New InteliGen NT

GENERAL PURPOSE COMPACT GEN–SET CONTROLLER

ComAp

LEADER IN GEN–SET COMMUNICATION SOLUTION

Description

New Technology InteliGen is a comprehensive controller for both single and multiple gen-sets operating in standby or parallel modes. Compact construction is optimized for these purposes; various HW modifications allow the customer to select the optimum type for a particular application. Built-in synchronizer and digital isochronous load sharer allow total integrated solution for gen-sets in standby, island parallel or mains parallel. Native cooperation of up to 32 gen-sets is a standard feature.

InteliGen^{NT} supports many standard ECU types and is especially designed to easily integrate new ones.

Powerful graphic display with user-friendly control allows even new users to find quickly the required information.

ComAp is open to various customized firmware solutions.

Benefits

▷ Support of engines with ECU (Electronic Control Unit)
▷ Excellent configurability allows matching exactly the customer's needs
▷ Complete integrated gen-set solution and signal sharing via CAN bus – minimum external components needed
▷ Many communication options – easy remote supervising and servicing
▷ Perfect price/performance ratio
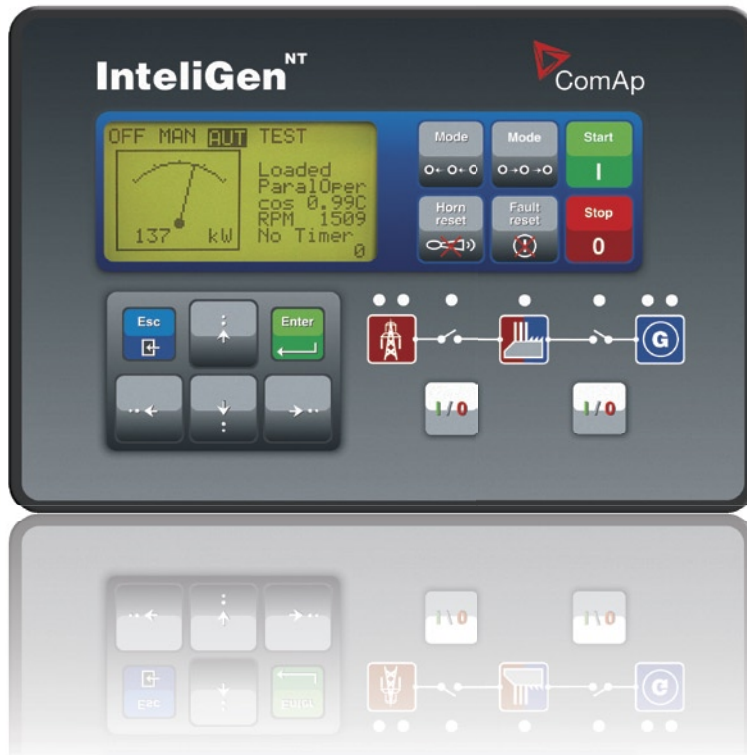▷ Gen-set performance log for easy problem tracing

New **InteliGen** NT

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Integrated fixed and configurable protections

▷ 3 phase integrated generator protections (U + f)

▷ IDMT overcurrent + Shortcurrent protection

▷ Overload protection

▷ Reverse power protection

▷ Earth fault protection

▷ 3 phase integrated mains protections (U + f)

▷ Vector shift protection

▷ All binary/analogue inputs free configurable for various protection types: HistRecOnly / Alarm Only / Warning / Off load / Slow stop / BreakerOpen&Cooldown / Shutdown / Mains protect / Sensor fail

▷ Additional 160 programmable protections configurable for any measured value to create customer-specific protections

