

# InteliMains<sup>NT</sup>

Compact switchgear controller



## Datasheet

### Product description

- Compact switchgear test controller with built-in display
- Built-in control for up to 32 logic groups divided by Bus Tie Breakers
- High level control for complex systems

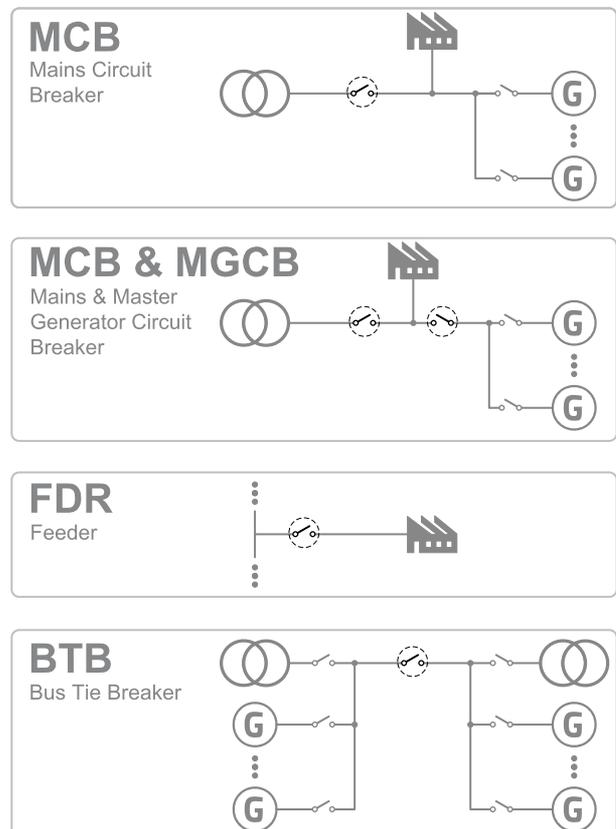
### Key features

- Built-in breaker control
- Genset group synchronization, Loadsharring and VARsharring via CAN2
- Customizable load control in parallel to mains
- Highly configurable
  - Timers, internal PLC, Force value and more
- Compatible with ComAp's InteliVision displays
- Monitoring and configuration with ComAp's PC tools
- Extended communications with InternetBridge-NT
- Extensive built-in protection functions
  - Undervoltage, overvoltage
  - Underfrequency, overfrequency and more
- Full Modbus slave support (RS232)
- Extendable with ComAp's extension modules



Order code: **IM-NT GC**

### Application overview



## Technical data

### Power supply

Power supply range	8-36 VDC
Power consumption	0.4A / 8VDC 0.15A / 24VDC 0.1A / 36VDC
RTC battery	10 years (replacable by official service)
Fusing	2A (without BOUT consumption)

### Operating conditions

Operating temperature	-30°C to +70°C
Storage temperature	-40°C to +80°C
Operating humidity	95% w/o condensation
Vibration	5-25Hz, ±1.6mm 25-100Hz, a=4g
Shocks	a=200m/s <sup>2</sup>

### Voltage measurement

Measurement inputs	3ph-n Mains voltage 3ph-n Bus voltage
Measurement range	110V/277V
Max allowed voltage	125%
Accuracy	1% of 110V/277V
Frequency range	40-70Hz (at accy 0.1Hz)
Input impedance	0.6MΩ ph-ph 0.3MΩ ph-n

### Current measurement

Measurement inputs	3ph Mains current 1ph Bus current
Measurement range	1A/5A
Max allowed current	1000%/200%
Accuracy	2% of 1A/5A
Input impedance	<0.1Ω

### Binary inputs

Number	6 non-isolated
Input resistance	4.7kΩ
Close/Open indication	0-2VDC close contact >4 VDC open contact

### Binary outputs

Number	6 non-isolated
Max current	0.5A (2A per group)
Switching to	negative/positive supply terminal

