

# User Manual

2021 v1.0

## SDM320Y-RF

### Prepayment Metering

## 1 Introduction

This document provides operating, maintenance and installation instructions. This unit measures and displays the characteristics of Single Phase Two Wire (1P2W) network. The measuring parameters include Total Energy kWh.

It also comes with a complete comms capability with built in RS485 Modbus RTU outputs, configuration is password protected. This unit is 10(80)A direct connected.

### 1.1 Unit Characteristics

The SDM320Y-RF can measure and display:

- Total Active Energy / Class B EN50470 1/3

The unit has a Password-Protected set up menu for:

- Time Settings
- Password Settings

### 1.2 RS485 Serial – Modbus RTU

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

Baud rate 9600



Parity none

## 2 Start Up Screens

WELCOME	The first screen lights up all display segments and can be used as a display check
Initial testing...	The interface performs a self-test and indicates the result if the test passes.
Software Version 1.1	The second screen indicates the software version .
Meter Number: 94967295	Meter Serial Number

\*After a short delay, the screen will display active energy measurements.

The buttons operate as follows:




	>Scroll the display for data checking. >Changing option at Setup mode >Exit the Setup mode
	>Setup mode entry >Confirmation

Smart Process & Control LTD  
Unit 11, Totman Close,  
Brook Road Industrial Estate,  
Rayleigh, Essex, SS6 7UZ  
Telephone: 01268 773422  
Website: [www.smartprocess.co.uk](http://www.smartprocess.co.uk)  
Email: [enquiry@smartprocess.co.uk](mailto:enquiry@smartprocess.co.uk)

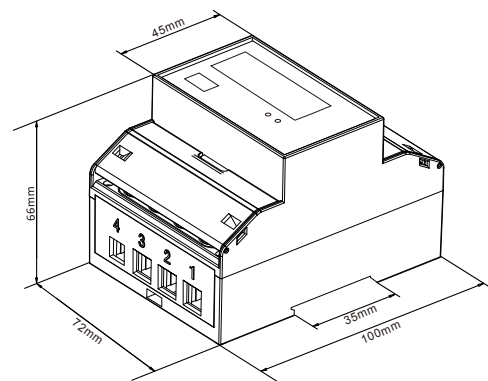
Display as follows:

Used 0.00 £	Used value 0.00 £
Used 0.00 kWh	Used kWh 0.00 kWh
Used Tarrif 1 0.00 £	Used value on Tariff 1
Used Tarrif 2 0.00 £	Used value on Tariff 2
Used Tarrif 1 0.00 kWh	Used kWh on Tariff 1
Used Tarrif 2 0.00 kWh	Used kWh on Tariff 2
Total 0.00 kWh	Total energy in kWh.
Meter Number: 94967295	Meter Serial Number
Alarm 1 2.00 Alarm 2 1.00 £	Alarm Settings 1 & 2
Time 18-06-23 10:17:17	Date and time
Unit Price: per kWh T1: 0.15 T2: 0.12	Unit price per kWh for each Tarrif

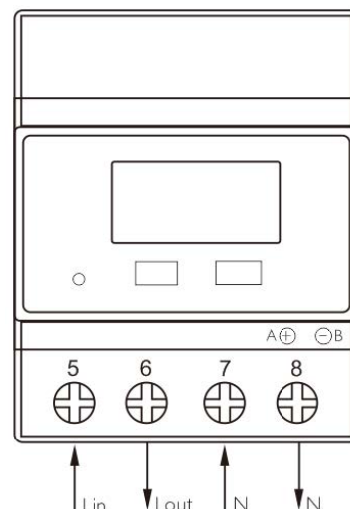
To enter set-up mode, press  &  the button for 3 seconds, until the password screen appears.

Password 1000	Setting up is password-protected so you must enter the correct password (default '1000') before processing.
Password Setting 1000	set-up new password using, press  & hold  for 3 seconds to enter
Time Setting 2021-03-03 22:14:45	set-up new time using, press  & hold  for 3 seconds to enter

## 3.1 Dimensions



## 3.2 Wiring Diagram



## 3.3 Environment

Operating temperature	-25°C to +55°C*
Storage temperature	-40°C to +70°C*
Relative humidity	0 to 90%, non-condensing
Altitude	Up to 2500m
Warm up time	10 Secs
Installation Category	CAT III
Mechanical Environment	M1
Electromagnetic environment	E2
Degree of pollution	2
IP Level	IP51 (Indoor, the meter is to be installed in Cabinet higher than IP51)

\*Maximum operating and storage temperatures are in the context of typical daily and seasonal variation.

## 3.4 Declaration of Conformity

We, Easton, declare under our sole responsibility as the manufacturer that the single phase multifunction electrical energy meter "SDM320Y-RF", corresponds to the production model described in the EU-type examination certificate and to the requirements of the Directive 2014/32/EU EU type examination certificate number 0120/SGS0391. Identification number of the NB 0120.