

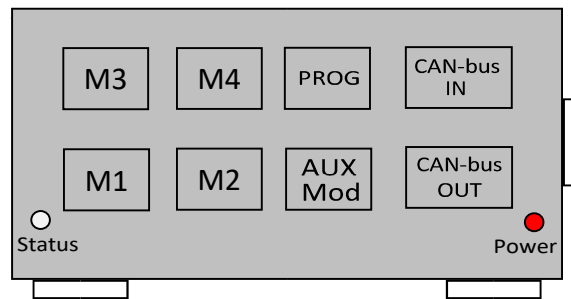
## Meter-Macs 4 Channel Mod-bus Data Logger MM-MDL4



## Overview

The Meter-Macs 4 Channel Mod-bus Data Logger, MM-MDL4, provides the interface to the Customer Utility Outlet. For each outlet there may be a utility meter, relay for switching and plugged detection sensor. Up to four outlets are fully supported by each MDL4 and up to 32 MDL4s may be linked along a cable run by means of a CAN interface. Internally the MDL4 processes Client balances in real time along with local functionality like switch off on Client balance exhaustion. The MDL4 supports Meter-MACS direct connect and Mod-bus meter types plus an optional plug-in cable dongle for Meter-Bus meter types.

MM-MDL4



35 mm DIN rail location

No configuration is required prior to installation. Setup entirely by remote download after installation.

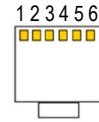
## Connectivity

- CAN-bus IN: RJ45 Socket - Connection from previous device in chain
- CAN-bus OUT: RJ45 Socket - Connection to next device in chain
- M1: RJ12 Socket - Electrical Interface for Outlet 1
- M2: RJ12 Socket - Electrical Interface for Outlet 2
- M3: RJ12 Socket - Electrical Interface for Outlet 3
- M4: RJ12 Socket - Electrical Interface for Outlet 4
- Aux/Mob: RJ12 Socket - Mob-Bus and Aux Relay drive
- PROG: RJ12 Socket - for firmware update

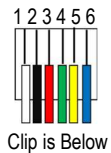
RJ45 Pin Number	CAN Function	Cable Wire (Pair / Conductor)
1	Ground 0V	1/1
2	Ground 0V	1/2
3	Ground 0V	2/1
4	CAN differential L	3/1
5	CAN differential H	3/2
6	CAN IN / CAN OUT	2/1
7	Power +12V	4/1
8	Power +12V	4/2



RJ12 Pin Number	M1, M2, M3 & M4 Function	Cable Colour
1	OBIS Rx/Tx MM Direct Connect Meter	White
2	Auto Disconnect / Plugged Switch	Black
3	Ground 0V	Red
4	+12V Relay Drive	Green
5	Pulse Input	Yellow
6	Power Detection	Blue



RJ12 Pin Number	AUX Mod-Bus Function	Cable Colour
1	Ground 0V	White
2	+12V Relay Drive	Black
3	No Connection	-
4	No Connection	-
5	Mod-Bus B (D-)	Yellow
6	Mod-Bus A (D+)	Blue



## Indication

Power: Solid Red LED  
 Status: Red LED, blinks on taking a meter reading, continuous flashing on alarm detection

## Electrical

Power: 12V DC nominal via CAN Bus RJ45 pins 1,2,3 (0V) & 7, 8 (+12V)  
 CAN: Propriety Local Hub mode, maximum range 200m  
 Relay Drives: 12V DC 150mA max, short circuit and back EMF protected  
 Inputs: Schmitt 5V logic level pull-up, 12V tolerant, fully debounced  
 OBIS: 300baud IEC 62056-21 section 6.4.1  
 Mod-Bus: RS485, +/- 80V fault protected, built in 120-ohm termination

## Mechanical

Dimensions: 40mm(h) x 90(l) x 75mm(d) Excluding cable entry  
 Mounting: 35mm DIN rail clips horizontal or vertical mount