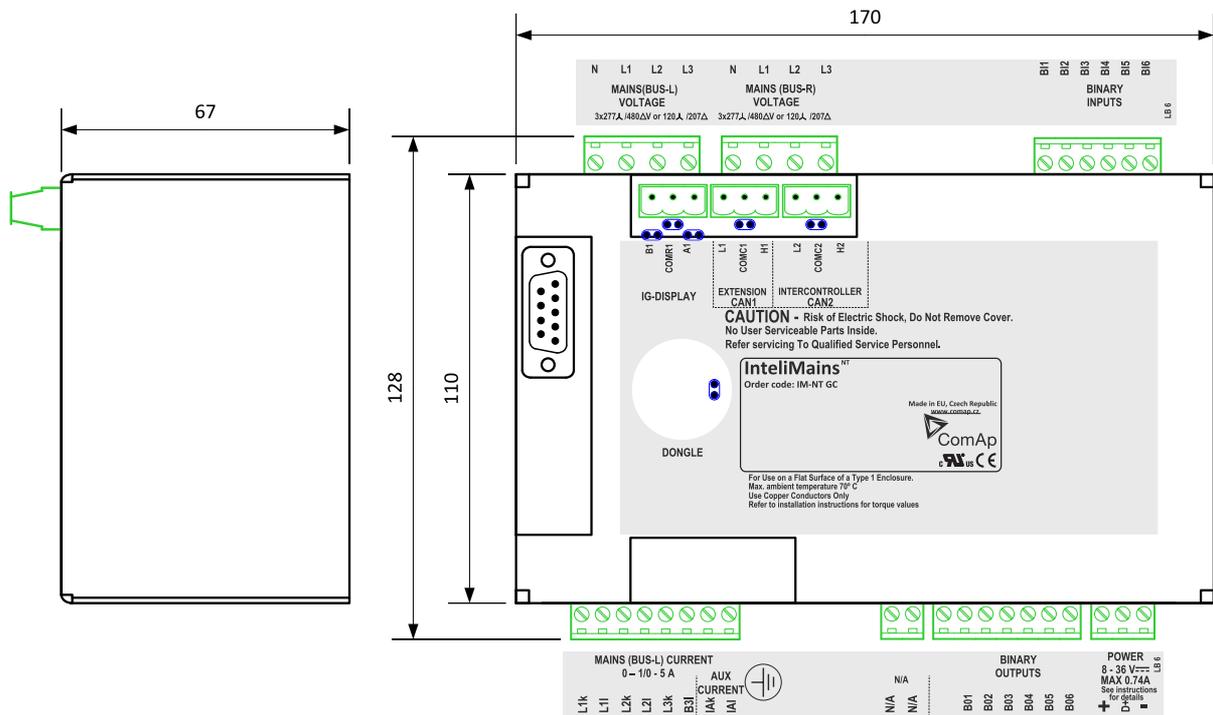
### Communications

RS232	Direct/Modbus
Display port	non-isolated RS485, direct/modbus/terminal connection
CAN1	External modules 250kbps, max 200m Isolated
CAN2	Intercontroller and comm extensions 250/50kbps, max 200/1000m Isolated

