REMOTE GRAPHIC DISPLAY ON RS-485 WITH MODBUS RTU PROTOCOL

DAT 9550

GENERAL DESCRIPTION

The device DAT 9550 is a graphic display designed for panel mounting and communicating with Modbus RTU protocol on RS-485 and RS-232 serial Slave port. Moreover on the device there is a RS-485 Master port by means of which it is possible to communicate with the eventual Modbus Slave devices connected. It can be used as Slave peripheral for the visualization of the data coming from the Intelligent Units of the DAT9000 series or from a PC, PLC or panel operator.

FEATURES

- Graphic display 132x32 pixels
- RS-485/RS-232 Modbus-RTU Slave Interface
- RS-485 Modbus-RTU Master Interface
- Remotely programmable
- Connection by removable screw-terminals (power supply & RS-485) and RJ45 (RS-232)
- Compact enclosure dimensions (DIN 48 x 96 mm)
- Galvanic Isolation on all the ways
- EMC compliance – CE mark
- Suitable for panel mounting in compliance with DIN-43700

Application areas

POWER SUPPLY	
Power supply voltage	10 ÷ 30 Vdc
Current consumption	45 mA typ. @ 24Vdc (standby,max. brightness)
	80 mA max
ISOLATIONS	
Power supply/ RS485	1500 Vac, 50 Hz, 1 min.
TEMPERATURE & HUMIDITY	
Operative temperature	-20°C .. +60°C
Storage temperature	-30°C .. +80°C
Humidity (not condensing)	0 .. 90 %
EMC (for industrial environments)	
DIRECTIVE 2004/108/EC	
Immunity	EN 61000-6-2
Emission	EN 61000-6-4

CONNECTIONS	
RS-232D	RJ-45
RS-485/Supply	Removable screw terminal blocks
HOUSING	
Material	Noryl self-extinguishing plastic (UL94-V0)
Mounting	Panel mounting
Dim. (mm)	W x L x T : 96 x 48 x 74
Weight	about 160 g.

In compliance with IEE 802.3 EIA RS-485 and RS-232	
Baud-rate	up to 38.4 Kbps
Max. distance (1)	1.2 Km @ 38.4 Kbps
Internal termination resistance	120 Ohm (optional)
Display	
Graphic Area	132x32 pixel 13.2 * 48.1 mm

(1) = The maximum distance depends of: number of devices connected, type of cabling, noises, etc...

LOOP POWERED 4 DIGIT LED PROGRAMMABLE DIGITAL INDICATOR

DAT 8050

GENERAL DESCRIPTION

The digital panel indicator DAT 8050 accept on the input a 4 - 20 mA current loop signal.
The input current signal is used to supply the device introducing a 5 Vdc voltage drop-out on the current loop, so is not required any external supply source. The user can program the visualisation of the measure in the range from -1999 up to 9999 points in order to set the values of the physical or electrical parameter transmitted on the current loop in the desired format.
The programming of the visualization is made by the buttons "SET" and "ENTER" located on the front side of the instrument.

FEATURES

- 4÷20 mA loop powered
- Voltage Drop-out < 5V
- High accuracy and linearity
- 0.52" LED display
- Visualization configurable on the front side
- Connections on removable screw terminals
- Compact case size (DIN 48 x 96 mm)
- EMC compliance - CE mark

Application areas

TEMPERATURE & HUMIDITY	
Operative temperature	-20°C .. +60°C
Storage temperature	-40°C .. +85°C
Humidity (not condensing)	0 .. 90 %
EMC (for industrial environments)	
DIRECTIVE 2004/108/EC	
Immunity	EN 61000-6-2
Emission	EN 61000-6-4
HOUSING	
Material	Noryl self-extinguishing plastic (UL94-V0)
Dim. (mm)	W x H x T : 48 x 96 x 74
Weight	about 150 g.

INPUT	
Input signal	4 ÷ 20 mA
Voltage drop-out	< 5 V
Limitation current	< 50 mA

DISPLAY	
Type of visualization	4 digits LED
Digit height	0.52"
Range of visualization (*)	Programmable on the front side, from "-1999" up to "9999", with High: 1(on left side). Low: -1(on left side)
Minimum measurable current	3.8 mA (visualization "Lo" in case of lower measure)
Maximum measurable current	20.2 mA (visualization "Hi" in case of higher measure)

CHARACTERISTICS AND PERFORMANCES	
Reading accuracy	the better than ± 0.05 % of f.s. or ± 1 digit.
Resolution	4 uA
Response time	< 0.5 sec.
Thermal drift	± 0.01 % of f.s. / °C

(*)= default visualization : 4.00 ÷ 20.00