

LEKTRI·CO

M2W

Modbus / Meter to WiFi

Device Version: Modbus Pre-release 1.0



Manual Version: 1.0

0 1 — U S A G E

The M2W module enables you to manage and balance the load of your electrical system and EV charger so that the power consumption stays within the limit of your main breaker. It also provides remote readings of your power grid and energy consumption which can be used for billing purposes (reading from MID certified meter).

The M2W module communicates with the MID Meter over Modbus RTU (RS485) and sends the contents over WiFi.

0 2 — F E A T U R E S

- Load Balancing with multiple modes (Standard, Eco, Eco+)
- Power Grid Monitoring
- MID metering

0 3 — L O A D B A L A N C I N G M O D E S

DISABLED

This mode disables any type of load balancing, but continues to report metering values

STANDARD

This is the normal operation mode, which ensures that the set breaker limit is not exceeded. Any linked charger will automatically adjust its charging power to respect your set limit.

ECO

The Eco mode enables you to make use of your solar panels and redirect the energy surplus in charging your car. Instead of injecting the surplus in the grid, this mode will adjust the charging current, so that all surplus energy is used for charging. If no surplus is available, this mode will still allow charging with the minimum charging current.

ECO +

The Eco + mode will charge your car only with green energy: Only if enough solar energy surplus is available, the charging will start and use that surplus. If the solar power production drops below the minimum set current, the charging will pause until solar energy is available again.

STEP 1

Your M2W Kit contains one M2W Module and one MID Meter.

STEP 2

The MID Meter should be installed between your existing utility meter and any other consumers or PV Inverters, so that all energy between the grid and your property passes through the meter

STEP 3

To install the MID Meter please consult the User Manual shipped with the MID Meter.

STEP 4

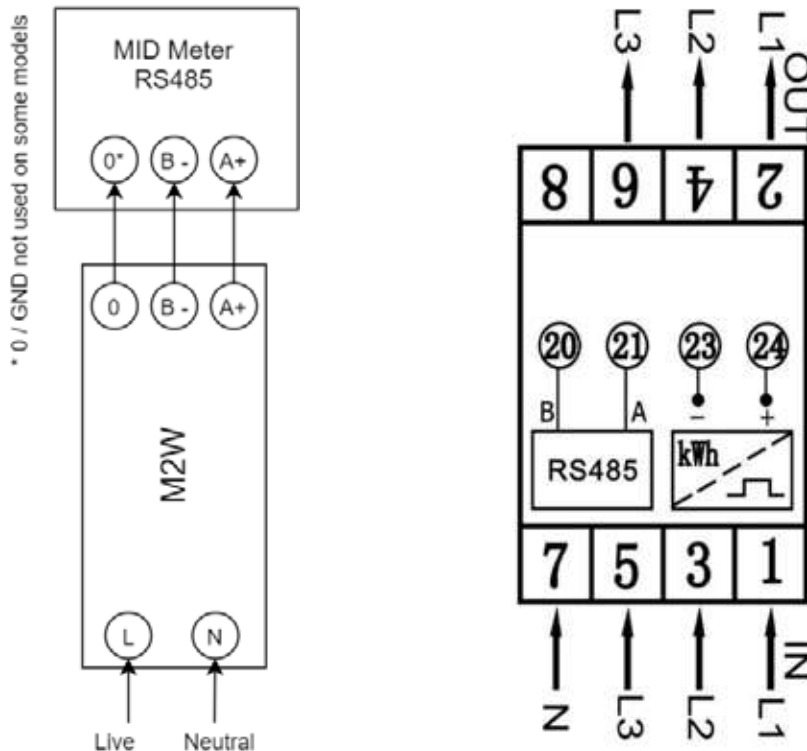
The M2W Module needs to be connected to the MID meter via a twisted pair cable (RS-485 standard). Therefore, the M2W Module can be mounted either in the vicinity of the meter, or in another appropriate place if a twisted pair cable can be run between the two.

STEP 5

The M2W Module should be connected as shown in the following figure:

M2W & METER CONNECTION

MID METER (DTS353F-2)



Operating temperature	-25 °C to +55 °C
Ingress Protection	IP30
Weight	50g
Width x Height x Depth	19 x 87 x 65 mm
Installation / Operation position	DIN-rail / Any
Power consumption	max 5W
Operating voltage	L-N Terminals: 85-240VAC 50/60Hz USB Port: 5V DC
WiFi	WiFi Protocols: 802.11 b/g/n Frequency range: 2412-2484 MHz Tx Power: max 20.5 dBm
NOT USED: Bluetooth	Compliant with Bluetooth v4.2 BR/EDR and BLE specifications Tx Power: max 12 dBm

