

# New IntelliLite<sup>NT</sup>



## SINGLE SET GEN-SET CONTROLLER

### Description

IntelliLite<sup>NT</sup> models are the new integrated controllers for gen-sets operating in single standby mode. Based on the field proven IntelliLite architecture, the new controllers fulfill every requirement needed for AMF and MRS applications – including modem and Internet control, user configuration and complete gen-set monitoring and protection.

IntelliLite<sup>NT</sup> controllers are easy to use and feature an intuitive user interface with graphic display. The built-in event and performance log with backed-up real time clock makes troubleshooting even simpler.

The new design brings seamless integration with the latest breed of EFI diesel engines from all major manufacturers. This offers a higher level of functionality with users able to display a full range of values from the EFI engine on standard analog gauges and true RMS measurement of electric values.

### Benefits

- ▷ Less wiring and components
- ▷ Less engineering and programming
- ▷ History log – easy troubleshooting and warranty claim handling
- ▷ Remote monitoring reduced call-out costs of service engineers
- ▷ Analog gauge (VDO, Datcon, ...) outputs – operator friendly
- ▷ Perfect price/performance ratio



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



ComAp products meet the highest standards, with every stage of production undertaken in accordance with the ISO certification obtained in 1998.



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# InteliLite<sup>NT</sup>

## Features

### ▷ 3 phase AMF function\*

- Over/Under frequency
- Over/Under voltage
- Voltage asymmetry

### ▷ 3 phase generator protections

- Over/Under frequency
- Over/Under voltage
- Current/Voltage asymmetry
- Overcurrent/Overload

### ▷ True RMS Voltage measurement

- 3 phase generator and mains\* voltages
- Voltage range 277 V p-n, 480 V p-p
- Maximal measured voltage 300 V p-n
- PT ratio range 0.1–500

### ▷ True RMS current measurements

- 3 generator phase currents
- Current range 5 A
- Maximal measured current 10 A
- CT ratio range 1–5000

### ▷ Power measurements

- Act / React Power and Power Factor per phase
- Active and Reactive Energy counter

### ▷ Event and performance log + RTC

- Event based history with 119 events
- Reason, Data and Time + all important values are stored
- Battery backed-up RTC
- Test Run scheduler

### ▷ User interface

- Graphic 128 × 64 pixels display
- Multiple language capability
- Setpoints adjustable via keyboard or PC
- Buttons with mechanical feedback

### ▷ Inputs and outputs

- 3 analog inputs (0–20 mA or Resistive – jumper selectable)
- 6 or 7\* Binary inputs
- 6 or 7\* Binary outputs
- Magnetic pick-up input
- D+ preexcitation terminal
- Optional 8 analog gauge drive outputs, compatible with VDO, Datcon gauges

### ▷ EFI engine support

- Cummins MODBUS
- Engine specific J1939 for all major manufacturers
- Diagnostic messages in plain text

### ▷ Communication interfaces

- Optional USB and RS232 plug-in modules
- MODBUS RTU (requires RS232 module)
- Internet

