

## Electric three-phase meter RD3

modern measuring equipment (mME) according to German MsbG, expandable to an intelligent measuring system (iMSys), with integrated LoRaWAN-functionality

- + Temperature-stable shunt measurement
- + High-resolution measuring unit
- + Compact single-board solution
- + Robust and durable due to cast resin filling
- + Tamper-proof
- + High-contrast, high-quality display
- + Voltage tap for add-on modules
- + 32 function variants available
- + Individual ownership notes
- + Development, production and quality management in Germany
- + Meter reading with the eBZ Checker



## ABOUT THE RD3

The RD3 is a three-phase active consumption meter (DIN EN 50470) with MID approval for three-point mounting (VDE-AR-N 4400).

The RD3 includes the consumption transparency of 730 daily, 104 weekly, 24 monthly and 2 annual values and data protection of historical data in accordance with the FNN specification EDL1.2, Nov. 2016 and MS2020.

Two internationally standardized interfaces provide measurement data for expansion systems. The MSB interface can transmit the data to smart metering/grid systems in an interoperable and tamper-proof manner. Smart home systems can be connected in parallel to the info interface.

Design and component selection are geared towards a life cycle >24 years. The RD3 is developed according to strict quality standards in Bielefeld. eBZ GmbH is monitored and certified by German institutions.

The highly automated production and testing system ensures consistent quality and short delivery times.

The integrated LoRaWAN-functionality complies with the specifications of the LoRa-Alliance and can fulfill the measurement task even before the LoRa radio network is expanded (activated ADR).

In addition to the smart metering task, smart grid monitoring with adjustable thresholds and register periods (Over The Air) is implemented.

## TECHNICAL DETAILS

3-point mounting in accordance with VDE-AR-N 4400, Single and double tariff meters with terminal 7\*/9\*/11/13/15/33, Variants: Reference, bidirectional, delivery meters with and without backstop

### Technical characteristics:

Mains voltage: 3x230/400V, 50Hz,  
Measuring range: 0.25–5 (60)A or 0.25–5 (100)A,  
Class A (2%) or B (1%) – delivery values <0.5%,  
Protection class IP 51, operating range –40 to +70°C  
Overvoltage resistance > 8KV,  
Power consumption < 0.8 watts/phase,  
Terminal diameter 8.5mm with two screws,  
Alternating current approval on L3,  
Infrared pulse diode 10,000 imp/kWh,

### Display:

6.0 with OBIS key figures, with power display that can be switched on/off in the second line via the flashlight menu

### MSB data interface

bidirectional, SML1.05 according to FNN EDL1.2, meter readings with min. 8 decimal places, power and voltage values per values per phase,

### Info data interface

OBIS or SML1.05(1s push, Mode D),  
Switching "short/long" via the flashlight menu

### Integrated LoRaWAN radio board

according to LoRaWAN 1.03 of the LoRa-Alliance,  
Transmission frequency ISM band 863–870 MHz  
Class C, Over The Air activation (OTAA)  
Transmission interval and file content adjustable (OTA)