Features

▷ **InteliGen**NT

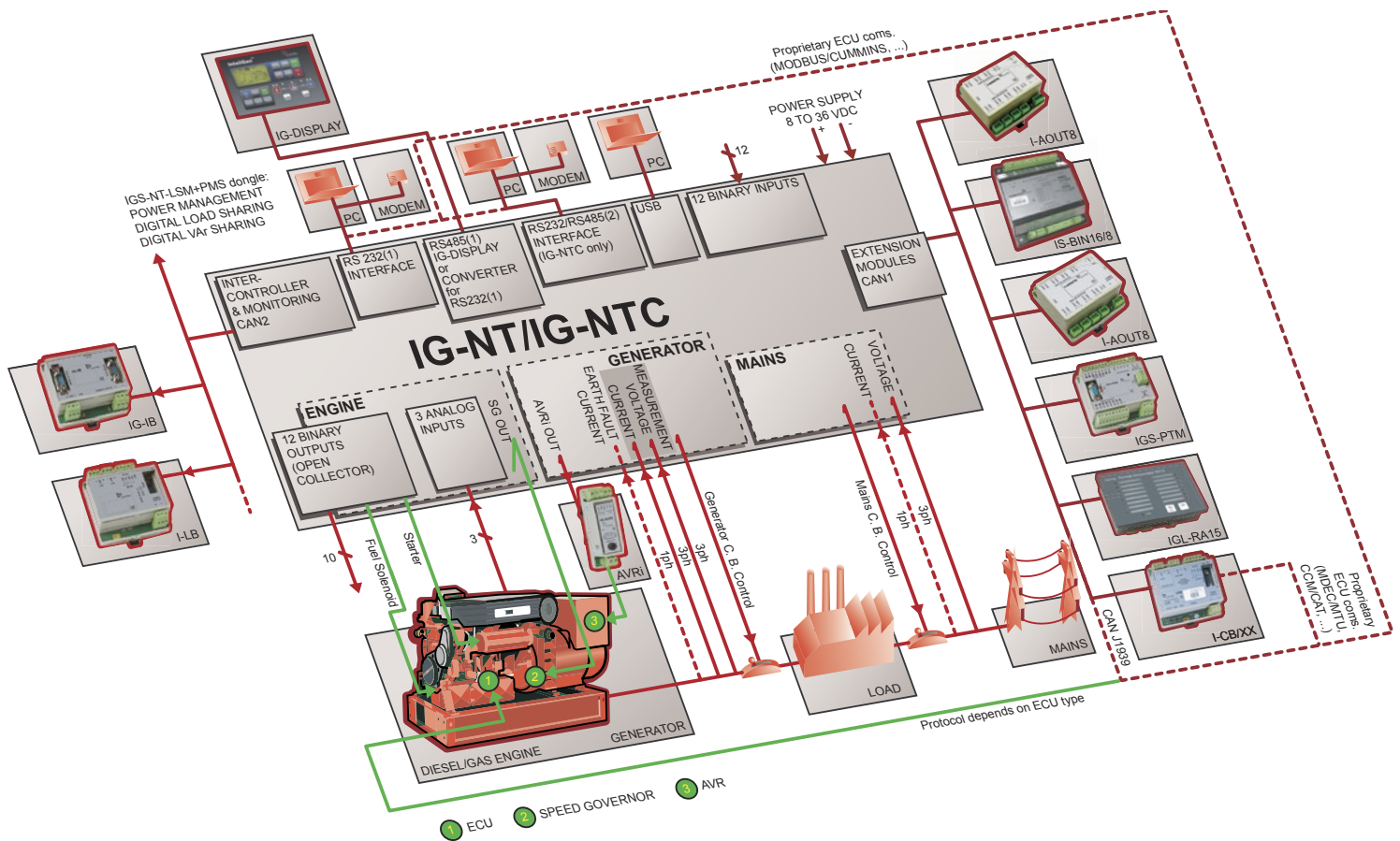| |
|---|
| Support of engines with ECU (J1939, ModBus and other proprietary interfaces); alarm codes displayed in text form |
| AMF function |
| Automatic synchronizing and power control (via speed governor or ECU) |
| Baseload, Import/Export |
| Peak shaving |
| Voltage and PF control (AVR) |
| Generator measurement: U, I, Hz, kW, kVAr, kVA, PF, kWh, kVAhr |
| Mains measurement: U, I, Hz, kW, kVAr, PF |
| Inputs and outputs configurable for various customer needs |
| RS232/RS485 interface with ModBus support; Analog/GSM/ISDN/CDMA modem support; SMS messages; ECU ModBus interface |
| Event-based history (up to 500 records) with customer-selectable list of stored values; RTC; statistic values |
| Integrated PLC programmable functions |
| Interface to remote display unit (IG-Display) |
| Dimensions 180x120 mm (front panel) |
| Sealed to IP65 |

▷ **InteliGen**NTC

All items from **InteliGen**NT Features list
+ Selectable measurement ranges for AC voltages and currents – 120 / 277 V, 0-1 / 0-5 A
+ Secondary RS232/RS485 interface with the same features as the primary one; additionally, the RS485 converter is isolated
+ USB 2.0 slave interface

