
- > You can better focus on your application, by reduced engineering efforts





# InteliSys Gas

Controller for Gas Gen-set

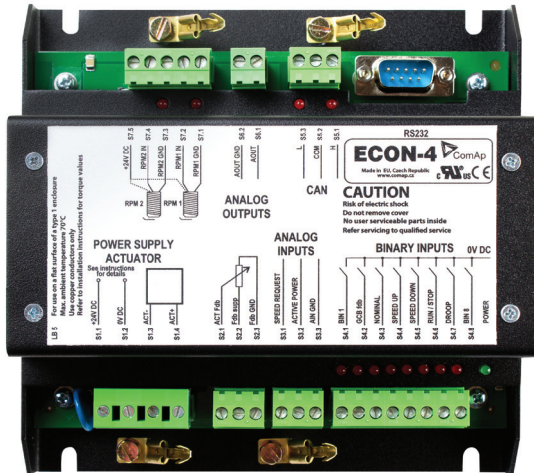
Applications compliant to the latest EU Grid codes



- > The InteliSys Gas is an industrial grade controller for gas engine generator sets mainly used in CHP (Cogeneration) and power generation applications. The InteliSys Gas controls, monitors and protects the generator set according defined setpoints and its configuration
- > Compliant to the European Requirements for Generators, and VDE-AR-N 4105:2018, VDE-AR-N 4110:2018, including Single Fault Tolerance
- > Preconfigured functions, scalable and configurable I/Os, broad communication capabilities a fast and intuitive allows to adapt the controller to various applications without greater efforts
- > The InteliSys Gas and its accessories gives you the perfect solution for your gas engine generator set application
- > Predefined adjustable functions tailored to gas engine specific needs
- > Read in of all relevant mechanical and electrical signals via Sensors, Voltage and Current Transformers to control the entire generator set
- > Full control of the circuit breakers like Generator Breaker and Mains Breaker
- > Automatic Synchronization and kW/kVAr Control to safely connect your generator to the bus and run in stable operation
- > Baseload control, Peak Shaving, Import & Export Power Control to and from the grid e.g. to keep the Electrical Power within the limits as agreed with the distribution system operator (DSO)

# ECON-4

Digital speed governor



ECON-4 is digital speed governor dedicated for speed control of gas or diesel engines. ECON-4 guarantees precise and fast speed control in island and network parallel operation. ECON-4 can control different types of actuators which makes it a general speed controller for almost every actuator on the market for engines in range of multiple MWel.

- > Greater stability for gas engine applications
- > Improved protection against tripping because of under/overshoot conditions
- > CAN connected with the gen-set control system which reduce and simplify the wiring and commissioning work

# InteliVision 5

5,7" Colour Display Unit



- > Colour display unit for localized visualisation
- > InteliVision 5 is compatible with the following product line of controllers: InteliGenNT, InteliSysNT and InteliMainsNT
- > 5,7" Colour TFT Display with resolution of 320 x 240 pixels
- > Local and Remote display for single controller monitoring
- > Plug & 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 of InteliVision 5 to mount a compatible controller
- > Same language support as the controller including graphic languages
- > Communication connection via RS-485 (galvanically separated)
- > Same cut out as InteliGenNT
- > Operating temperature: -30 to +70°C



## Intellivision 5 CAN

5,7" Colour Display Unit with CAN Bus Interface

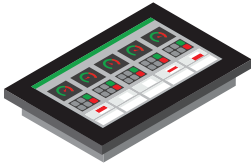


## Intellivision 5 CAN Backlit

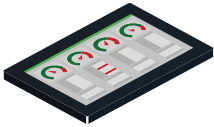
Marine Approved 5,7" Colour Display Unit with Backlit Buttons and CAN Bus Interface

# Remote Touch Displays

Control breakers and much more using just your finger.



