



Waterworks

# BERMAD Meters

Merging monitoring & control



## CONVERTER MC406

Euromag Electromagnetic Flowmeter



## Converter MC406

The MC406 is the new high-efficiency, technologically advanced battery powered electronic converter from Euromag, combining high performances and dedicated applications solutions to a low cost of ownership.

Up to 10 years of battery life allows maintenance free of operation. Battery pack is then easily replaceable, all data are automatically stored in the internal EEPROM memory and no data will be lost.



The battery powered electronic converter



## Applications

- Abstraction and distribution
- Revenue and bulk metering
- Irrigation
- Waste water and treatment
- Leak detection systems
- Any remote application with no access to mains power

## Installation

Compact: horizontal or vertical (typically pit installations).

Separate (Remote): up to 30 meters of cable are supplied from factory.

## Case

Reliable and robust, Technopolymer case with 4 PG9 glands and aluminum bottom on compact vertical configuration.

## Data security

Excellent data security given by the internal EEPROM memory. Enhanced security in data and parameter storage; built-in datalogger with over 100.000 data lines capacity (more than 3 years of data under factory settings). Cycle memory, old data will be overwritten by new ones when full capacity is reached. A software is supplied with the unit to allow users to communicate with the 406 via Ircom port to any pc, lap top or windows tablet. Easy data download and management, easy programming.

Advanced self-diagnostic performs a wide range of essential checks automatically.

## Low flow detection

Combined to the Euromag MUT2300 sensor series, the MC406 is capable to read flow velocities of 0.015 m/s (MID - OIML R49 certified).

MC406 is compatible with the complete line of sensors from Euromag. Full bore units up to DN 600, and with any insertion sensors.

## Remote data reading

With advanced display information, on-site data collection and remote monitoring via GSM/GPRS network, the MC406 allows any customer to access all the information, easily and at no cost.

Add on communication module automatically sends the information via SMS, e-mail (with or without attachment) and to [www.euromagdata.com](http://www.euromagdata.com) free access using any browser and with personal ID and password, also on smart phones and tablets.

Add on modules of temperature and pressure readying, make the MC406 one of the most complete electronic converter for electromagnetic flowmeters available, giving to the end user a full control over all the main parameters of its network, reducing cost of programming, installation and maintenance.

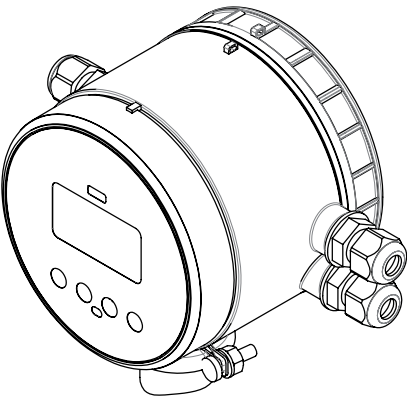
One unit supplying flow - pressure - temperature, all at the same time.

## Always verified

On-site verification available with the Euromag FIELD VERIFICATOR.



MC406 HORIZONTAL



Weight 405 gr

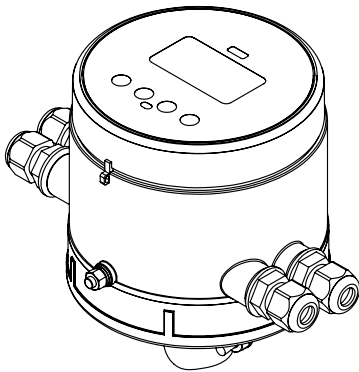


MUT1222 - MC406



MC406

## MC406 VERTICAL

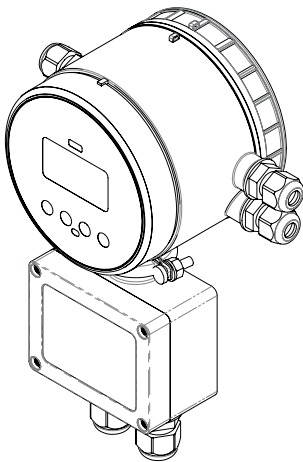


Weight 480 gr



MUT2300 - MC406 VERTICAL

## MC406 SEPARATE



Weight 600 gr

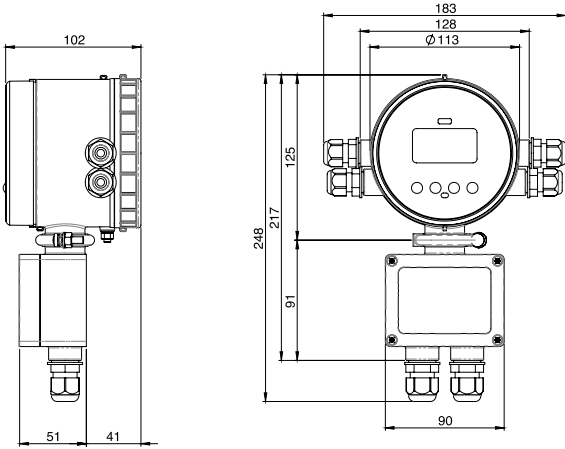
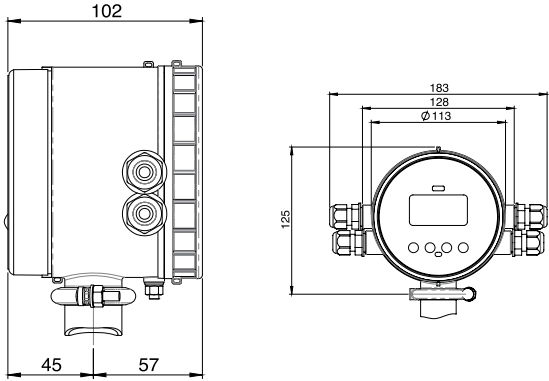


