



SDM630-Modbus V2

DIN Rail Smart Meter for Single and Three Phase Electrical Systems,



- Measures kWh Kvarh, KW, Kvar, KVA, P, F, PF, Hz, dmd, V, A, etc.
- 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

2016 V1.1

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Introduction

The SDM630-Modbus V2 measures and displays the characteristics of single phase two wires (1p2w), three phase three wires (3p3w,) and three phase four wires(3p4w) supplies, including voltage, frequency, current, power ,active and reactive energy, imported or exported. Energy is measured in terms of kWh, kVArh. Maximum demand current can be measured over preset periods of up to 60 minutes. In order to measure energy, the unit requires voltage and current inputs in addition to the supply required to power the product.

SDM630-Modbus V2 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.

Start-up Screens

1		The first screen lights up all display segments and can be used as a display check
2		The second screen indicates the firmware installed in the unit and its build number.
3		The interface performs a self-test and indicates the result if the test passes.

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




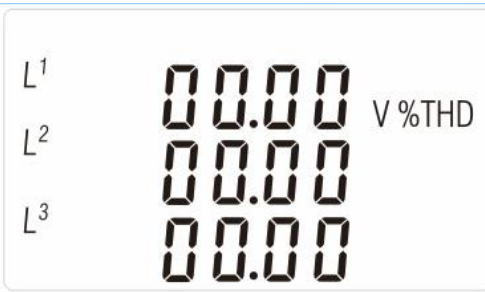
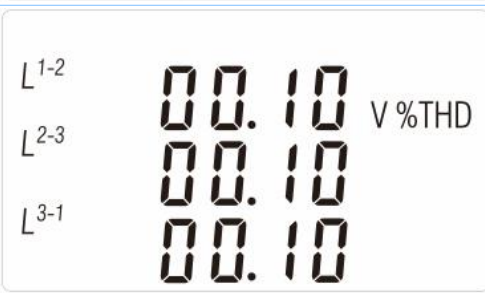

Measurements

The buttons operate as follows:

1		Selects the Voltage and Current display screens In Set-up Mode, this is the “Left” or “Back” button.
2		Select the Frequency and Power factor display screens In Set-up Mode, this is the “Up” button
3		Select the Power display screens In Set-up Mode, this is the “Down” button
4		Select the Energy display screens In Set-up mode, this is the “Enter” or “Right” button

Voltage and Current

Each successive pressing of the button selects a new range:

1-1	 <p>L¹ 000.0 L² 000.0 V L³ 000.0</p>	Phase to neutral voltages(3p4w)
1-2	 <p>L¹⁻² 380.0 L²⁻³ 380.0 V L³⁻¹ 380.0</p>	Phase to neutral voltages(3p3w)
2	 <p>L¹ 0.000 L² 0.000 A L³ 0.000</p>	Current on each phase
3-1	 <p>L¹ 00.00 V %THD L² 00.00 L³ 00.00</p>	Phase to neutral voltage THD%(3p4w)
3-2	 <p>L¹⁻² 00.10 V %THD L²⁻³ 00.10 L³⁻¹ 00.10</p>	Phase to neutral voltage THD%(3p3w)
4	 <p>L¹ 00.00 %THD L² 00.00 L³ 00.00</p>	Current THD% for each phase

Frequency and Power factor and Demand



Each successive pressing of the button selects a new range:




1		Frequency and Power Factor (total)
2		Power Factor of each phase
3		Maximum Power Demand
4		Maximum Current Demand

Power





Each successive pressing of the button select a new range:





1		Instantaneous Active Power in kW
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2		Instantaneous Reactive Power in kVAr
3		Instantaneous Volt-amps in KVA
4		Total kW, kVArh, kVA

Energy Measurements

Each successive pressing of the  button selects a new range:

1-1		Imported active energy in kWh
1-2		Exported active energy in kWh

2-1		Imported reactive energy in kVArh
2-2		Exported reactive energy in kVArh
3-1		Total active energy in kWh
3-2		Total reactive energy in kVArh

Set-up

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



Setting up is password-protected so you must enter the correct password (default '1000') before processing. If an incorrect password is entered, the display will show: Err













To exit setting-up mode, press  repeatedly until the measurement screen is restored.

Set-up Entry Methods




Some menu items, such as password, require a four-digit number entry while others, such as supply system, require selection from a number of menu options.


