RTUQM-G
GATEWAY OR PROTOCOL CONVERTER

Description
The RTUQM system can be used as a gateway allowing the data interchange between different communication protocols.

Characteristics
• The system allows great configuration flexibility and can be used in different applications.
• The flexibility is based on independent hardware/software modules that permit to increase and decrease capacities in an simple way.
• The communications modules are executed concurrently.
• The modularity protects the initial investment when is wanted to add new performances years later.
It has a wide capacity of configuration and supervision as in local as in remote way.
• Wide configuration and supervsion capacities are provided locally or remote.
• Several slaves with the same or different protocols could be connected simultaneously.
• Several masters with the same or different protocols could be connected simultaneously.
• Specially designed to work in sub-stations.
• Points: 65536
• It has no mobile parts such as ventialtors or rigid disks.
• The operating system and the application programs are installed in flash memory.
• Power supply: 24 Vdc
• The sub-stations available voltages could be used adding the power supply model FCRTU24V5A.

Supported protocols

Module	Type	Model	Port
Modbus	Slave	MCMODRQ	Serial and TCP/IP
Modbus	Master	MAMODRQ	Serial and TCP/IP
IEC60870-5-101	Slave	MC101RQ	Serial
IEC60870-5-101	Master	MA101RQ	Serial
IEC60870-5-104	Slave	MC101RQ	TCP/IP
IEC60870-5-104	Master	MA101RQ	TCP/IP
DNP3	Slave	MCDNPRQ	Serial and TCP/IP
DNP3	Master	MADNPRQ	Serial and TCP/IP
Relays GE (model SMOR-B or DTP)	Master	MARPROTRQ	Serial
Relays ABB (model DPU)	Master	MARPROTRQ	Serial

Other protocols can be added easily.
Also it is possible, the data acquisition or the local command through the input/output hardware installation.
The system has a supervision/ autodiagnostic module running continuously and a hardware watchdog.
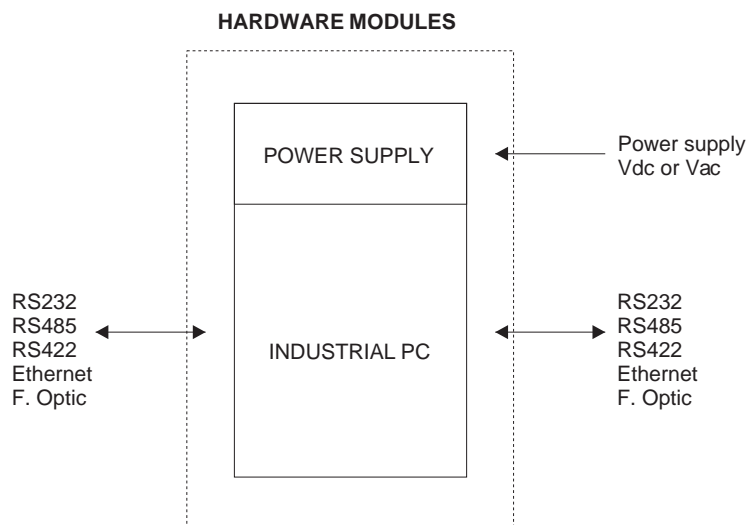
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PROTOCOL OR GATEWAY CONVERTER

The configuration and the supervision is done from an administration program in Windows operative system which can communicate with the gateway through the serial port or TCP/IP network, allowing the remote supervision of the devices.

Communications

Type	Quantity	Speed
Serial RS232	3 or 11	Up to 115 bps
Serial RS485	1	Up to 115 bps
Ethernet	1 or 2	10/100 Mbps

Accessories: RS232-RS485 converters and fiber optic Ethernet.

HARDWARE MODULES

POWER SUPPLY

INDUSTRIAL PC

Power supply
Vdc or Vac

RS232
RS485
RS422
Ethernet
F. Optic

RS232
RS485
RS422
Ethernet
F. Optic

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SOFTWARE MODULES

RTU or Scada ←→ Slave communication module ←→ Data Base MDBRQ ←→ Master communication module → IED, RTU

Data Base MDBRQ ↕ Console supervision and maintenance MCONRQ

Serial or TCP/IP

Laptop Windows 2000 PRCMRQ