Diagram labels: Proprietary ECU coms. (MODBUS/CUMMINS, ...); POWER SUPPLY 8 TO 36 VDC; IG-DISPLAY; IGS-NT-LSM+PMS dongle: POWER MANAGEMENT DIGITAL LOAD SHARING DIGITAL VAr SHARING; PC; MODEM; PC; MODEM; PC; USB; 12 BINARY INPUTS; I-AOUT8; IS-BIN16/8; I-AOUT8; IGS-PTM; IGL-RA15; I-CB/XX; INTER-CONTROLLER & MONITORING CAN2; RS 232(1) INTERFACE; RS485(1) IG-DISPLAY or CONVERTER for RS232(1); RS232/RS485(2) INTERFACE (IG-NTC only); EXTENSION MODULES CAN1; IG-IB; I-LB; IG-NT/IG-NTC; ENGINE; 12 BINARY OUTPUTS (OPEN COLLECTOR); 3 ANALOG INPUTS; SG OUT; AVRi OUT; GENERATOR; EARTH FAULT CURRENT; MEASUREMENT VOLTAGE CURRENT; MAINS; VOLTAGE CURRENT; AVRi; Fuel Solenoid; Starter; 10; 3; Generator C. B. Control; Mains C. B. Control; 3ph; 1ph; 3ph; 1ph; MAINS; CAN J1939; Proprietary ECU coms. (MDEC/MTU, CCM/CAT, ...); DIESEL/GAS ENGINE; GENERATOR; LOAD; Protocol depends on ECU type; ECU; SPEED GOVERNOR; AVR

Communication extension features

▷ **IG-IB** (Ethernet/Internet communication support; multiple gen-set control via Internet; active e-mails on gen-set failure; Internet dial-up / callback function)

▷ **I-LB/I-LB+** (direct, modem or USB (I-LB+ version only)connection; control of multiple gen-sets; RS485 / ModBus support for direct connection; Analog/GSM/ISDN/CDMA modem support; modem callback function)

▷ **I-CR** (CAN Repeater module; allows an extension of the standard CAN bus length)

▷ **InteliMonitor** – free PC SCADA software for supervision of single or multiple controllers (IG/IS-NT, IG, IS, ID); configurable site structure; easy site overview, common history log; direct / modem / Internet connection

▷ **GenConfig** – free configuration tool for IG/IS-NT controllers; allows full configuration of an NT controller and it's peripherals

Extension features

▷ up to 10x **IS-AIN8** (8 analogue configurable inputs; 2 or 3 wire resistive sensors; voltage, current sensors; thermocouples)

▷ up to 6x **IS-BIN16/8** (16 binary inputs, 8 binary outputs; galvanic separated I/O)

▷ up to 4x **I-AOUT8** (8 analogue configurable outputs)

▷ up to 4x **IGS-PTM** (4 analogue inputs, 1 analogue outputs; 8 binary inputs, 8 binary outputs)

▷ up to 4x **IGL-RA15** (15 green / amber / red LED indicators)

▷ **I-CB** interface to electronic engine control units not compatible with protocol J1939 (e.g. MDEC/MTU, CCM/CAT)

▷ **IG-Display**; graphical remote display; distance from the controller up to 1 km; (LT) (GC) (Marine) modifications available

Upgrade kit

IGS-NT-LSM+PMS dongle:
Enables multiple isolated parallel or multiple parallel with mains operation (with CAN bus)

▷ Digital Load Sharing
▷ Digital VAr Sharing
▷ Optimizing number of running engines: Power management; kW, kVA or % load based

HW modification codes

Order code IG-NT (LT) (GC) (Marine) or IG-NTC (LT) (GC) (Marine)

LT = Low Temperature; display equipped with heating foil for operation down to –30°C

GC = Graphical Characters; one additional font (12x12, e.g. Chinese) can be used on the display

Marine = Type approved version for Marine

NEW TECHNOLOGY RANGE OF CONTROLLERS

BASIC TYPE TABLE	BINARY INPUTS	BINARY OUTPUTS	ANALOG INPUTS	ANALOG OUTPUTS	COMMUNICATION PORTS	AC MEASUREMENT RANGES (GEN., MAINS/BUS)	REMOTE DISPLAYS	INTEGRATED PLC
IG-EE	6	6	—	—	1x RS232/ RS485	277 V, 0-5 A	1x IG-Display	standard
IG-EEC	6	6	—	—	2x RS232/ RS485, USB	120 / 277 V, 0-1 / 0-5 A	1x IG-Display	standard
IG-NT	12	12	3	—	1x RS232/ RS485	277 V, 0-5 A	1x IG-Display	standard
IG-NTC	12	12	3	—	2x RS232/ RS485, USB	120 / 277 V, 0-1 / 0-5 A	1x IG-Display	standard
IS-NT-BB	16	16	4	1	2x RS232/ RS485, USB	120 / 277 V, 0-1 / 0-5 A	up to 3x IS-Display	extended
IM-NT	6	6	—	—	1x RS232/ RS485	120 / 277, 0-1 / 0-5 A	1x IG-Display	extended

InteliGen® is a comprehensive controller for both single and multiple gen-sets operating in standby or parallel modes.

InteliSys® is an expandable controller for both single and multiple gen-sets operating in standby or parallel modes, especially in CHP and other complex applications.

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

www.comap.cz