Menu Option Selection

- 1) Use the  and  buttons to select the required item from the menu. Selection does not roll over between bottom and top of list
- 2) Press  to confirm your selection
- 3) If an item flashes, then it can be adjusted by the  and  buttons. If not, there maybe a further layer.
- 4) Having selected an option from the current layer, press  to confirm your selection. The SET indicator will appear.
- 5) Having completed a parameter setting, press  to return to a higher menu level. The SET indicator will be removed and you will be able to use the  and  buttons for further menu selection.
- 6) On completion of all set-up, press  repeatedly until the measurement screen is restored.












Number Entry Procedure


When setting up the unit, some screens require the entering of a number. In particular, on entry to the setting up section, a password must be entered. Digits are set individually, from left to right. The procedure is as follows:

- 1) The current digit to be set flashes and is set using the  and  buttons
- 2) Press  to confirm each digit setting. The SET indicator appears after the last digit has been set.

3) After setting the last digit, press  to exit the number setting routine. The SET indicator will be removed.












Change password

1		<p>Use the  and  to choose the change password option</p>
2-1		<p>Press the  to enter the change password routine. The new password screen will appear with the first digit flashing</p>
2-2		<p>Use  and  to set the first digit and press  to confirm your selection. The next digit will flash.</p>
2-3		<p>Repeat the procedure for the remaining three digits</p>
2-4		<p>After setting the last digit, SET will show.</p>

Press  to exit the number setting routine and return to the Set-up menu. SET will be removed

DIT Demand Integration Time

This sets the period in minutes over which the current and power readings are integrated for maximum demand measurement. The options are: 0, 5, 8, 10, 15, 20, 30, 60 minutes

1		<p>From the set-up menu, use  and  buttons to select the DIT option. The screen will show the currently selected integration time.</p>
2-1		<p>Press  to enter the selection routine. The current time interval will flash</p>
2-2		<p>Use  and  buttons to select the time required.</p>
2-3		<p>Press  to confirm the selection. SET indicator will appear.</p>
<p>Press  to exit the DIT selection routine and return to the menu.</p>		





Backlit set-up

1		<p>The backlit lasting time is settable Default lasting time is 60minutes For example, if it's set as 5, the backlit will be off in 5minutes from the last time operation on the meter.</p>
2		<p>Press to enter the selection routine. The current time interval will flash The options can be: 0(always on),5,10,30,60,120minutes</p>
<p>Use and buttons to select the time required. Press to confirm the set-up,</p>		

Supply System

Use this section to set the type of power supply being monitored.

1		<p>From the Set-up menu, use and buttons to select the System option. The screen will show the currently selected power supply.</p>
2-1		<p>Press to enter the selection routine. The current selection will flash</p>
2-2		<p>Use and buttons to select the required system option: 1P2(W),3P3(W) ,3P4(W)</p>

2-3		 Press  to confirm the selection. SET indicator will appear.
<p>Press  to exit the system selection routine and return to the menu. SET will disappear and you will be returned to the main Set-up Menu</p>		

Pulse output











This option allows you to configure the pulse output 1. The output can be set to provide a pulse for a defined amount of energy active or reactive.

Use this section to set up the pulse output for:

Total kWh/ Total kVArh

Import kWh/Export kWh

Import KVArh/Export KVArh

1		<p>From the Set-up menu, use  and  buttons to select the Pulse output option.</p>
2-1		<p>Press  to enter the selection routine. The unit symbol will flash.</p>
2-2		<p>Use  and  buttons to choose kWh or kVArh.</p>
<p>On completion of the entry procedure, press  to confirm the setting and press  to return to the main set up menu.</p>		

Pulse rate

Use this to set the energy represented by each pulse. Rate can be set to 1 pulse per dFt/0.01/0.1/1/10/100kWh/kVArh.



(It shows 1 impulse = 10kWh/kVArh)










1		<p>From the Set-up menu, use and buttons to select the Pulse Rate option.</p>
2		<p>Press to enter the selection routine. The current setting will flash. Note: When it's dFt, it means 2.5Wh/VArh</p>
<p>Use and buttons to choose pulse rate. On completion of the entry procedure, press to confirm the setting and press to return to the main set up menu.</p>		

Pulse Duration

The energy monitored can be active or reactive and the pulse width can be selected as 200, 100(default) or 60ms.



