

## INTERFACES

RS232

RS485

M-Bus

Data/Req

Current Loop

Ethernet

GSM/GPRS

USB



## FEATURES

- Reading data from meters (heat, water, gas, electricity...) and controllers
- Independent data log with real time stamp (Real Time Clock)
- Possibility to choose interfaces: M-Bus, RS232, RS485, Current Loop, Data/Req, USB, GSM/GPRS, Ethernet
- Remote communication and updates through GSM/GPRS or Ethernet
- Galvanically isolated interfaces and power supply
- Power supply for external powering of meters
- Memory expansion: up to 8 GB using micro SD card
- Supported protocols: Modbus RTU, Modbus TCP/IP, IEC60870-5-104:2000, FTP server/client and others

**MX-5** data logger is dedicated for real time logging and analyzing of data. Using GPRS/GSM or Ethernet, logger sends data to remote users / server. MX-5 can also communicate with other controllers and sensors. Device has wide range of optional interfaces and protocols and can read any kind of meters, controllers and sensors equipped with standard protocols. Perfect for telemetry/monitoring, control and smart metering.

## Application

Industrial monitoring

Commercial monitoring

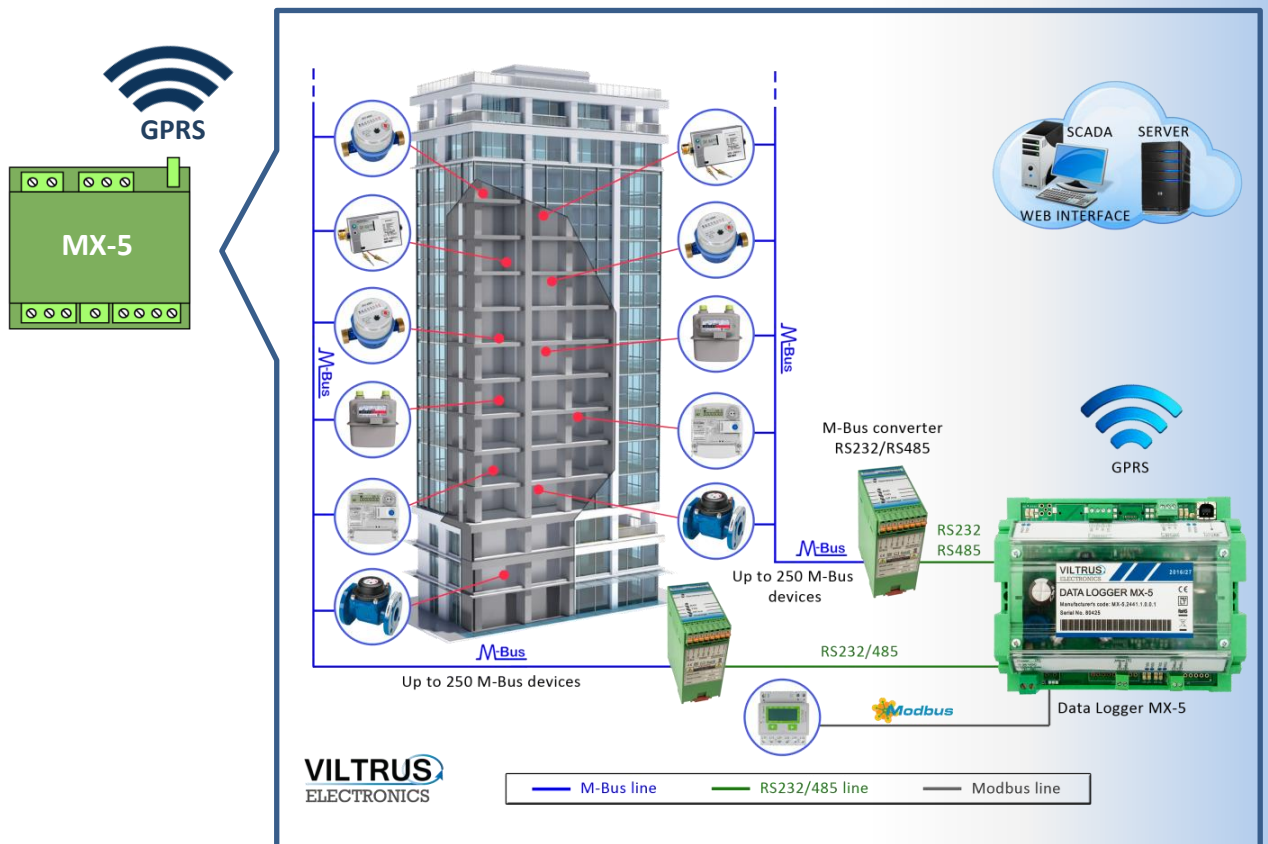
Residential monitoring

Water/Heat metering

Electricity metering

Gas metering

Controllers metering



## TECHNICAL SPECIFICATIONS

<b>Description</b>	<b>MX-5 data logger</b>
CPU	ARM7
Flash	archive storage up to 8 MB, independent data storage without power about 5 years
SD card support	micro SD card up to 8 GB
<b>Interfaces</b>	
GSM/GPRS	4 band 850/900/1800/1900 MHz
RS232 (4 ports)	distance up to 15 m, speed up to 19,2 Kbit/s
RS485 (3 ports)	distance up to 1,2 km, max 32 transivers, speed up to 19,2 Kbits/s
M-Bus (2 ports)	up to 16 M-Bus devices (up to 8 M-Bus devices for each M-Bus port)
Data/Req (2 ports)	(KAMSTRUP) data transfer interface
Current Loop (2 ports)	25-27V, 14-20mA, up to 6km, speed up to 19,2 Kbit/s
Ethernet	10/100 Mbps, RJ45, distance up to 100 m
USB	type B, ver. 2,0
<b>Protocols</b>	
Modbus RTU, Modbus TCP/IP, IP, ICMP, UDP, TCP, DHCP, PPP, ARP, SNTP, IEC60870-5-104:2000, DynDNS, FTP server, FTP client, DNS client	
<b>General</b>	
Power supply	9-36 VDC
Over-voltage protection	>1000V
Capacity	300mA max
Power for external devices	3,7/5/6/8/10 VDC (20mA)
<b>Certifications</b>	
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
<b>Physical characteristics</b>	
Dimensions	147x128x50 mm
Weight	400 g
Mounting type	on DIN rail
Protection type	IP20
<b>Climate conditions</b>	
Operating temperature	-25 to +60°C
Storage temperature	-40 to +60°C
Humidity range	5 – 95%, non-condensing
<b>LED indication</b>	
Power	
Serial ports read/write for each port	
GSM/GPRS modem status	
Ethernet status	
<b>Other features</b>	
Real time clock	+
M-Bus auto setup	+
Warranty period	2 years

## ORDERING CODE

MX-5.	A	B	C	D.	E.	F.	G.	H
0 – None 1 – GPRS/GSM 2 – RS232								
0 – None 1 – RS485 2 – RS232 3 – Opto 4 – M-Bus 5 – Current loop								
0 – None 1 – RS485 2 – RS232 3 – Opto 4 – M-Bus 5 – Current loop								
0 – None 1 – RS485 2 – RS232								
0 – None 1 – Ethernet								
0 – None 1 – Power for external devices								
0 – None 1 – Real Time Clock (RTC)								
0 – None 1 – SD card socket								

Example: **MX-5.1432.1.0.1.0** (GPRS, M-Bus, Opto, RS232, Ethernet, RTC)