### ▷ Mechanical and operation parameters

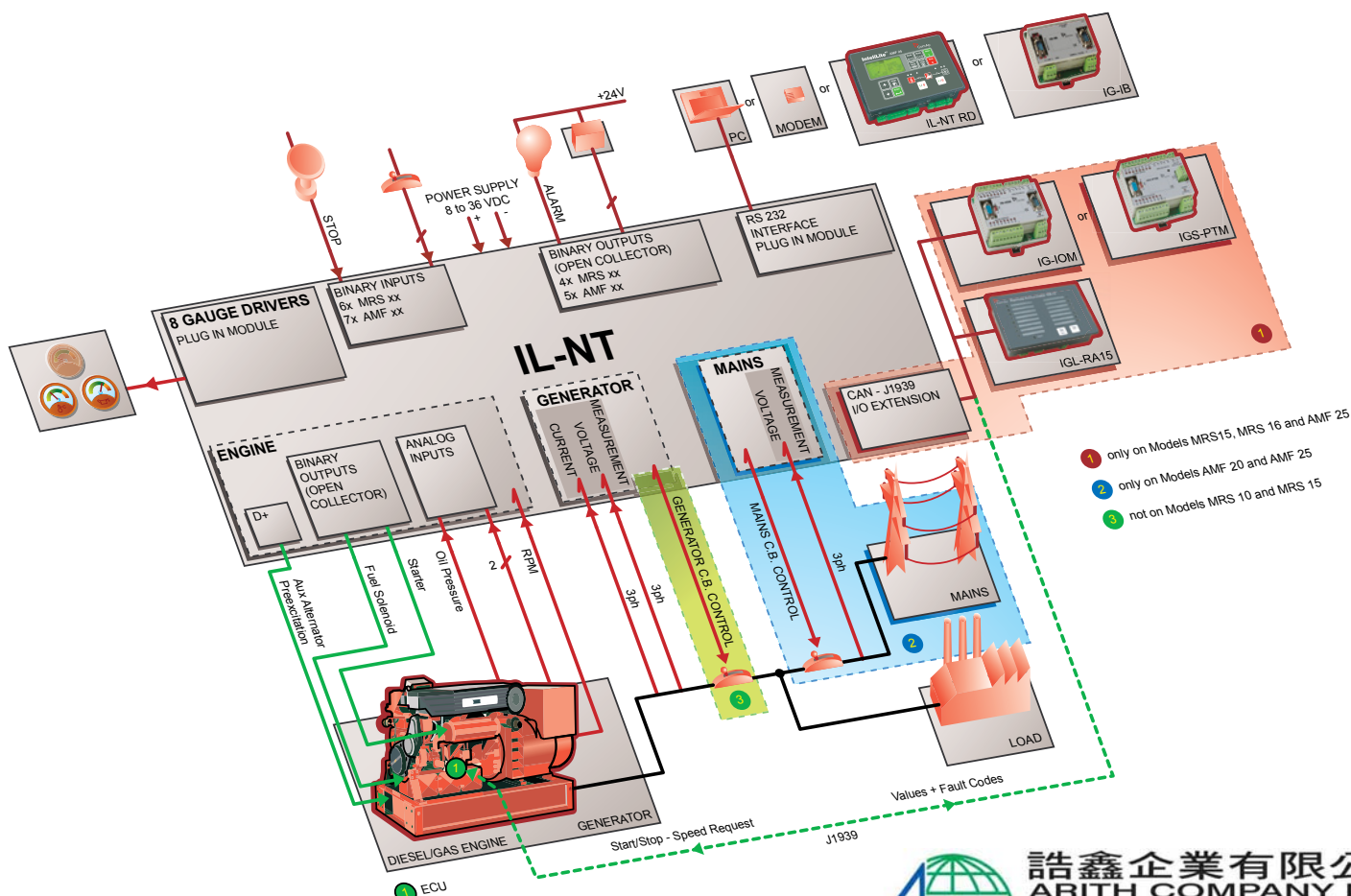
- Unit dimension 120 × 180 mm
- Sealed front face rated for IP65
- Hard plexiglass LCD cover
- Operation temperature
  - 20°C – +70°C standard version
  - 40°C – +70°C low temperature version
- Power supply voltage 8–36 V
- Voltage drops shorter than 50 ms do not affect operation

## Extension modules

- ▷ IL-NT RS232 RS232 plug-in interface
- ▷ IL-NT USB USB plug-in interface
- ▷ IL-NT AOUT8 gauge plug-in interface
- ▷ IL-NT RD remote display
- ▷ IG-IB Internet module
- ▷ IGS-PTM\*\* extension I/O module
- ▷ IGS-IOM\*\* extension I/O module
- ▷ IGL-RA15\*\* 15 LED remote annunciator

\* Only for Models AMF 20 and AMF 25

\*\* Only for Models MRS 15, MRS 16 and AMF 25



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# Available models

## MRS 10

**MANUAL AND REMOTE  
START CONTROLLER**



- ▷ 3 analog inputs
- ▷ magnetic pickup input
- ▷ D+ preexcitation terminal
- ▷ 6 binary inputs
- ▷ 6 binary outputs

## MRS 11

**MANUAL AND REMOTE  
START CONTROLLER**



- ▷ 3 analog inputs
- ▷ magnetic pickup input
- ▷ D+ preexcitation terminal
- ▷ 6 binary inputs
- ▷ 6 binary outputs
- ▷ GCB control

