

## Telem-RTA-A Combined RTU, Data Concentrator and Annunciator



The combined RTU, Data Concentrator and Annunciator Telem-RTA is a master remote terminal unit for coordinated substation control. Telem-RTA provides control operations, data collection, protocol cross-referencing and data exchange with remote control center. At the same time it announces events on the front panel. If required the units can be cascaded to obtain the desired capacity of the system.

### Features

- Analog inputs
- Analog outputs
- Digital inputs
- Double command output for control
- Leased line or dial-up communication
- Concentrated data acquisition and control using different communication protocols
- Protocol cross-referencing
- Logical operations using digital and analogue measurement objects
- Local event reporting and acknowledgement
- User friendly configuration tool
- Configurable remotely over data acquisition line

### Interfaces

Number of differential analog inputs	6
Analog inputs range	+/- 5 mA; (+/- 20 mA, 4-20 mA on request)
Number of analog outputs	2 (on request)
Number of isolated digital inputs	18 (16 dry contacts with internal supply , 2 with external supply)
Number of double command outputs	5 (open collector, max 40 V, 100 mA)
Number of event indicators LED	16
Number of acknowledgment buttons	16 (on request)
Number of RS-232 communication ports	4 x RS-232 (1 x full modem signal)
Ethernet port	1 x 10/100 Base-T

### Data communication protocols

To higher level systems	IEC 60870-5-101 balanced or unbalanced, IEC 60870-5-104
To lower level devices	IEC 60870-5-101, IEC 60870-5-103, Modbus, IEC 62056-21 (IEC 1107), Spa-bus

### Data communication parameters

Start bits	1
Stop bits	1 or 2
Data bits	7 or 8
Parity checking	Odd, even or no parity
Communication rates	From 300 to 38400 bit/sec
Handshake	Configurable RTS/CTS handshake

### Mechanical and environmental parameters

Degree of protection	IP 40
Dimensions (W x H x D)	195 x 145 x 120
Mounting	Onto panel or DIN rail
Ambient temperature in operation	-20...+50 °C
Relative humidity	80% non-condensing

### Power supply

Supply voltage	10 to 32 V DC
Supply voltage for dry contact digital inputs	24-48 V DC
Power consumption	< 5 VA