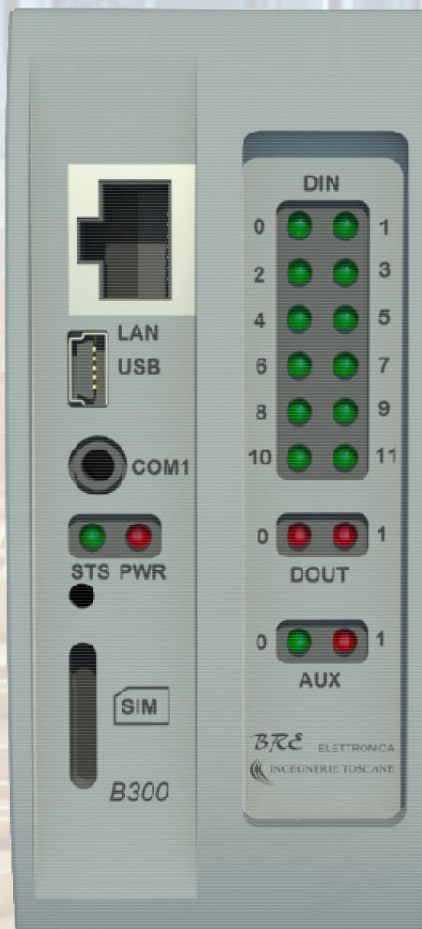# RTU B300

CPU MODULE

The B300 is a multiprotocol advanced RTU (Remote Terminal Unit) with local processing capability, compact modular construction, provided for installation on DIN rail.

The B300 RTU is a modular device composed of a CPU and of several Input/Output modules.

The CPU module is the main unit of the B300 RTU. In every configuration there must always be a CPU module.

The CPU module is equipped with some Input/Output lines and can be used in a standalone configuration, without additional modules, when the on board I/O lines are sufficient for the specific application.

The CPU module is equipped with an Ethernet port, RS 232 and RS 485 serial ports, USB port, Bluetooth functionality, mass storage on SD card and GSM / GPRS communication module.

The CPU module implements various protocols, including IEC 60870-5-101 and IEC 60870-5-104 and is able to transfer data on different communication vectors. The CPU module is equipped with PLC capability and can perform local automation. To implement the automations is available a powerful integrated development environment, which supports all five programming languages required by the IEC 61131-3 standard and in addition, allows the integration of library blocks written in C / C ++ language, standard de facto in the programming of embedded systems.

Mechanical specifications	
Case	PC/ABS blend self-extinguishing gray enclosure
Dimensions	119 x101 x 45 mm
Fixing	On DIN rail (EN 60715)
Protection grade	IP42
Operating temperature	-10 / 45 °C
Storage temperature	-20 / 60 °C

Electrical specifications	
Power supply	7,2 - 30 Vcc
Medium current absorption	100 mA at 12V
Current absorption in transmission	200 mA at 12V
Serial port RS232 COM 1	Software programmable 2400-115.200 bps, 1 or 2 stop bit, Odd/Even/None Parity
Serial port RS232 COM 2	Software programmable 2400-115.200 bps, 1 or 2 stop bit, Odd/Even/None Parity
Ethernet port	On board
GSM/GPRS module	Triband with external antenna connector
Bluetooth module	On board
USB port	Device type with mini USB connector
RS-485 port	Master/Slave with MODBUS-RTU communication protocol
Digital Inputs	N. 12 opto-isolated channels Input voltage range 9-24 Vcc/Vca
Digital Outputs	N. 2 on 2A 125Vac relays, coil absorption 200mW
Analog Inputs	N. 4 analog inputs 12 bit resolution, input range 0-5V, 0 - 20 mA, 4-20 mA, software programmable
Memory Card	SD Card 2 GB
Communication protocols	IEC 60870-5-101 IEC 60870-5-104 MODBUS TCP MODBUS RTU
PLC functionality	PLC functionality to implement industrial process automation. PC integrated development environment. Programmable with all the five programming languages required by the IEC 61131-3 standard (Instruction List, Structured Text, Ladder Diagram, Function Block Diagram, Sequential Function Chart). Equipped with debugger and simulator