



# Type Approval Certificate

[ Control, Monitoring and Protection System ]

**Initial Approval** 16 August 2022

**Manufacturer** ComAp, a.s.  
U Uranie 1612/14a, 170 00 Prague 7, Czech Republic

**Product Description** Type : IntelliGen-NT, IntelliSys-NT and IntelliMains-NT

" See Appendix 1 "

**Approval Condition** " See Appendix 1 "

**THIS IS TO CERTIFY** that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt. 6, Ch. 2, Art. 301 of the Rules for Classification, Steel Ships

This Certificate is valid until 15 August 2027

Issued at Busan, Korea on 16 August 2022



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME22023163126) and certificate No.(HMB28160-AC002).



**KOREAN REGISTER**

*General Manager of  
Marine & Ocean Equipment Team*

**Note :** 1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.  
2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.  
3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.  
4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

## Product Description and/or Approval Condition

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### A. Product Description

#### 1. Product Specification

- 1) Product Description (Type : IntelliGen-NT, IntelliSys-NT and IntelliMains-NT)  
NT family system and components can be used as Control, Monitoring and Protection for single and multiple generator applications.  
A modular construction is complemented by displays, extension modules, communication modules and other devices.

#### 2) System comprising

Model	Description
IS-NTC-BB	IntelliSys-NTC BaseBox, Generator/generator-set controller
IG-NT (C) - (LT) - (GC)	IntelliGen-NT, Generator/generator-set controller with display
IG-NT (C) - BB	IntelliGen-NTC BaseBox, Generator/generator-set controller
IG1000 Marine	IntelliGen 1000, Generator/generator-set controller
IM1010 Marine	IntelliMains 1010, Mains supervision/Utility breaker controller
IM-NT (C) (GC) (LT)	IntelliMains-NT, Mains/bus breaker control - controller with display
IM-NT (C) - BB	IntelliMains-NT BaseBox, Mains/bus breaker control - controller
IntelliVision5 CAN Backlit	Colour display, 5,7" TFT, 320x240 pixels, soft key buttons
IntelliVision8 Marine	Colour display, 8" TFT, 800x600 pixels, soft key buttons
IntelliVision12 Touch OEM	Color display, 12,1" LCD, 1280x800 pixels, multi-touch, RS485, CAN, Ethernet and USB
IntelliVision13 Touch	Color display, 13,3" LCD, 1920x1080 pixels, multi-touch, Ethernet and USB
I-AOUT8	Extension module, 8 analogue outputs
Inteli AIN8	Extension module, 8 analogue inputs
Inteli AIN8TC	Extension module, 8 analogue inputs for thermocouple sensors
Inteli AI09/1	I/O extension module, 4 analogue inputs, 4 analog inputs for thermocouple sensors, 1 analog input
IS-BIN16/8	Extension module, 16 binary inputs, 8 binary outputs
IGS-PTM	Extension module, analogue/binary IO module, configurable
IGL-RA15	Remote annunciator
I-CB	ECU communication module
I-CR	CAN repeater communication module
I-CR-R	CAN redundancy communication module
I-LB+	Communication bridge module
I-RB16	Relay board, 16 outputs
I-RB8	Relay board, 8 outputs
I-RB8-231	Relay board, 8 outputs
I-LBA	Low battery adaptor
IG-MTU/Marine	Mains transformer unit
IG-AVRi/Marine	AVR Interface
IG-AVRi-TRANS/Marine	Power supply transformer
InteliFieldbusGateway	Communication module

#### 3) Software Version

- IGS-NT-GeCon Marine : 3. x. x
- IGS-NT standard : 4. x. x
- IG1000, IM1010 : 2. x. x

#### 4) Manufacturing place

- TOROLA electronic, spol. s r.o.  
Nadrazni 906, 744 01 Frenstat pod Radhostem, Czech Republic
- NVision Czech Republic a.s.  
Klasterni 1, 259 01 Votice, Czech Republic
- VESLA s.r.o.  
Bustehradská 223, 272 03 Kladno, Czech Republic
- Mikroelektronika spol. s r.o.  
Draby 849, 566 01 Vysoke Myto, Czech Republic

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### 2. Approved Drawings and Documents