MC406

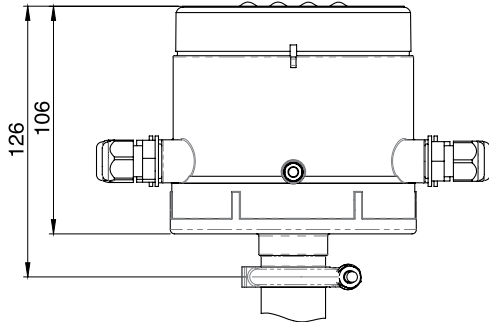
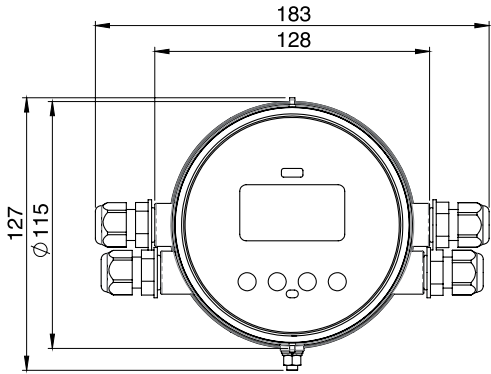


MC406 HORIZONTAL

MC406 SEPARATE



MC406 VERTICAL



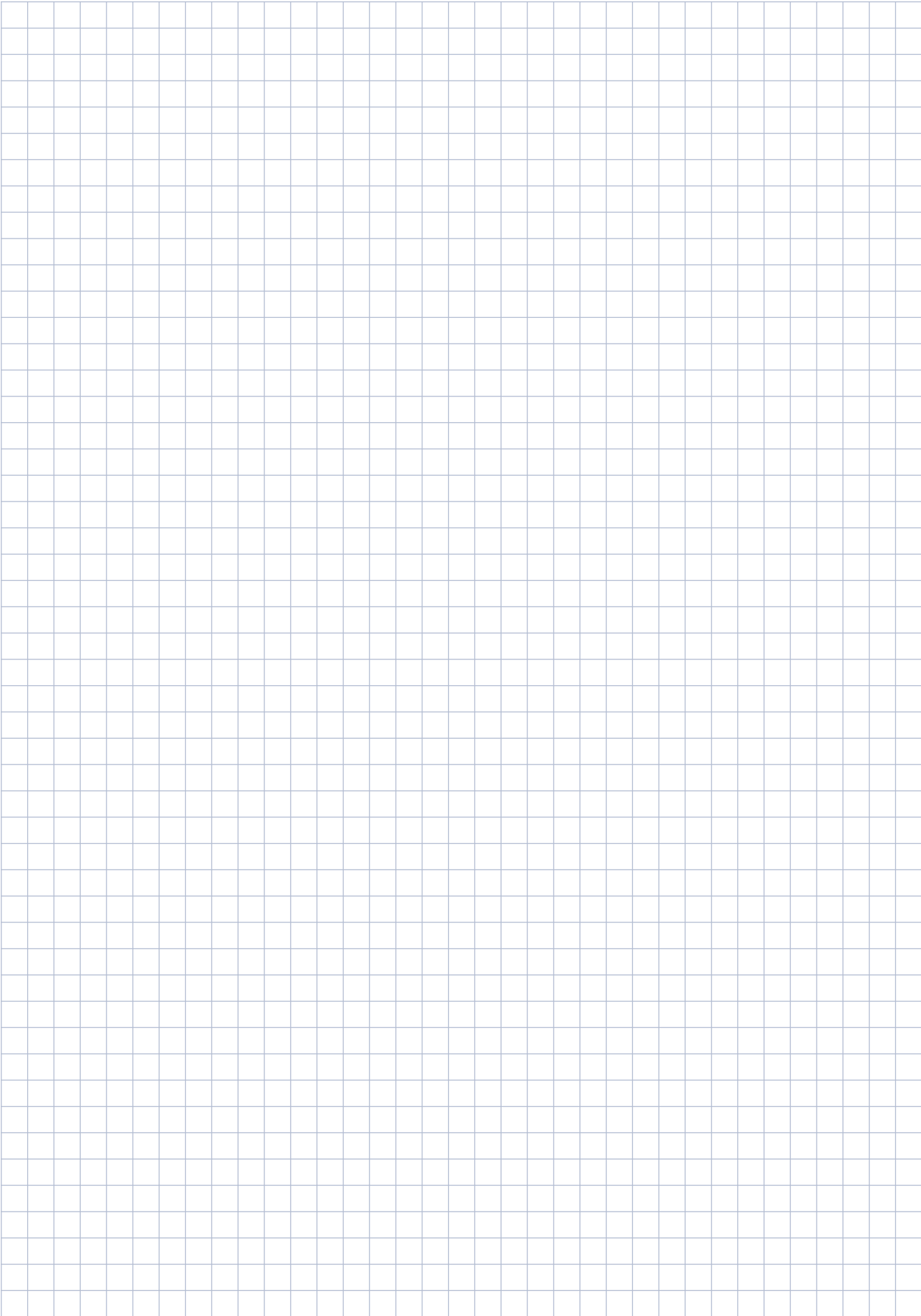
Transmitter type	Battery powered - 2 x D Cell 3.6 V *
Battery life	Lithium battery pack up to 10 years
Accuracy	0.2 % +/- 2 mm/s - insertion sensors 2% of rate +/- 2mm/s
Temperature	Ambient: -20 ... +60 C° (-4 ... +140 F) Media -25 ... 80 C° (-13 ... +176 F) Storage -40 ... +70 C° (-22 ... +158 F)
Enclosure	Technopolymer case with aluminum bottom on compact vertical version. IP 68. Remote wall mount bracket in carbon steel zinc plated
Cable entries	4X PG9 Glands I/O - 2X M20 x 1.5. Glands junction box in remote version
Custody transfer	Type approved OIML R49-1 2013 / EN 14154 MID EN-ISO 4064 - Certificate n. T10713
Conformity	EMC: EN 61010 - LVD: EN 61326 ; EN/IEC 60529 IP68
Sensor type	Full bore up to DN 600 - Insertion meters
Flow velocity range	0.015 m/s up to 10 m/s
Sampling rate	Standard mode 1 / 5 Hz up to 1 / 60 Hz (default 1 / 15 Hz) max 3.125 Hz
Installation	Integral (compact) or remote with factory mounted sensor cable in 5 m (16.4 ft) up to 30 m (98.4 ft)
Digital filters	Damping - cut-off (0.05 m/s default) - bypass - peak cut
Display and keys	LCD display - Index, menu, and symbols icons for dedicated information 4 Push buttons to access all functions Totalizer informations can be displayed with 5 decimal digits
Displayed informations	Live flowrate Total positive totalizer (T+) Total negative totalizer (T-) Partial positive totalizer (P+) Partial negative totalizer (P-) Time & date Converter temperature Process pressure and temperature (if available) Parameters corresponding code and value