## AMF 20

**AUTOMATIC MAINS FAILURE  
START CONTROLLER**



- ▷ 3 analog inputs
- ▷ magnetic pickup input
- ▷ D+ preexcitation terminal
- ▷ 7 binary inputs
- ▷ 7 binary outputs
- ▷ GCB and MCB control

## MRS 15

**MANUAL AND REMOTE  
START CONTROLLER WITH  
SUPPORT FOR EFI ENGINES**



- ▷ 3 analog inputs
- ▷ magnetic pickup input
- ▷ D+ preexcitation terminal
- ▷ 6 binary inputs
- ▷ 6 binary outputs
- ▷ CAN with J1939 support
- ▷ extension modules capability

## MRS 16

**MANUAL AND REMOTE  
START CONTROLLER WITH  
SUPPORT FOR EFI ENGINES**



- ▷ 3 analog inputs
- ▷ magnetic pickup input
- ▷ D+ preexcitation terminal
- ▷ 6 binary inputs
- ▷ 6 binary outputs
- ▷ GCB control
- ▷ CAN with J1939 support
- ▷ extension modules capability

## AMF 25

**AUTOMATIC MAINS FAILURE  
START CONTROLLER WITH  
SUPPORT FOR EFI ENGINE**



- ▷ 3 analog inputs
- ▷ magnetic pickup input
- ▷ D+ preexcitation terminal
- ▷ 7 binary inputs
- ▷ 7 binary outputs
- ▷ GCB and MCB control
- ▷ CAN with J1939 support
- ▷ extension modules capability

## The Chart of Functions of IntelliLite<sup>NT</sup> Controllers

FUNCTIONS/CONTROLLERS	IL-NT MRS 10	IL-NT MRS 15	IL-NT MRS 11	IL-NT MRS 16	IL-NT AMF 20	IL-NT AMF 25
Binary inputs/outputs	6 / 6	6 / 6	6 / 6	6 / 6	7 / 7	7 / 7
Analog inputs	3	3	3	3	3	3
Magnetic pick-up	●	●	●	●	●	●
AMF function	–	–	–	–	●	●
Input configuration	●	●	●	●	●	●
Output configuration	●	●	●	●	●	●
Voltage measurement Gen. / Mains	3 ph / –	3 ph / –	3 ph / –	3 ph / –	3 ph / 3 ph	3 ph / 3 ph
Current measurement	3 ph	3 ph, IDMT overcurrent	3 ph	3 ph, IDMT overcurrent	3 ph	3 ph, IDMT overcurrent
kW/kWh measurement	● / –	● / ●	● / –	● / ●	● / –	● / ●
History file	–	●	–	●	–	●
RTC with battery	●	●	●	●	●	●
GCB/MCB control with feedback	– <sup>1)</sup> / –	– <sup>1)</sup> / –	● <sup>2)</sup> / –	● <sup>2)</sup> / –	● / ●	● / ●
Battery charging alternator circuit	●	●	●	●	●	●
J1939 interface	–	●	–	●	–	●
Internet support	with IG-IB	with IG-IB	with IG-IB	with IG-IB	with IG-IB	with IG-IB
Extension modules	–	IGL-RA15, IG-IOM, IGS-PTM	–	IGL-RA15, IG-IOM, IGS-PTM	–	IGL-RA15, IG-IOM, IGS-PTM
8 analog gauge drivers	0	0	0	0	0	0
RS232 interface	0	0	0	0	0	0
Modem interface	0	0	0	0	0	0
MODBUS interface	0	0	0	0	0	0
Remote display	0	0	0	0	0	0
Cummins MODBUS	0	0	0	0	0	0

Key: ● included  
 – excluded  
 0 optional – plug-in module required  
 1) Automatic GCB control without feedback  
 2) Manual/Automatic GCB control, but without feedback

Legend: IG-IOM/IGS-PTM: I/O extension modules  
 IGL-RA15: Remote annunciator  
 GCB: Generator circuit breaker  
 MCB: Mains circuit breaker

**For more information about our products and solutions visit our web-page**



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