

DC ENERGY METERS FOR EV CHARGING STATIONS DMED4



DMED4 are DC energy meters **specifically designed for electrical vehicle charging stations**. The maximum current **up to 1500A with 1500V** maximum voltage makes the meters **suitable for fast charging applications**.

General features:

- Auxiliary power supply: 12-24VDC
- Versions with maximum current from 150 to 1500A
- Operating temperature: -40°C +85°C
- Sealable terminal covers
- Metrological LED.

Certifications:

- MID certified
- Eichrecht, MessEG (Mess und Eichgesetz) , MessEV (Mess und Eichverordnung)
- cURus
- LNE (France, pending).

Compliant with standards:

- IEC62052-11, IEC62052-31, IEC62053-41, EN50470-4 (class B)
- IEC61010-1, IEC61010-2-030
- VDE-AR-E 2418-3-100
- PTB-A 20.1, PTB-A 50.7, REA 6A, PTB-8.51-MB10-Krypto-EN-V17
- Welmec 7.2
- UL61010-1, UL61010-2-030
- CSA C22.2 No 61010-1, CSA 22.2 No 61010-2-030.

Main functionalities:

- Measures: imported energy, exported energy (V2G - Vehicle to Grid Ready), current, voltage, temperature.
- Logbook for metrological events
- Real time clock (synchronized by the master)
- Compensation of the cable losses
- Digital signature functionality.

Connection to the EVCS main board:

- Via RS485 or Ethernet
- Via Modbus slave or API over http protocols both with digital signature included.



Mechanical size	SIZE 1			SIZE 2
Max DC voltage	1500V	1500V	1500V	1500V
I Max	150A	400A	600A	1500A
Measuring range	0.12...150A	0.32...400A	0.48...600A	1.2...1500A
Typ. bar size	M10 ring terminal	40x10mm - 2x40x5mm		100x5mm - 2x80x5mm

Coding

Series	Communication port	Type of certified energy	Max current
DMED4	04	D	0600
	03 = RS485 built-in	D = certified imported energy	0150 = max 150A
	04 = RS485 + Ethernet built-in	R = certified imported/exported energy (V2G - Vehicle to Grid Ready)	0400 = max 400A
			0600 = max 600A
			1500 = max 1500A

Compact design

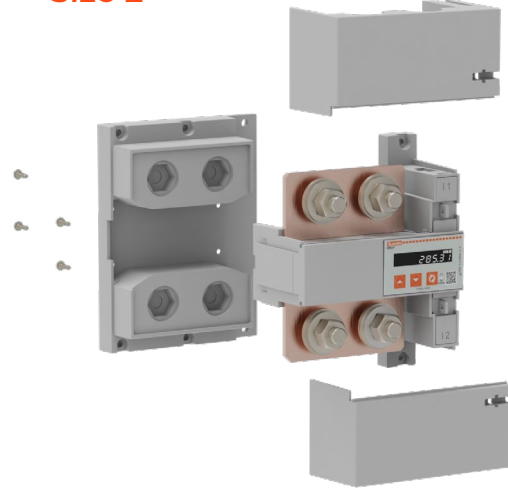
The very compact design, the extended **operating temperature range up to 85°C** and the versatile mounting options simplify the **integration even in charging stations with limited space**.

- Mounting on bars with or without plastic base
- Rear mounting with plastic base and 4 screws
- Rear mounting with insulators and 2 screws.

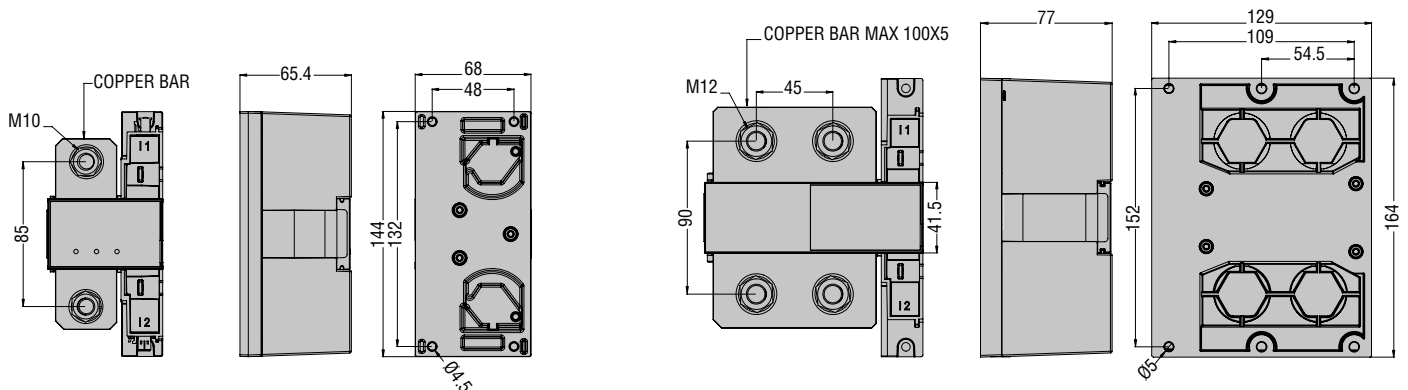
Size 1



Size 2



Dimensions [mm]



ACCESSORIES: DATA CONCENTRATOR AND DISPLAY

Where the display information needs to be visible from outside the charging station, a data concentrator type DMED4DC... can be added, suitable for connection to energy meters type DMED4... (DC energy meters) or type DMED341... (AC energy meters).

General features:

- DMED4DC1: connection from 1 to 4 energy meters
- DMED4DC2: point-to-point connection to 1 energy meter
- DIN rail or panel mounting (72x90x34mm)
- Power supply: 12-24VDC (9...31VDC)
- Sealable terminal covers
- Operating temperature: -40°C...+70°C
- Built-in Ethernet port with Modbus-TCP protocol (DMED4DC1 only)
- Built-in RS-485 port with Modbus-RTU protocol.





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ENERGY AND AUTOMATION

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The products described in this document are subject to update and modification at any time. The descriptions, technical and functional information, illustrations and instructions in the leaflet are to be considered as purely illustrative and consequently have no contractual relevance. Remember also that the products themselves must be used by qualified personnel in compliance with current plant engineering and installation standards, in order to avoid injury to persons or damage to property.