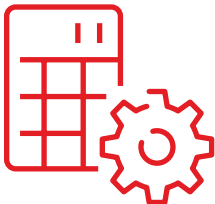
Intel**Vision 18Touch** is an industrial grade display equipped with a 18.5 inch multi-touch screen for use with compatible ComAp controllers to monitor and control many different applications. From the screen, you can monitor one gen-set, or an entire site.



Intel**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.



Intel**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.**



IntelVision 18 Touch

ComAp

OFF

MAN

AUTO

TEST

ComAp

ALARM LIST

no alarm

50.0 Hz

Engine state  
Loaded

Breaker state  
Mainoff

Binary Inputs

- 1. UCB feedback
- 2. VCB feedback
- 3. Remote STOP
- 4. Remote TEST
- 5. SP Overv
- 6. Configuration 1
- 7. Configuration 2

Binary Outputs

- 1. Alarm
- 2. Fuel sensor
- 3. UCB Close/Over
- 4. VCB Close/Over
- 5. Overheat
- 6. Alarm

Genset kVAh 1 4 6 0 kVAh

1 0 kVAh

# InteliVision 12Touch

12,1" Colour Display Unit Touchscreen



- > Industrial operator panel equipped with 12,1" colour TFT multi-touch screen with resolution of 1280 × 800 pixels
- > Touch based Graphical User Interface, support for multi-touch gestures
- > Plug & 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 a USB stick)
- > User's pictures import
- > Adaptive and colour AlarmList
- > Large History screen
- > Adjustable setpoints help
- > Communication connection via RS-485, CAN or Ethernet
- > Multilanguage support
- > Integrated easy to use mounting system
- > Designed to be mounted in either monitoring or engine room
- > Industrial and robust design
- > Rugged housing manufactured from a single piece of aluminium alloy
- > Chemically strengthened front glass (8 times stronger than normal glass)
- > Sun-readable display (1000 cd/m2)
- > Automatic brightness control
- > Operating temperature: -30 to + 70°C
- > Face is sealed to IP65
- > EMC, climatic and mechanical tests
- > CE certification
- > Supported controllers :
  - IntelliSys GAS
  - IntelliGenNT BaseBox
  - IntelliGenNTC BaseBox
  - IntelliSysNTC BaseBox
  - IntelliMainsNTC BaseBox
  - IntelliSysNTC Hybrid
  - IntelliDrive DCU Marine from HW version 2.0
  - IntelliDrive Mobile from SW version 2.6.0

# InteliVision 13Touch

13.3" Colour Display Unit



- > 13.3" Multi-touch projected capacitive display with a resolution of 1920 × 1080 pixels
- > EU RO MR Marine certification
- > Multi-controller support for up to 4 controllers
- > Buttons for brightness change on front face
- > Windows 10 IoT Enterprise 2019 LTSC (64bit)
- > ComAp PC tools pre-installed
- > Setpoints configurable from one device
- > History logs of all controllers
- > Fullscreen mode with lock protection/PIN
- > Front face protection compliant with IP66
- > Intel Atom® x5-E3930 Processor
- > 4 GB RAM
- > 32 GB eMMC, 240 GB SSD
- > 2 × Ethernet, 2 × USB 2.0, 2 × USB 3.0
- > Operating temperature: -15 °C to +55 °C
- > Power input 10-31 V DC
- > Identical compatibility with controllers as InteliVision 18Touch - majority of the ComAp controllers

# InteliVision 18Touch

18,5" Colour Display Unit Touchscreen



- > Panel suitable for use with a wide range of ComAp controllers
  - > Successor to the IntelVision 17Touch
  - > Display for monitoring and control of the entire site
  - > Possible to use for remote monitoring and control through Internet
  - > 18,5" LED backlit projected capacitive touchscreen with a resolution of 1366 × 768 pixels
  - > Operating temperature extends from -10 °C to +60 °C
  - > Powerful Intel® Celeron® quad core processor J1900
  - > 3x USB, 2x mini-PCIe sockets, 1x CFast, 2x RS232/422/485/, 2x RJ45
  - > 32 GB SSD
  - > Front protection compliant with IP66
  - > Mounting support: panel/wall/stand/VESA 100mm × 100mm
  - > Power input 12-30 VDC
  - > ComAp PC tools preinstalled
  - > Setpoints configurable from one device
  - > History logs of all controllers
  - > Fullscreen mode with lock protection/PIN
  - > Onscreen keyboard
- > Windows operating system

# 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<sup>+</sup>

case studies via [comap-control.com](https://comap-control.com)



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

# InteliSCADA

PC configuration and monitoring tool

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/controllers and one-click is needed to get InteliSCADA programmed and to 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 & 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.

