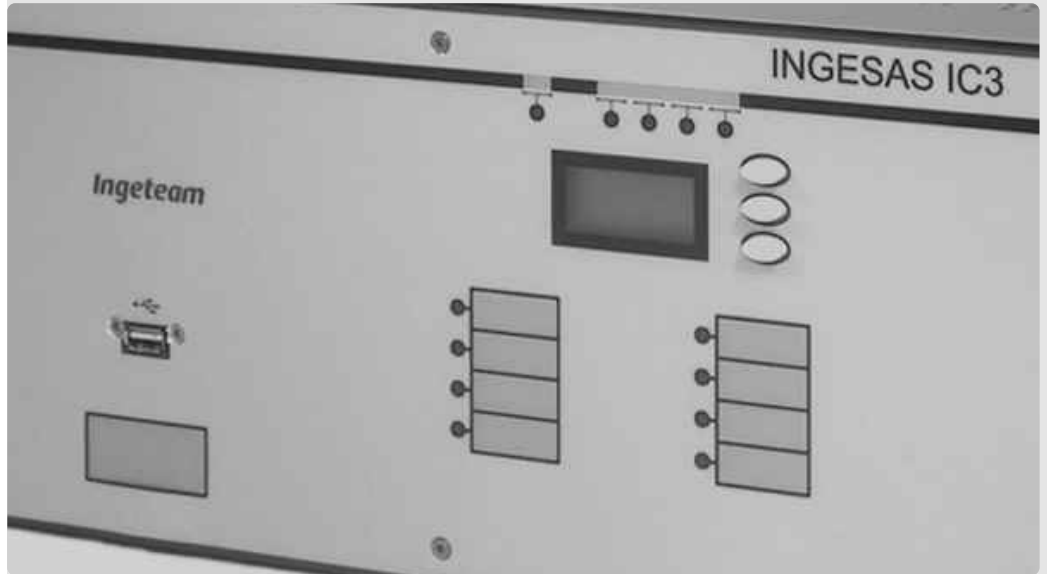


INGESAS

IC3

Substation
Control Unit



INGESAS™**IC3** consists of a high-performing modular system designed for substation environments, providing high reliability and availability thanks to the various redundancy mechanisms that it offers. Its main functions are as follows:

- Collects all the substation information (alarms, statuses, measurements, counters etc.) and sends it to different control centres, following telecontrol standards.
- Receives commands and set points from different telecontrol centres and sends them to the corresponding IEDs.
- Performs general logic operations at substation level, receiving the necessary information from the IEDs at position level. These logic operations are developed using IEC61131-3 compliant tools.
- Acts as a synchronisation pattern for all the devices connected to the communications network via the SNTP protocol.

Applications:

Photovoltaic, wind, electrical distribution and transmission, energy sector telecontrol installations, etc.

Grid Automation

Communication protocols

INGESAS™**IC3** is able to manage the following communication protocols:

- IEC61850 and derivatives. Client and Server.
- IEC60870-5-101 / 104 Master and Slave.
- DNP 3.0 Master and Slave.
- MODBUS ASCII - RTU / TCP Master and Slave.
- Other communication protocols can be integrated using the OPC Client / Server.

N.B.: Check availability for protocol combinations.

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Advantages

- Can be configured with tools that comply with the IEC 61850 standard.
- One single device makes it possible to centralise all of the information for different main telecontrol centres, whilst also managing different protocols.
- The information sent to each main telecontrol centre can be configured by the user, only sending what is necessary to each one.
- Logic programming is carried out using IEC61131-3 compliant tools.
- Allows different types of redundancy, improving the system's overall availability.
- Easily expandable database, which lets you add new IEDs to the system simply and securely.
- Reduces costs in terms of engineering, commissioning and maintenance by using powerful configuration and simulation tools.
- Different mechanisms for uploading information to the equipment: front USB port, FTP, etc.

Options

- PRP/HSR redundant network connection module.
- Redundant power supply
- Digital I/Os modules

