

ENSTO

Ensto E-RTU 2020 New control cabinet



Ensto E-RTU 2020, smart equipment for MV/LV distribution sub-stations, as well as MV overhead lines. The Ensto E-RTU 2020 allows MV cells up to 8 channels or single channel overhead switches to be controlled, current to be measured and faults to be detected (power surges and earth faults) for networks with impedance-earthed neutral point treatment or a neutral earthing compensator. It can be operated locally or remotely via a SCADA system using the types of communication protocols set out in this document, by means of a cyber-secure VPN tunnel. This new product has been developed to meet the new requirements of smart grids.

Ensto: a control cabinet specialist for more than 30 years

Our first control cabinet was developed in 1987 for the French market and for French-speaking African countries. Over the years, this cabinet evolved in response to demand from other export markets and for both underground and overhead networks.

This new Ensto E-RTU 2020 cabinet satisfies the requirements of the majority of international standards, it offers greater flexibility and operating safety and is more efficient in terms of implementation.

Customer benefits

- Compliance with the key standards IEC 60870-5-101, IEC 60870-5-104, DNP3, DNP3 IP, communication redundancy
- Communication via GSM / GPRS modules / 3G / 4G / digital radio / all IP communication devices with an Ethernet connection

- Simultaneous cabinet configuration and communication thanks to three independent Ethernet ports
- Protection against cyber-attacks with the aid of secure communication, secure tunnels (VPN, OpenVPN & IPSec) and cryptographic elements on the PCB
- Reduced duration of power cuts (SAIDI)
- Easy to upgrade: addition of extra functions
- Flexible updates in a secure environment
- Possibility of upgrading a previous generation ITI2012 cabinet (underground or overhead) by simply replacing the previous generation CPU board with the CPU2020

Better life.
With electricity.

Ensto designs and markets smart electrical solutions to improve the safety, functionality, reliability and effectiveness of Smart Grids, buildings and transport.

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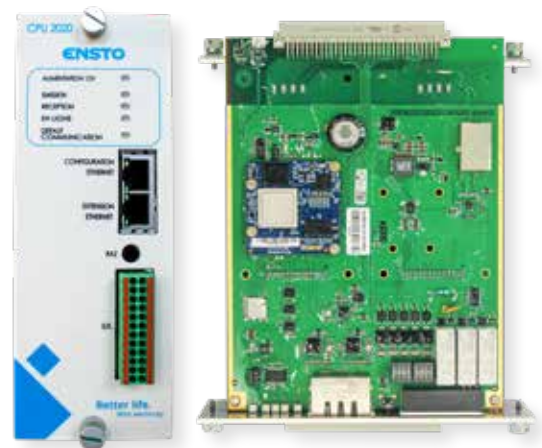
Ensto E-RTU 2020

New control cabinet

Advanced functions of the Ensto E-RTU 2020 cabinet

E-RTU 2020 cabinet	
Control of MV cells	Control of the MV switching device <ul style="list-style-type: none"> locally via the user interface or via the web interface (ensuring personal safety) remotely (see communication media)
Current and voltage measurements	Electrical switching operations locally or remotely
Fault detection	Detection of a fault current with impedance-earthed neutral point treatment or a neutral earthing compensator
I/O	4 existing I/O + additional I/O : <ul style="list-style-type: none"> 1 input for temperature measurement (°C): externally with a PT 100 sensor 1 x 4/20 mA or 0-10 V analogue input for various measurements including: water level in a substation, SF6 gas pressure, etc.) 5 digital inputs 3 relay outputs
Remote communication	IEC 60870-5-101, IEC 60870-5-104 protocols, DNP3, DNP3 IP, ModBus with serial IP Communication redundancy (multiprotocol)
Communication media	Control cabinet linked to SCADA via digital radio, GSM, 2G, 3G, 4G, 3 IP ports
Cybersecurity	Secure communication + Secure tunnels (VPN OpenVPN & IPSec) + cryptographic elements on the PCB
Event logging	Increased storage capacity: 10,000 events stored
Configuration and updates	Secure web interface (HTTPS) Protocol modification by configuration Local or remote firmware update

Ensto ref.	Descriptions
NX2009613	CPU 2020 board
NX2009706	Ensto E-RTU 2020 overhead cabinet
NX2009884	Ensto E-RTU 2020 underground cabinet



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