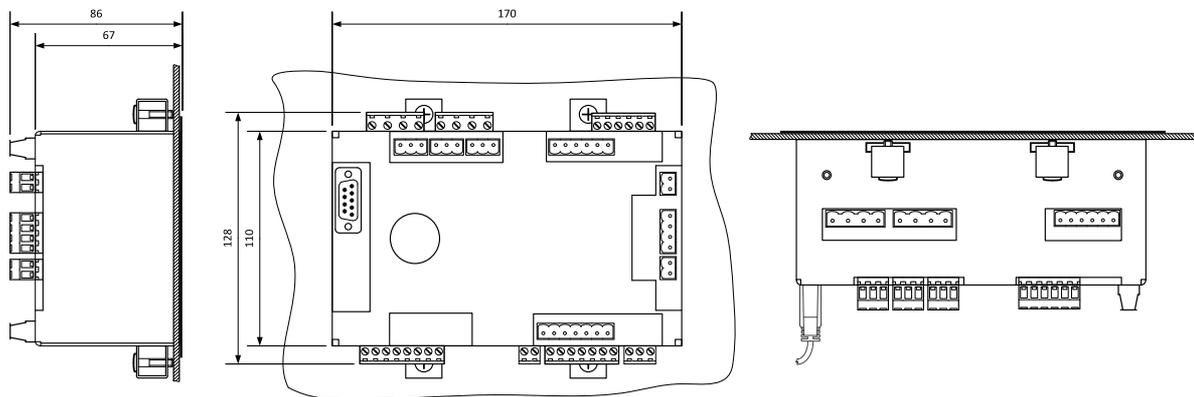
### Display

Type	Built-in monochromatic
Resolution	128x64
Front cover	IP65
Others	Control buttons, Display buttons, Breaker and voltage stage LEDs

## Dimensions, terminals and mounting



## Panel door mounting



**Note:** IntelliMains<sup>NT</sup> can be mounted into panel doors as a standalone unit using provided metal holders. The cut-out for the unit should be 1mm wider than the unit on each side (i.e. cut-out dimensions 172x112mm).

## Available extension modules

Product	Description	Order code
Inteli IO8/8	8 Binary inputs and 8 Binary outputs packed in a small unit (HW switchable to IO16/0)	<a href="#">I-IO8/8</a>
Inteli IO16/0	16 Binary inputs packed in a small unit (HW switchable to IO8/8)	<a href="#">I-IO8/8</a>
Inteli AIN8	8 Analog inputs and 1 pulse/frequency input in a small unit	<a href="#">I-AIN8</a>
InteliAIN8TC	8 Thermocouple Analog inputs in a small unit	<a href="#">I-AIN8TC</a>
IS-AIN8	8 Analog inputs packed in a rugged metal unit	<a href="#">IS-AIN8</a>
IGS-PTM	8 Binary inputs, 8 Binary outputs, 4 Analog inputs and 1 Analog output in a unit	<a href="#">IGS-PTM</a>
IGL-RA15	15 Binary LED output (3 colors) packed in a rugged metal unit	<a href="#">IGL-RA15</a>
I-AOUT8	8 Analog outputs packed in a rugged metal unit	<a href="#">I-AOUT8</a>
InternetBridge-NT	Multiple Internet connections (PC and Modbus) to all controllers on CAN2 or RS485	<a href="#">IB-NT</a>
I-LB+	Direct connection (PC) to all controllers on CAN2 or RS485	<a href="#">I-LB+</a>

## Related products

Product	Description	Order code
InteliVision 5	Color 5.6" display for monitoring and control	<a href="#">INTELIVISION 5</a>
InteliVision 5 RD	Color 5.6" display for monitoring and control (RS485 isolated and backlit buttons)	<a href="#">INTELIVISION 5 RD</a>
InteliVision 8	Color 8" display for advanced monitoring, control & trending, USB capable	<a href="#">INTELIVISION 8</a>

**Note:** You can find all related manuals and materials for InteliMains<sup>NT</sup> at <http://www.comap.cz/products/detail/intelimains-nt>

## Functions and protections

The described product fully supports the following functions and protections as defined by ANSI (American National Standards Institute):

Description	ANSI code	Description	ANSI code
Synchronism check	25	Overcurrent (IDMT)	51
Undervoltage	27	Power factor	55
Overload	32	Overvoltage	59
Load shedding	32P	Vector shift	78
Undercurrent	37	AC reclosing	79
Current unbalance	46	Overfrequency	81H
Voltage asymmetry and phase sequence	47	Underfrequency	81L
Temperature monitoring	49T	ROCOF	81R
Overcurrent	50		

## Certificates and standards

<ul style="list-style-type: none"> <li>EN 60068-2-6 ed.2:2008</li> <li>EN 60068-2-27 ed.2:2010</li> <li>EN 60068-2-30, May 2000</li> <li>EN 60068-2-64</li> <li>EN 61010-1:2003</li> </ul>	
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