

# Data Sheet

2018 v1.0

## SDM72D-M DIN Rail Power Meter

- MID B&D Approved
- Class 1 Accuracy
- Dual Pulsed Output
- Straight-Through Connection
- 4 Module Dinrail Mounted (35mm)



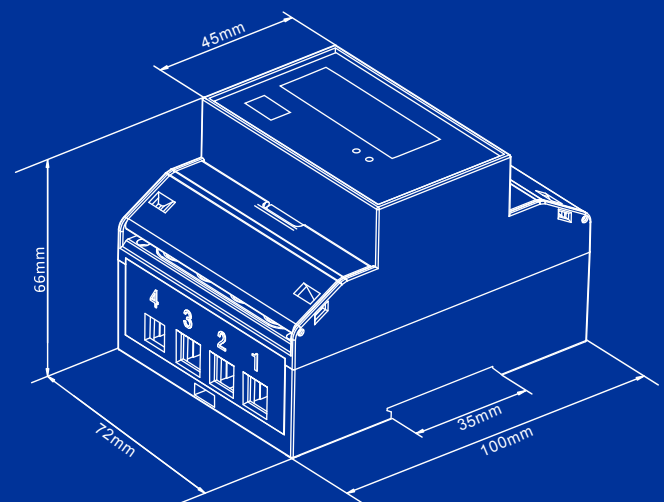
## SDM72D Three Phase Power Meter

The SDM72D Digital Power Meter works directly connected to a maximum load 100A AC circuit eradicating the need for current transformers.

This meter has been MID B&D Certified by SGS UK, proving both it's accuracy and quality. This certification allows this model to be used for any sub-billing applications.

The SDM72D measures and displays Total Active Energy of a three phase circuit. The unit has a built in pulsed output as well for remote monitoring.

## Dimensions



## RS485 Output for Modbus RTU

For Modbus RTU, the following RS485 communication parameters can be configured from the set-up menu:

Baud Rate: 2400, 4800, 9600, 19200, 38400

Parity: None (default) / Odd / Even

Stop Bits: 1 or 2

RS485 Network Address: 3 Digit Number - 001 to 247

Modbus<sup>®</sup> Word order Hi/Lo byte order is set automatically to normal or reverse. It cannot be configured from the set-up menu.

## SDM72D Digital Power Meter - Three Phase

### Measured Parameters

The SDM72D monitors and displays Total Active Energy (kWh) of a three phase four wire (3p4w) system.

### Technical Data

|                              |  |
|------------------------------|--|
| Certification                | MID B&D Approved                       |
| Operating Humidity           | ≤ 75%                                  |
| Storage Humidity             | ≤ 95%                                  |
| Operating Temperature        | -20°C - +50°C                          |
| Storage Temperature          | -30°C - +70°C                          |
| International Standard       | IEC 62053-21                           |
| Accuracy Class               | 1                                      |
| Mounting                     | DIN rail (DIN 43880)                   |
| Sealing                      | IP51 Indoor                            |
| Nominal Voltage Input        | (Ph+N) 100 to 289V (Ph+Ph) 173 to 500V |
| Max Continuous Voltage       | 120% of nominal                        |
| AC Voltage Withstand         | 4KV for 1 minute                       |
| Impulse Voltage Withstand    | 6KV-1.2μS                              |
| Reference Input current      | 0.5A                                   |
| Base Input Current (Ib)      | 10A                                    |
| Maximum Input Current (Imax) | 100A AC                                |
| Max Continuous Current       | 120% of nominal                        |
| Operational Current Range    | 0.4% Ib-Imax                           |
| Over current withstand       | 20Imax for 0.01s                       |
| Nominal Input Current Burden | 0.5VA                                  |
| Frequency                    | 50Hz(±10%)                             |
| Power Consumption            | ≤ 2W/10VA/phase                        |
| Pulsed Output                | 1000imp/kWh                            |

### Wiring Diagram

