# **MainsCompact**<sup>NT</sup>



MAINS SUPERVISION CONTROLLER



## **Description**

The MainsCompact<sup>NT</sup> controller is a member of the InteliCompact family designed for the control of up to 31 InteliCompact<sup>NT</sup> MINT controllers in parallel to mains operation or multiple AMF operation.

It evaluates mains conditions, controls the mains breaker, controls the master generator breaker, starts the gen-set group and reverse-synchronizes the group to the mains.

The unit automatically starts a gen-set group and provides peak load shaving from the mains.

### **Benefits**

- Easy solution, less wiring, less components
- Synchronizing of the gen-set group to the mains
- Wide range of communication capabilities
- Perfect price/performance ratio



#### AirGate

Modern communications made simple. ComAp's powerful AirGate technology is provided in a range of our controllers and makes remote internet connection to the ComAp controller easy. Just register the AirGate enabled controller on our website and from then on let ComAp's unique system locate and maintain contact with the controller, no need to worry about VPN's, Static IP addresses or corporate firewalls, simple! "AirGate – Simply connected."



ComAp is a member of AMPS (The Association of Manufacturers of Power generating Systems).

## **Features**

- Mains measurements: V, A, Hz, kW, kVA, PF, kWh, kVArh
- Mains protections:
  - · Undervoltage, overvoltage
  - Underfrequency, overfrequency
  - · Vector shift
  - · Binary input for external mains decoupling relay
- Bus measurements: V, Hz
- Basic functions:
  - Mains failure detection using integrated mains protections (voltage, frequency, phase shift)
  - Peak shaving
  - · High tariff avoidance
  - Mains export limit
  - MCB control
  - Optional MGCB control
  - · Test of the Multi-AMF function (with or without load)
  - Soft loading/unloading
  - Peak Level Start/Stop

- Event-driven history file
- Configurable inputs and outputs
- Plug-in communication modules: RS232, RS485, USB device, Ethernet, GPRS
- External communication modules (shared for all controllers in the site): RS232, RS485, Internet via Ethernet or PPP dial-up
- SMS and/or e-mail sending when an alarm occurs (requires GSM modem, Internet module and/or GPRS module)
- ▶ Dimensions 180×120 mm
- IP65 front panel sealing

## **Order code**

Controller	Order code
MainsCompact <sup>NT</sup>	MC-NT

## **Accessories and PC tools**

#### **EXTENSION MODULES**

- ► **IGS-PTM** Analog/Binary Input/Output Module
- ▶ IG-IOM Analog/Binary Input/Output Module
- ▶ **IGL-RA15** Remote Annunciator
- ► IL-NT BIO8 Binary Input/Output Module
- ▶ IL-NT AOUT8 Analog Outputs for PWM Gauges Module

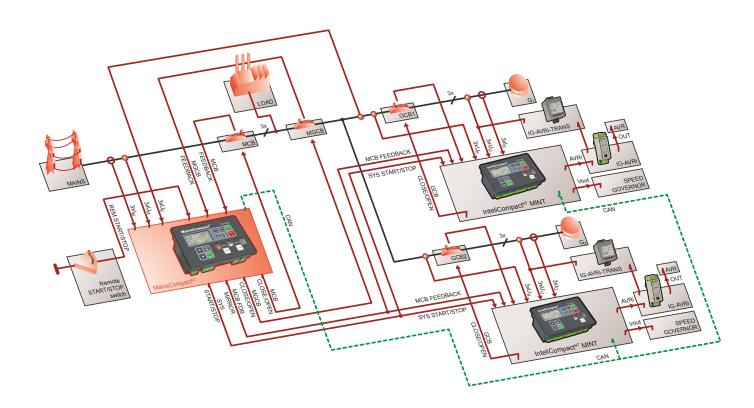
#### **COMMUNICATION MODULES**

- ▶ InternetBridge-NT ¹¹ Communication Module with Cellular/Ethernet Connection
- ▶ I-LB+ Local Bridge
- ▶ **IB-Lite** Internet/Ethernet Plug-in Module including Web Server
- ▶ IL-NT GPRS GSM Modem/Wireless Internet Module
- ▶ IL-NT RS232 RS232 Extension Board
- IL-NT RS232-485 Dual Port Extension Board
- ▶ IL-NT S-USB Service USB Module

#### **PC TOOLS**

- ► LiteEdit PC Configuration and Monitoring Tool
- WebSupervisor Cloud-based System for Monitoring and Controlling of ComAp Controllers
- WinScope Special Graphical Controllers' Monitoring Software
- ▶ InteliMonitor PC Monitoring Tool

