

## Overview



- Advanced datalogger with real-time timestamping (RTC) synchronized via NTP.
- Multiple communication interfaces: RS232, RS485, USB, Ethernet, and global 4G connectivity.
- M-Bus master supporting up to 20 devices.
- I/O Capabilities: 6 analog inputs (current, voltage, resistance, or temperature probes) and 4 digital inputs (contact, impulse counter, alarm).
- Relay Control: Supports up to 2 relay outputs (230VAC, 3A) with automatic weekly scheduling.
- Analog Outputs: Dimmer functionality with up to 2 analog outputs (0-10V).
- 8GB microSD card for local data storage.
- FTP client for periodic data transfer in CSV format.
- Remote configuration and firmware updates via 4G.
- Supports Modbus RTU, Modbus TCP/IP, M-Bus, MQTT, and FTP protocols.

## Characteristics

### General

Power supply:	9 – 36VDC
Overvoltage protection:	>1000V (max. 5 sec)
Consumption:	<10 VA
Internal battery:	3.7V, 750 mAh

### Specifications

CPU:	Cortex M4
Flash:	8 MB, up to 5 years storage.
GSM:	850/900/1800/1900 MHz
WCDMA:	B1/B2/B4/B5/B6/B8/B19
LTE-FDD:	B1/B2/B3/B4/B5/B7/B8/B12/B13/ B18/B19/B20/B25/B26/B28/B66
LTE-TDD:	B34/B38/B39/B40/B41
External storage:	8GB microSD card

### Interfaces

RS232:	Up to 15m, speed up to 57600 bps
RS485:	Up to 1.2 km, speed up to 57600 bps
M-Bus:	Supports up to 20 devices
USB:	Type B, ver. 2.0
Ethernet:	RJ45, 10/100 Mbps, range up to 100m

### Digital inputs/outputs

Digital inputs. 4 sink/contact inputs  
Relay outputs 2 relay outputs (NO/NC, 230V AC, 3A)

### Analog inputs

Current:	0/4-20mA (error: 0.15%)
Voltage:	0-10V (error: 0.15%)
Temperature:	PT100 or PT1000 sensors

### Analog outputs

Voltage:	2 outputs (0-10V, load up to 5mA)
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### Supported protocols

Modbus RTU, Modbus TCP/IP, M-Bus, MQTT, FTP (server/client)

### LED Indicators

Power supply status  
Discrete I/O signal status for each port  
3G connection status  
Ethernet connection status  
On/Off status of each digital input

### Working conditions

Working temperature: -25°C to +60°C  
Storage temperature: -40°C to +60°C  
Humidity range: 5 to 95% (non-condensing)

### Regulatory approvals

EN 55022:2000+A1+AC:2002+A2:2003  
EN 55024:2000+A1:2003+A2:2003  
EN 61000-4-2+A1+A2:2002  
EN 61000-4-3+A1:2004  
EN 61000-4-4:2005  
EN 61000-4-5:2002+A1:2003  
EN 61000-4-6:2002+A1:2003

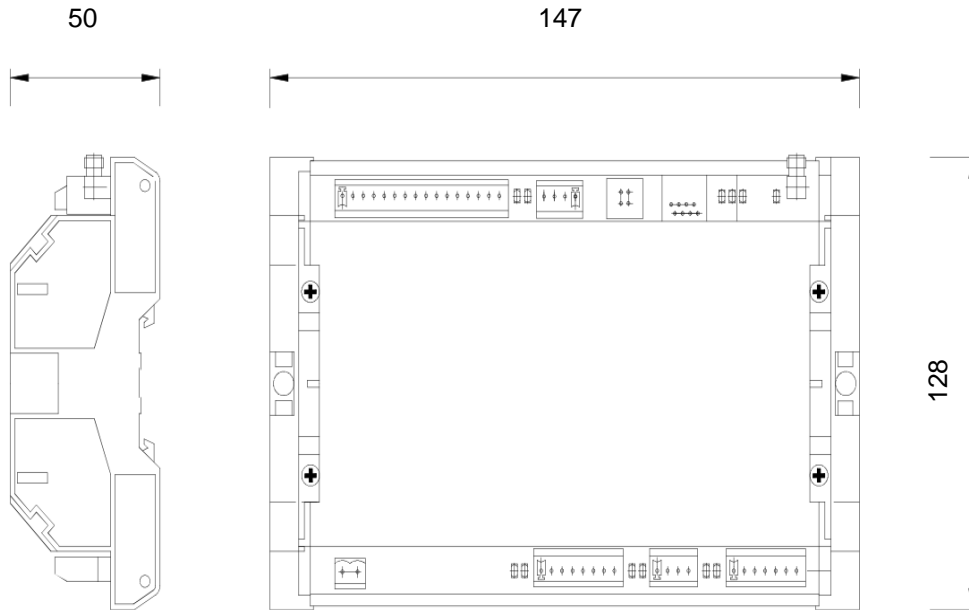


### Physical characteristics

Dimensions:	147x128x50 mm
Weight:	400 g
Material:	PC/ABS
Protection rating:	IP20
Mounting:	DIN rail compatible

### Other features

Made in the EU

**Dimensions (mm)**

**Ordering code**

MODEL	Interface	Interface	Interface	Interface	Interface	Analog inputs					Analog out.	Dig. inp.	Relay out.	Batt	SD		
UCM	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
	0 – None 1 – RS485 2 – RS232	0 – None 2 – RS232	0 – None 4 – M-Bus	0 – None 1 – Ethernet	0 – None 6 – Global 4G comm	0 – None 1 – Current (0..20mA) 2 – Voltage (0..5V) 3 – Voltage (0..10V) 4 – PT100	0 – None 1 – One 0..10V output 2 – Two 0..10V outputs	0 – None 4 – Four discrete inputs	0 – None 1 – One relay out. (3A) 2 – Two relay out. (3A)	0 – None 1 – Backup battery	0 – None 1 – microSD card slot + 8GB card						

Example: **UCM.1001600001041001** UCM-316 with RS485 + Ethernet + 4G + 2x Analog inputs (current) + 4x Discrete inputs + 1x Relay output + microSD card holder

The information contained in this datasheet is subject to change without notice. Make sure you are using the latest version.