

## INTERFACES

RS232

RS485

M-Bus

Wireless 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: Wireless M-Bus , M-Bus, RS232, RS485, Current Loop, Data/Req, USB, GSM/GPRS, Ethernet
- Wireless M-Bus up to 300 devices
- Remote communication over GSM/GPRS or Ethernet (RJ45)
- Galvanically isolated interfaces and power supply
- Power supply for external powering of meters
- Memory expansion: up to 8 GB using micro SD card

**MX-9** data logger is dedicated for collecting the data via Wireless M-Bus and real time logging, analyzing of data. Using GPRS/GSM or Ethernet, logger sends data to remote users / server. MX-9 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 

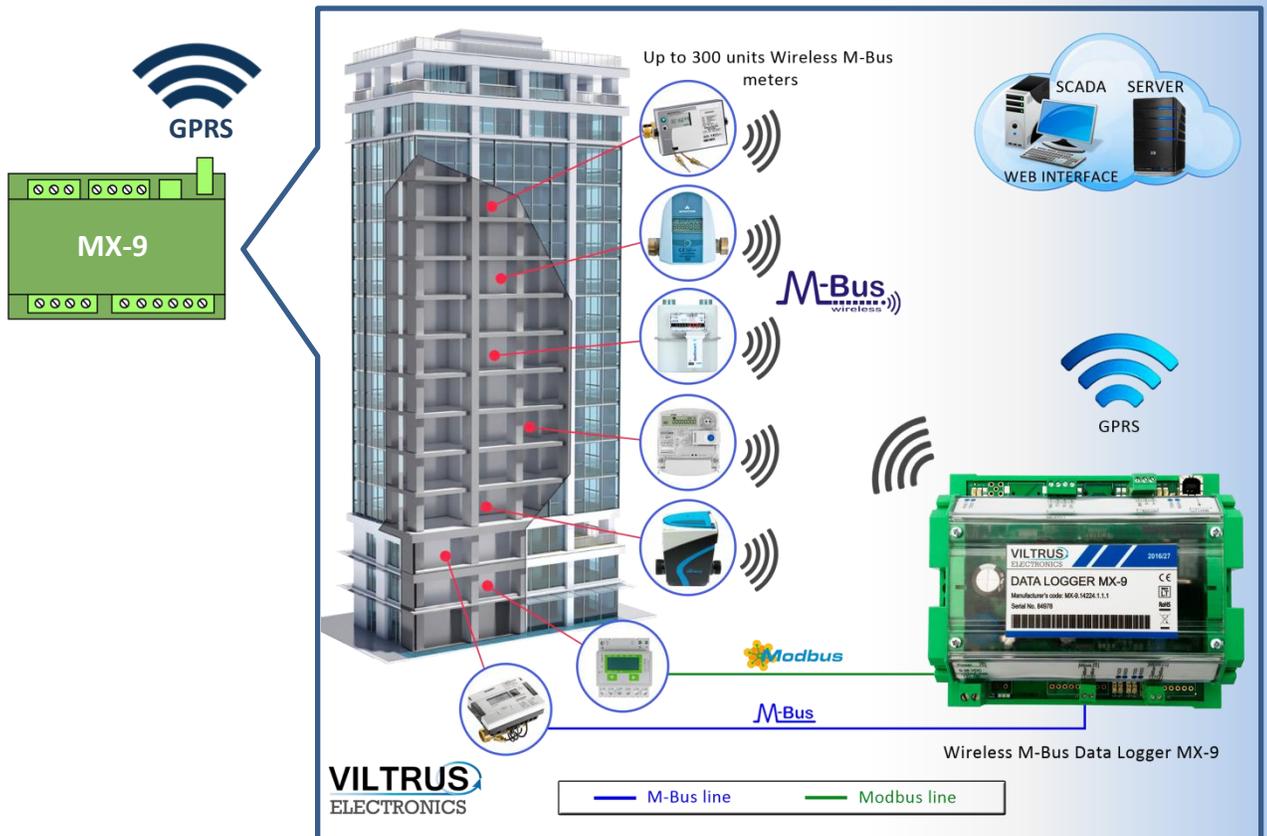
Residential monitoring 

Water/Heat metering 

Electricity metering 

Gas metering 

Controllers 



## TECHNICAL SPECIFICATIONS

<b>Description</b>	<b>MX-9 data logger</b>
CPU	ARM7
Flash	archive storage up to 8 MB, independent data storage without power about 5 years
External memory	up to 8 GB micro SD card
<b>Interfaces</b>	
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)
Wireless M-Bus (1 port)	up to 300 devices
Data/Req (2 ports)	(KAMSTRUP) data transfer interface
Current Loop (2 ports)	<30V, 14-20mA, up to 6 km, speed up to 19,2 Kbit/s
GSM/GPRS	4 band 850/900/1800/1900 MHz
Ethernet	10/100 Mbps, RJ45, distance up to 100 m
USB	ver. 2,0, type B
<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
Power consumption	<10VA
Power for external devices	3,7/5/6/8/10 V (<20mA)
Interface galvanic isolation	500V
<b>Physical characteristics</b>	
Dimensions	147x128x50 mm
Weight	450 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>Programing and updating</b>	
Remote	GSM/GPRS or Ethernet
Locally	RS232, RS485 or USB
<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-9.	A	B	C	D	E.	F.	G.	H
0 – None 1 – GPRS modem 2 – RS232								
0 – None 1 – RS485 2 – RS232 3 – Data/Req 4 – M-Bus 5 – Current loop								
0 – None 1 – RS485 2 – RS232 3 – Data/Req 4 – M-Bus 5 – Current loop 6 – CAN								
0 – None 1 – RS485 2 – RS232								
0 – None 4 – Wireless M-Bus								
0 – None 1 – Ethernet								
0 – None 1 – Micro SD card								
0 – None 1 – Power supply for external devices								

Example: **MX-9.10004.0.1.0** (GPRS, Wireless M-Bus, Micro SD card)