

INTERFACES

RS232

RS485

M-Bus

Data/Req

USB


GSM/GPRS


4 Analog IN


16 Discrete IN

8 Discrete OUT

Application


Industrial monitoring 

Commercial monitoring 

Residential monitoring 

Agro field monitoring 

Water/Heat metering 

Electricity metering 

Gas metering 

Sensors monitoring 

FEATURES

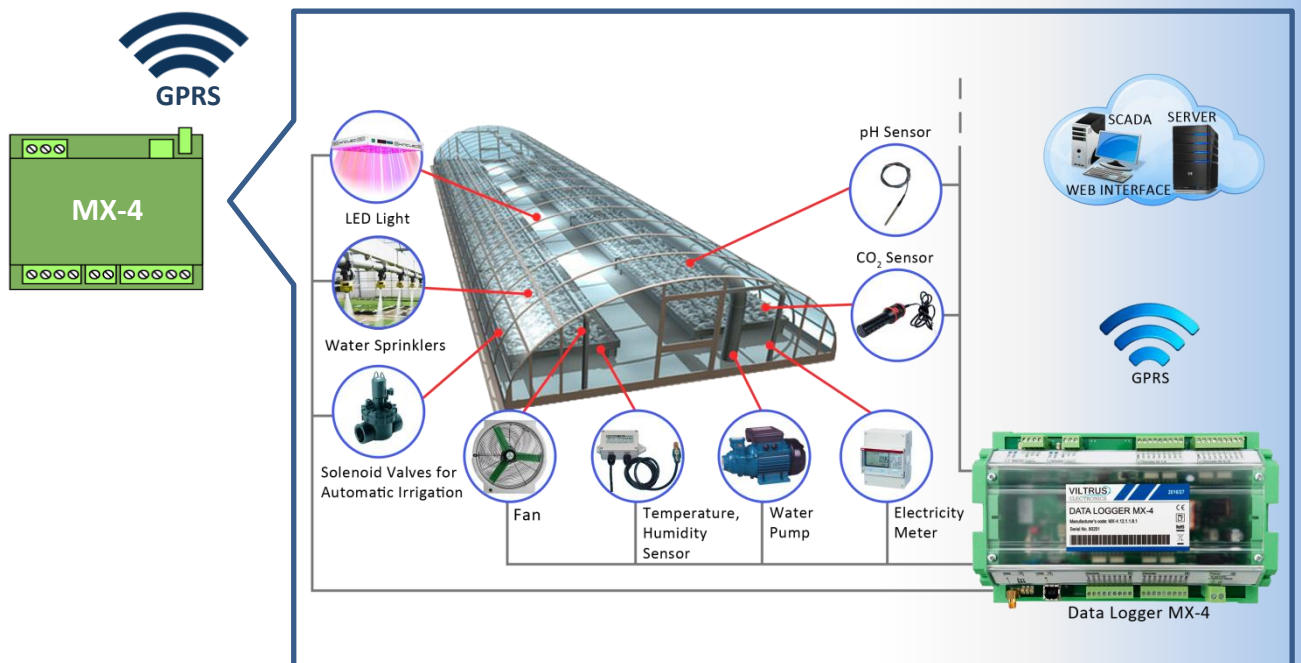
- Reading data from meters (heat, water, gas, electricity...), sensors and controllers
- Independent data log with real time stamp (Real Time Clock)
- Possibility to choose interfaces: M-Bus, RS232, RS485, USB, Data/Req, GSM/GPRS, Analog IN, Discrete IN/OUT
- Analog inputs (current, voltage, resistance, thermoresistance (Pt100, Pt1000, NTC))
- Discrete inputs (alarms or events)
- Control capabilities over digital outputs (remote management)
- Remote communication and updates through GSM/GPRS



MX-4 data logger is dedicated for real time logging and analyzing of data. Using GPRS/GSM logger sends data to remote users / server. MX-4 can also communicate with other controllers and sensors. Device has wide range of optional interfaces and protocols (Modbus RTU, Modbus TCP/IP, IEC60870-5-104: 2000, etc.) and can read any kind of meters, controllers and sensors equipped with standard protocols.

MX-4 data logger/controller can also measure and store different kinds of analog inputs (current, voltage, resistance or PT100 temperature sensors), discrete inputs (alarms or events) and also it performs control capabilities over discrete outputs (remote management).

MX-4 data logger is ideal for smart metering, data acquisition, remote devices control, measure and store different kinds of analog and discrete I/O applications, process monitoring.



TECHNICAL SPECIFICATIONS

Description	MX-4 data logger
CPU	ARM7
Flash	archive storage up to 8 MB, independent data storage without power about 5 years
Interfaces	
RS232 (3 ports)	distance up to 15 m, speed up to 19,2 Kbit/s
RS485 (3ports)	distance up to 1,2 km, max 32 transivers, speed up to 19,2 Kbits/s
M-Bus (1 port)	up to 8 M-Bus devices
Data/Req (1 port)	(KAMSTRUP) data transfer interface
GSM/GPRS	3 band 900/1800/1900 MHz
USB	type B, ver. 2,0
Discrete IN	16 sink contact
Discrete OUT	8 open collector, >50VDC and >500mA
Analog IN	4 resistance, voltage or current, reading 10 times per second
Protocols	
Modbus RTU, Modbus TCP/IP, IP, ICMP, UDP, TCP, DHCP, PPP, ARP, SNTP, IEC60870-5-104:2000, DynDNS, FTP server, FTP client, DNS client	
General	
Power supply	9-36 VDC
Over-voltage protection	>1000V
Capacity	300mA max
Certifications	
Electromagnetic compatibility	EN 55022:2010
	EN 55024:2010
	EN 61000-4-2:2009
	EN 61000-4-3:2006
	EN 61000-4-3:2006/A1:2008
	EN 61000-4-3:2006/A2:2010
	EN 61000-4-4:2004
	EN61000-4-4:2004/A1:2010
Safety	EN 60950-1:2006+A1:2010+A11:2009+A12:2011
Physical characteristics	
Dimensions	197x128x50 mm
Weight	450 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	GSM/GPRS
Locally	USB, RS232, RS485
LED indication	
Power	
Status of discrete input, for each port	
Serial ports read/write for each port	
GSM/GPRS modem status	
Other features	
Real time clock	+
M-Bus auto setup	+
Warranty period	2 years

ORDERING CODE

MX-4.	A	B	C.	D.	E	F	G	H.	I.	J.	K
0 – None 1 – RS485 2 – RS232 3 – Opto 4 – M-Bus											
0 – None 1 – RS485 2 – RS232											
0 – None 1 – RS485 2 – RS232											
0 – None 1 – GPRS/GSM											
0 – None 1 – Current analog input 2 – Voltage -5...+5V analog input 3 – Voltage -10...+10V analog input 4 – Thermoresistor (Pt100) analog IN 5 – Thermoresistor (Pt1000) analog IN 6 – Resistance 0...10kΩ analog IN 7 – Resistance 0...300Ω analog IN 8 – Thermoresistor 0...10kΩ (NTC) analog IN 9 – Thermoresistor 0...30kΩ (NTC) analog IN											
0 – None 1 – 4 discrete inputs 2 – 8 discrete inputs 3 – 12 discrete inputs 4 – 16 discrete inputs											
0 – None 1 – 8 discrete outputs											
0 – None 1 – Real Time Clock (RTC)											

Example: **MX-4.412.1.1400.2.8.1** (M-Bus, RS485, RS232, GPRS, Current Analog IN, Thermoresistor (Pt100) Analog IN, 8 Discrete IN, 8 Discrete OUT, RTC)