RAY-2 *GPRS/Ethernet Modbus Data Logger* *with digital I/O*

INTERFACES

RS232

RS485

USB

Ethernet

GSM/GPRS

16 x Discrete IN

32 Discrete OUT

FEATURES

➢ Independent data log with real time stamp (Real Time Clock)

➢ Possibility to choose interfaces: RS232, RS485, USB, Ethernet, GSM/GPRS, Discrete IN/OUT

➢ Data from local device reading over USB or RS232/RS485 (using Modbus RTU protocol)

➢ Remote data sending over GSM/GPRS or Ethernet using Modbus TCP/IP protocol

➢ Up to 16 discrete inputs (contact/impulse)

➢ Up to 32 discrete outputs (voltage, current)

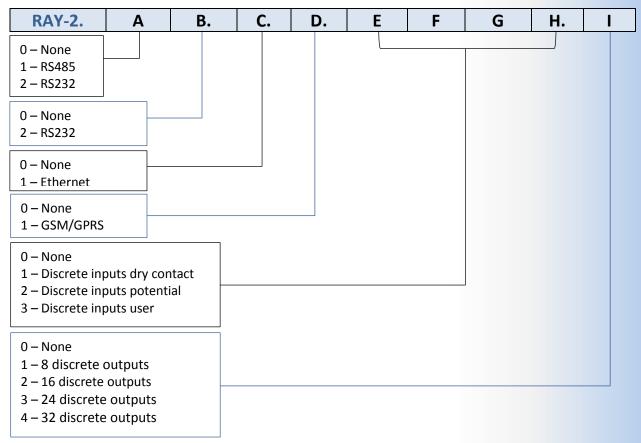➢ Supported protocols: Modbus RTU, Modbus TCP/IP, IEC60870-5-104:2000 and others

RAY-2 data logger is dedicated for measuring and logging different kinds of discrete signals, tracking the status of discrete inputs, count of inputs impulses, control devices (discrete outputs control) formation of discrete output signals, archiving and sending data to local operator over RS232/RS485 or USB and to remote operator over GSM/GPRS or Ethernet.

ORDERING CODE

RAY-2.	A	B.	C.	D.	E	F	G	H.	I

A:
0 – None
1 – RS485
2 – RS232

B:
0 – None
2 – RS232

C:
0 – None
1 – Ethernet

D:
0 – None
1 – GSM/GPRS

E/F/G/H:
0 – None
1 – Discrete inputs dry contact
2 – Discrete inputs potential
3 – Discrete inputs user

I:
0 – None
1 – 8 discrete outputs
2 – 16 discrete outputs
3 – 24 discrete outputs
4 – 32 discrete outputs

Example: **RAY-2.**12.1.0.1000.2 (RS485, RS232, Ethernet, discrete inputs dry contact, 16 Discrete OUT)

TECHNICAL SPECIFICATIONS

Description	RAY-2 data logger
CPU	ARM Cortex M3
Flash	archive storage up to 8 MB, independent data storage without power about 5 years
Interfaces	
RS232 *(2 ports)*	distance up to 15 m, speed up to 19,2 Kbit/s
RS485 *(1 port)*	distance up to 1,2 km, max 32 transivers, speed up to 19,2 Kbits/s
Ethernet	10/100 Mbps, RJ45, distance up to 100 m
USB	type B, ver. 2,0
GSM/GPRS	3 band 900/1800/1900 MHz
Discrete IN	16 dry contact or potential
Discrete OUT	32 control voltage -24V, current -0,1A
Protocols	
Modbus RTU, Modbus TCP/IP, IP, ICMP, UDP, TCP, DHCP, PPP, ARP, SNTP, IEC60870-5-104:2000	
General	
Power supply	9-36V DC
Over-voltage protection	>1000V
Power consumption	<10VA
Interface galvanic isolation	1000V
Physical characteristics	
Dimensions	238x128x50 mm
Weight	800 g
Mounting type	on DIN rail
Protection type	IP20
Climate conditions	
Operating temperature	-25 to +60°C
Storage temperature	-40 to +60°C
Humidity range	5 – 95%, non-condensing
Programing and updating	
Remote	Ethernet (RJ45), GSM/GPRS
Locally	RS232, RS485 or USB
LED indication	
Power	
Discrete signal status for all ports	
Serial ports read/write for each port	
Ethernet status	
GSM/GPRS modem status	
Other features	
Real time clock	+
Warranty period	2 years