



SDM630-Standard

DIN Rail Smart Meter for Single and Three Phase Electrical Systems



- Measures kWh and Kvarh
- Bi-directional measurement IMP & EXP
- Two pulse outputs
- RS485 Modbus
- Din rail mounting 35mm
- 100A direct connection
- Better than Class 1 / B accuracy

USER MANUAL

2014 V1.0

Introduction

This document provides operating, maintenance and installation instructions. The unit measures and displays the characteristics of single phase two wires(1p2w), three phase three wires(3p3w,) and three phase four wires(3p4w) supplies, including active and reactive energy, imported or exported. Energy is measured in terms of kWh, kVAh. In order to measure energy, the unit requires voltage and current inputs in addition to the supply required to power the product.

SDM630-Standard supports max. 100A direct connection, saves the cost and avoid the trouble to connect external CTs, giving the unit a cost-effective and easy operation. Built-in interfaces provides pulse and RS485 Modbus RTU outputs. Configuration is password protected.

Unit Characteristics

The Unit can measure and display:

- Line voltage and THD% (total harmonic distortion) of all phases
- Line Frequency
- Currents, Current demands and current THD% of all phases
- Power, maximum power demand and power factor
- Active energy imported and exported
- Reactive energy imported and exported

The unit has password-protected set-up screens for:

- Changing password
- Supply system selection 1p2w, 3p3w, 3p4w
- Demand Interval Time(DIT)
- Reset for demand measurements
- Pulse output duration

Two pulse output indicates real-time energy measurement. An RS485 output allows remote monitoring from another display or a computer.

RS485 Serial - Modbus RTU

This uses an RS485 serial port with Modbus RTU protocol to provide a means of remotely monitoring and controlling the Unit

Set-up screens are provided for setting up the RS485 port.

Pulse output

This provides two pulse outputs that clock up measured active and reactive energy. The constant of pulse output 2 for active energy is 400imp/kWh(unconfigurable), its width is fixed at 100ms.

The default constant of configurable pulse output 1 is 400imp/kWh, default pulse width is 100ms. The configurable pulse output 1 can be set from the set-up menu.