#### 1) Data Sheets

- IntelliGen-NT BaseBox Datasheet (2020. 06. 24), IntelliGen-NTC BaseBox Datasheet (2020. 06. 24), IntelliGen-NTC Datasheet (2020. 03. 17), IntelliGen 1000 Datasheet (2021. 09. 15), IntelliMains 1010 Datasheet (2021. 09. 15), IntelliMains-NTC BaseBox Datasheet (2019. 09. 26), IntelliMains-NT Datasheet (2019. 09. 26), IntelliSys-NTC BaseBox Datasheet (2019. 09. 19), IntelliVision 5 CAN Backlit Datasheet (2020. 07. 01), IntelliVision 8 Marine Datasheet (2021. 11. 09), IntelliVision 12Touch OEM Datasheet (2019. 01. 15), IntelliVision 13Touch Datasheet (2020. 03. 31), I-CR Datasheet (2018. 07. 08), Reference Guide for Accessory modules Rev. 11 (2019. 12. 16), Global Guide for IGL-RA15 Rev. 2 (2019. 07. 10), Reference Guide for I-CB Rev. 1 (2015. 06), IntelliFieldbus Gateway Datasheet (2020. 09. 17)

### 3. Test Reports, etc.

#### 1) Environmental/EMC Test Reports

- 603501-01/01 (2006. 11. 30), 603501-01/02 (2006. 11. 30), 004726-01/01 (2011. 04. 19), 603501-01/03 (2006. 11. 30), 603501-01/04 (2006. 11. 30), 305245-01/01 (2013. 11. 19), 210677-01/02 (2021. 05. 03), 021208-01/02 (2020. 06. 29), 210979-01/01 (2021. 07. 28), 211062-01/01 (2021. 05. 24), 210942-01/03 (2021. 04. 27), 210942-01/04 (2021. 04. 27), 505059-01/02 (2016. 02. 23), 704180-01/01 (2017. 10. 31), 405106-01/01 (2014. 11. 19), P-VZLUTEST-205/20 (2020. 08. 07), 021497-01/01 (2020. 06. 26), 703780-01/01 (2017. 11. 20), 210942-01/02 (2021. 04. 27), 9/602/2021-3 (2021. 10. 28), 9/613/2021-2 (2021. 10. 28), 214000148 (2021. 08. 17)

#### 2) FMEA

- IGS-NT FMEA Ver. 1.0 (2016. 03. 22)

#### 3) Software

- Global Guide for IntelliGen 1000
- New Features List for IGS-NT-GeCon-MARINE Rev. 5
- New Features List for IntelliGen-NT, IntelliSys NT Rev. 19

#### 4) Manual

- IGS-NT Installation Guide (2018. 08)

## B. Approval Condition

### 1. Application & Limitation

- 1) This approval is granted on the basis of the test reports and the approved documentation.
- 2) Degree of protection shall be complied with Rule Pt. 6 Ch. 1 Sec. 2 201.2. (5).
- 3) The manufacturer should inform this Society of all kinds of revisions of the equipment including software. If the changes are recognized to affect functionality of the approved equipment, type test to confirm the reliability of the revised equipment may be performed in the presence of our surveyor.

### 2. Individual Product Cert. and Drawing Approval Requirement

- 1) Individual Product Certification is required.
- 2) In case where this system is installed on board, the system drawings for individual vessel are to be approved by this Society.

### 3. Marking

- 1) The product or packing is to be marked with the manufacturer's name and type designation on a suitable position.

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### 4. Others

1) Test condition (IACS UR E10 Rev.7 basis)

Test	Condition	Remark
EMC	All locations excluding the bridge and deck zone All locations including the bridge and deck zone	1) 2)
Temperature	-25 ~ +70°C	-
Vibration	Acceleration $\pm 4.0g$	-
Degree of protection	IP65 front, IP20 rear IP65 when sealed to console, IP22 standalone IP65 for IntelliVision 5 CAN Backlit	3) 4)

#### \* Remark

- 1) For Other components
- 2) For IntelliGen 1000 Marine
- 3) For IGL-RA15, IntelliVision 8 Marine, IntelliVision 12 Touch OEM and controllers with display
- 4) For IntelliVision 13 Touch

&lt; End of Certificate &gt;

KOREAN REGISTER