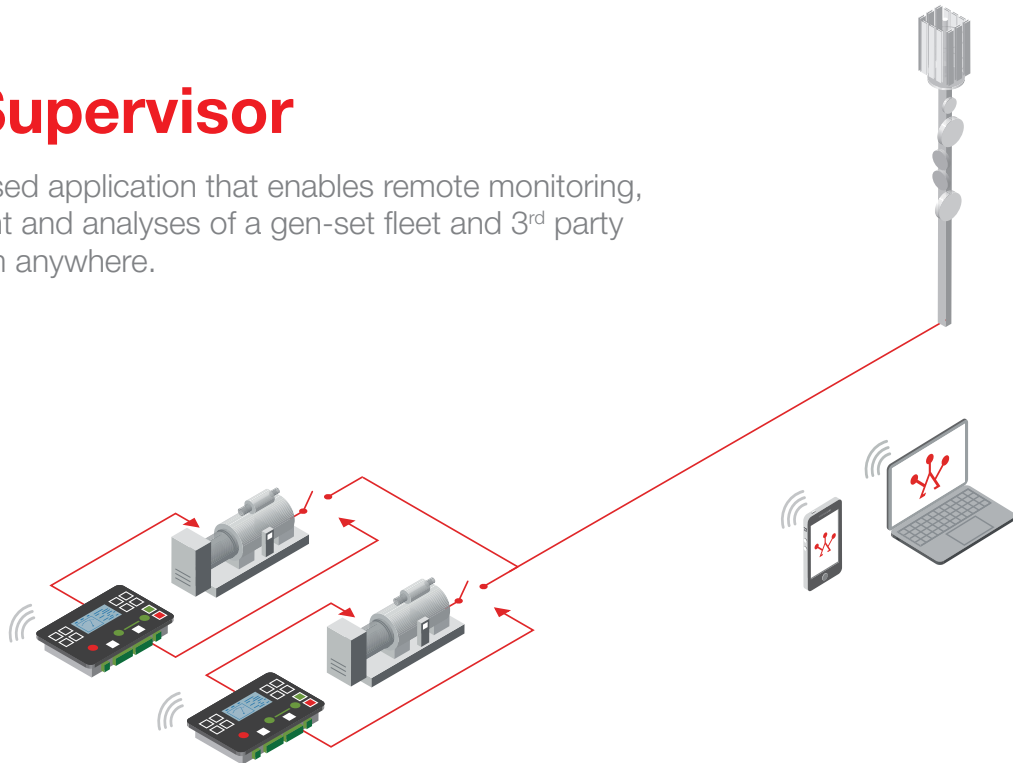


Inteli**SCADA**



# WebSupervisor

A Cloud-based application that enables remote monitoring, management and analyses of a gen-set fleet and 3<sup>rd</sup> party devices from anywhere.



## Main Features

- > 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 customization 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 third 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)
- > Customizable look with your logo and URL
- > User management with several levels of permission