Flow Units	m, m3, l, ML, ft3, GAL
Outputs	2 pulses passive outputs (MOS), individual galvanically isolated - clean contact Maximum load +/- 35V DC, 100 mA short circuit protected
Communication	Integrated Euromag IrComm interface
Datalogging	100,000 lines of data with a frequency of log between 1 minute and 120 minutes (default 15 minutes)
Add on modules	GSM/GPRS Euromag Module Pressure (1) and temperature (2) Energy metering ready
Totalizers	4 (2 positive and 2 negative)
Date and time	Yes
Data protection	Password available, automatic firmware check and recover during the update
Alarms and status	Status icon displayed and alarm logged in the datalogger
Self diagnostic	Alarms available: <ul style="list-style-type: none"> <li>• excitation failure</li> <li>• empty pipe on the 4th electrode</li> <li>• empty pipe on the measuring electrodes</li> <li>• high temperature</li> <li>• high voltage supply</li> <li>• pulse overlapped</li> <li>• wet electronic board</li> </ul>
External verification	Field verifcator available for calibration verification and electronic status
Software for communication and programming	Commissioning (equal settings of meters) - Data print for documentation - Data export (CSV file) - Firmware update - Read instant flowrate - Read and write all non volatile parameters - Download internal datalogger - View instrument event logger

\* Lithium batteries are subject to special transportation regulations according to United Nations "Regulation of Dangerous Good", UN 3090 and UN 3091. Special transport documentation is required to observe these regulations. This may influence both transport time and cost





# About BERMAD

BERMAD is a leading, privately-owned global company that designs, develops and manufactures tailor-made water & flow management solutions that include state-of-the-art hydraulic control valves, air valves and advanced metering solutions.

Founded in 1965, we have spent over 50 years interacting with the world's major end users,

and accumulating knowledge and experience in multiple markets and industries. Today, we are recognized as a pioneer and established world-leading provider of water & flow management solutions that give our customers the unprecedented operational efficiency, and superior quality, durability and performance they need to meet the demanding challenges of the 21st century.



ozbranding.co.uk



[www.bermad.com](http://www.bermad.com)

The information contained herein may be changed by BERMAD without notice. BERMAD shall not be held liable for any errors.  
© Copyright 2009-2019 BERMAD CS Ltd.

PCUWE19-MC406