1) Available shortly



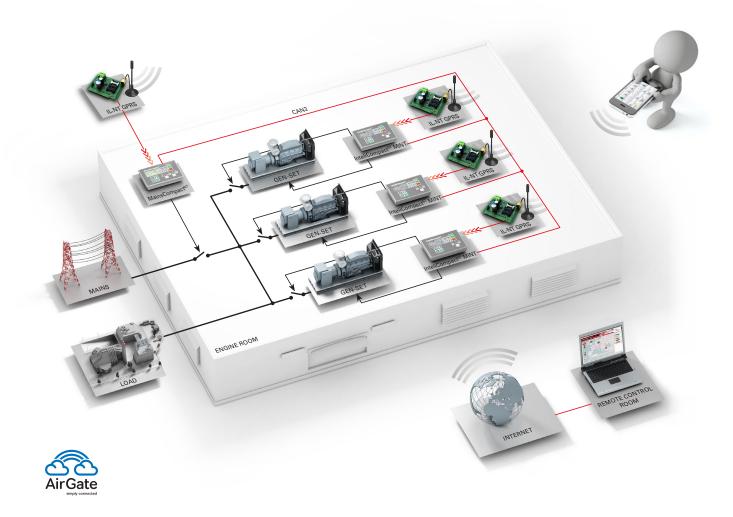


## **Typical application**

## Multiple gen-sets in parallel to grid - remote monitoring and control via Internet

#### **Description:**

- ▶ Fully automatic system reduces electric energy bill by keeping the mains power below high tariff level during peak hours.
- At the same time it accomplishes emergency standby power in case of mains failure.
- ▶ Remote control and monitoring via IL-NT GPRS.
- WebSupervisor is used for remote monitoring.
- Wide range of engine and generator protections, including vector-shift protection, loss of excitation and earth fault current protection.
- Automatic forward and reverse synchronization with soft load ramp-up and ramp-down during changeover.
- ▶ Common synchronization of InteliCompact<sup>NT</sup> MINT controllers provided by MainsCompact<sup>NT</sup>.
- Active and reactive load import/export control and load-sharing.
- Automatic optimization of number of running sets according to load (including Run Hours equalization).
- Peak shaving controlled by built in Scheduler, engines automatically run during peak period.
- ▶ History file with performance log stored in InteliCompact<sup>NT</sup> MINT allows easy backtracking and problem solving.
- Seamless communication with engine's electronic injection control unit, all important values and alarms are visible on screen of InteliCompact<sup>NT</sup> and stored to the history file in plain language.



#### Scope of supply:

- ▶ 3× InteliCompact<sup>NT</sup> MINT
- ▶ 3× IG-AVRi
- ▶ 3× IG-AVRi-TRANS/LV
- ▶ 1x MainsCompact<sup>NT</sup>
- ▶ 4× IL-NT GPRS



## MainsCompact<sup>NT</sup> RELATED PRODUCTS

## InteliCompact<sup>NT</sup> MINT

MULTIPLE PARALLELING GEN-SETS WITH INTERNAL LOAD-SHARING CONTROLLER

InteliCompact<sup>NT</sup> MINT controllers are integrated controllers for gen-sets operating in groups parallel to each other and with or without the mains.

Functionality, optimized for ease of use, installation and configuration, includes built-in synchronizer and digital isochronous active and reactive load sharer. Native co-operation of up to 32 gen-sets is a standard feature.

The InteliCompact<sup>NT</sup> MINT models come with MainsCompact<sup>NT</sup> controller, which is a mains controller, in order to extend the functionality of InteliCompact<sup>NT</sup> MINT by functions needed for parallel to mains operation. InteliCompact<sup>NT</sup> can communicate via standard and proprietary CAN J1939 or Modbus communication protocols to a wide range of EFI engines, which include Catepillar, Cummins, Detroit Diesel, Deutz, GM, Isuzu, Iveco, John Deere, MAN, MTU, Perkins, Scania, Sisu, VM Motori, Volvo Penta and others.



## InteliCompact<sup>NT</sup> SPtM

SINGLE GEN-SET IN PARALLEL TO MAINS CONTROLLER

InteliCompact<sup>NT</sup> SPtM controllers are integrated controllers combining AMF and paralleling functions for single gen-sets.

This combination allows the gen-set to be operated as an AMF gen-set with interrupt-free transfers as well as in continuous parallel-to-mains mode.

Functionality, optimized for ease of use, installation and configuration, includes built-in synchronizer and mains protections. InteliCompact<sup>NT</sup> can communicate via standard and proprietary CAN J1939 or Modbus communication protocols to a wide range of EFI engines, which include Catepillar, Cummins, Detroit Diesel, Deutz, GM, Isuzu, Iveco, John Deere, MAN, MTU, Perkins, Scania, Sisu, VM Motori, Volvo Penta and others.



For more information about our products and applications visit

## www.comap.cz



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Customer satisfaction is our mission. We continuously develop the best people to succeed in our mission.