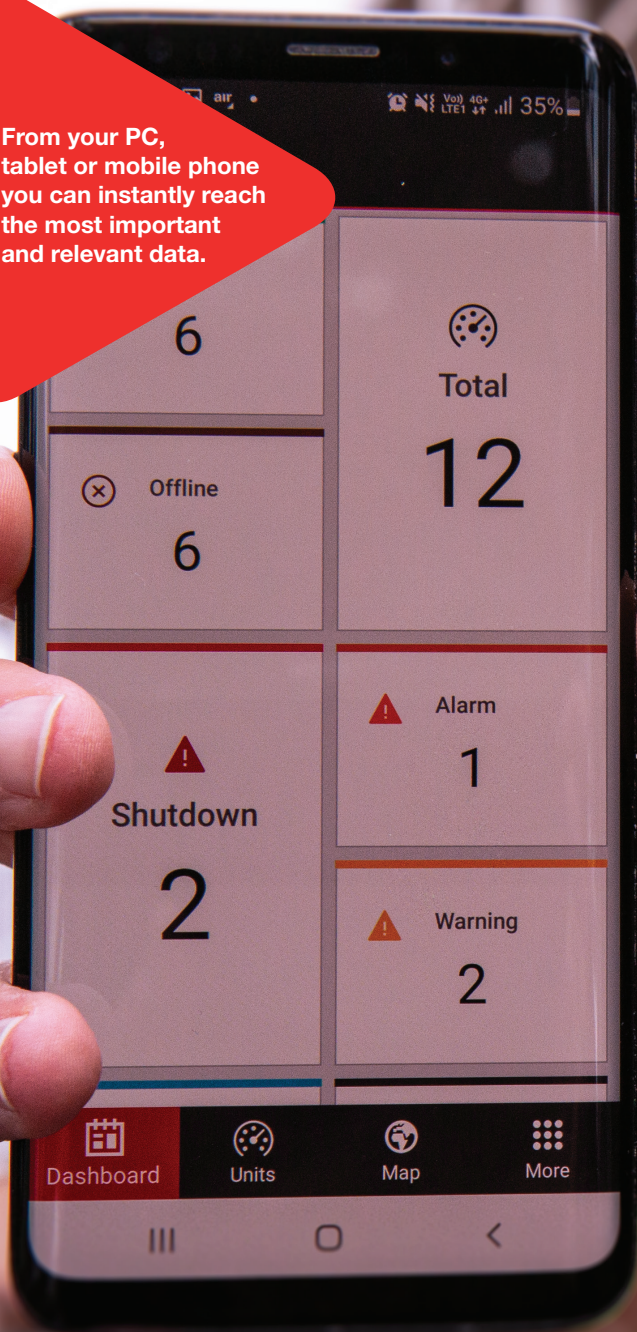
\*Tracking and geofencing requires purchasing an additional GPS card.

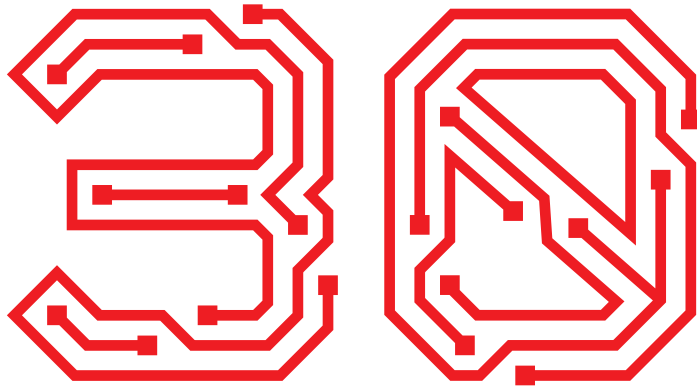






From your PC,  
tablet or mobile phone  
you can instantly reach  
the most important  
and relevant data.





### **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 400 employees, and a network of 60+ distributors. The company is in the hands of its founders who have an ambitious vision for further growth and investment in acquisitions and partnerships. But it is trusted relationships with customers what is the central focus of ComAp. Let's have a look at the milestones of this astonishing journey starting back in the early 1990s, in the heart of Europe, that has become known as The Heart of Smart Control in the world of independent and backup power generation.



