



IEM-DCC

Calibration regulation-compliant DC energy meter

ISAscale® Energy Meter – DC charging



INTRODUCTION

The IEM-DCC-500 is a high precision DC energy meter that features compliance to German Eichrecht. The main application is DC charging infrastructure for electric vehicles with a power class up to 500 kW. This device with energy backstop supports current measurement up to 500 A and voltage measurement up to 1,000 V.

APPLICATIONS

- DC energy meter (with return stop) in DC charging stations for electrically powered vehicles up to the power class of 500 kW with calibration regulation-compliant recording of individual charging processes
- For calibration regulation-compliant billing with a declaration of conformity as per German MessEV module B and module D testing by conformity service centre

TECHNICAL DATA

Description	Unit	
Application temperature	-25 ... +70	°C
Supply voltage	10 ... 48	V
Communication interface	RS 485	
Communication log	SML	
Transaction receipt format	ISA-EDL-40-P	
Digital signature	ECDSA (ECC 256)	

FEATURES

- Measuring taps for current and voltage integrated in tamper-proof sealed housing
- Rated insulation voltages as per DIN EN 60664-1:2008-01
- Backlit TFT display with 7+2 digits and 320x240 pixels
- Tamper-proof after installation and start-up thanks to terminal cover with sealing screw
- Measurement accuracy class B as per VDE-AR-E 2418-3-100 and DIN EN 50470 (MID)
- Charging cable-dependent parametrisation for the software-side compensation of the charging cable losses
- Four-wire measurement to detect charging cable losses
- Creation of a calibration regulation-compliant and digitally signed transaction receipt in the ISA-EDL-40-P format
- Calibration regulation-compliant event storage

DIMENSIONS [mm]

Length: 235 / Width: 175 / Height: 62

COMMUNICATION