Engine Control

InteliSys | InteliGen

Renewable Energy

ComAp Cores

Inteli Sys Hybrid

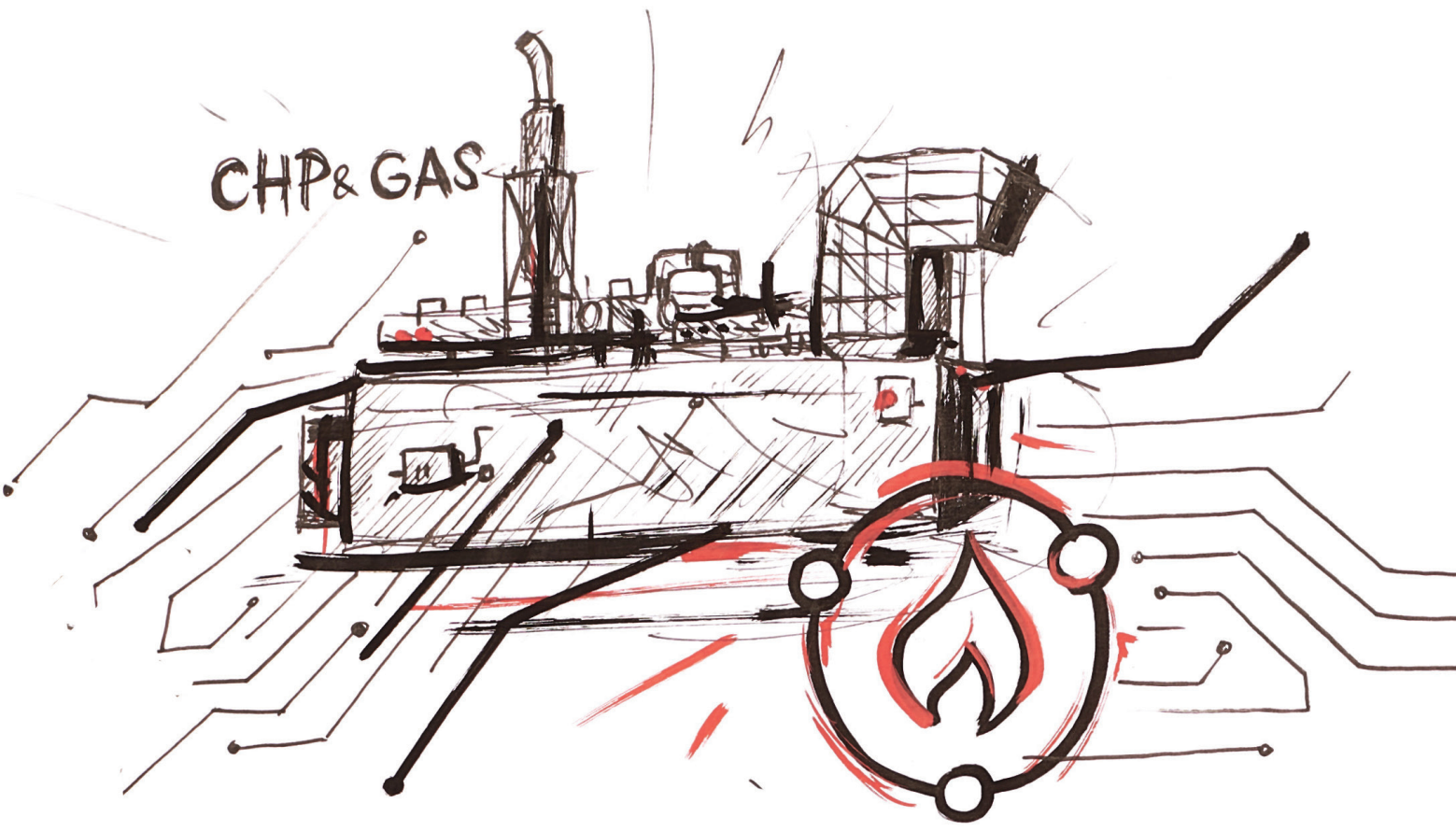
3  
We are the heart of

COMAP 1991 - NOW



THE HEART  
OF SMART  
CONTROL (.EXE)

CHP & GAS



[comap-control.com](http://comap-control.com)