(It shows pulse width of 200ms)

1-1		<p>From the Set-up menu, use  and  buttons to select the Pulse width option.</p>
1-2		<p>Press  to enter the selection routine. The current setting will flash.</p>
<p>Use  and  buttons to choose pulse width. On Completion of the entry procedure, press  to confirm the setting and press  to return to the main set up menu.</p>		




Communication








There is a RS485 port can be used for communication using Modbus RTU protocol. For Modbus RTU, parameters are selected from Front panel.

RS485 Address












(The range is from 001 to 247)

1		<p>From the Set-up menu, use  and  buttons to select the Address ID</p>
---	---	---

2-1		Press  button to enter the selection routine. The current setting will be flashing.
2-2		Use  and  buttons to choose Modbus Address(001 to 247)
On completion of the entry procedure, press  button to confirm the setting and press  button to return the main set-up menu.		

Baud Rate

1		From the Set-up menu, use  and  buttons to select the Baud Rate option.
2-1		Press  to enter the selection routine. The current setting will flash.
2-2		Use  and  buttons to choose Baud rate 2.4k, 4.8k, 9.6k, 19.2k, 38.4k
On completion of the entry procedure, press  to confirm the setting and press		










to return to the main set up menu.

Parity

1		<p>From the Set-up menu, use and buttons to select the Parity option.</p>
2-1		<p>Press to enter the selection routine. The current setting will flash.</p>
2-2		<p>Use and buttons to choose Parity (EVEN / ODD / NONE)</p>
<p>On Completion of the entry procedure, press to confirm the setting and press to return to the main set up menu.</p>		

Stop bits








1		<p>From the Set-up menu, use and buttons to select the Stop Bit option.</p>
---	--	---

2-1		Press  to enter the selection routine. The current setting will flash.
2-2		Use  and  buttons to choose Stop Bit (2 or 1)
On completion of the entry procedure, press  to confirm the setting and press  to return to the main set up menu.		

Note: Default is 1, and only when the parity is NONE that the stop bit can be changed to 2.

CLR

The meter provides a function to reset the maximum demand value of current and power.

1		From the Set-up menu, use  and  buttons to select the reset option.
2		Press  to enter the selection routine. The MD will flash.
Press  to confirm the setting and press  to return to the main set up menu.		

Specifications

Measured Parameters

The unit can monitor and display the following parameters of a single phase two wire(1p2w), three phase three wire(3p3w) or four phase four wire(3p4w) supply.

Voltage and Current

Phase to neutral voltages 100 to 289V a.c. (not for 3p3w supplies)

Voltages between phases 173 to 500V a.c. (3p supplies only)

Percentage total voltage harmonic distortion (THD%) for each phase to N (not for 3p3w supplies)

Percentage voltage THD% between phases (three phase supplies only)

Current THD% for each phase

Power factor and Frequency and Max. Demand

Frequency in Hz

Instantaneous power:

Power 0 to 99999 W

Reactive Power 0 to 99999 VAR

Volt-amps 0 to 99999 VA

Maximum demanded power since last Demand reset Power factor

Maximum neutral demand current, since the last Demand reset (for 3p4w supply only)

Energy Measurements

- Imported active energy 0 to 999999.99 kWh
- Exported active energy 0 to 999999.99 kWh
- Imported reactive energy 0 to 999999.99 kVAh
- Exported reactive energy 0 to 999999.99 kVAh
- Total active energy 0 to 999999.99 kWh
- Total reactive energy 0 to 999999.99 kVAh

Measured Inputs

Voltage inputs through 4-way fixed connector with 25mm² stranded wire capacity. single phase two wire(1p2w), three phase three wire(3p3w) or four phase four wire(3p4w) unbalanced. Line frequency measured from L1 voltage or L3 voltage.

Accuracy

- Voltage 0.5% of range maximum
- Current 0.5% of nominal
- Frequency 0.2% of mid-frequency
- Power factor 1% of unity (0.01)
- Active power (W) ±1% of range maximum
- Reactive power (VAR) ±1% of range maximum
- Apparent power (VA) ±1% of range maximum
- Active energy (Wh) Class 1 IEC 62053-21
- Reactive energy (VARh) ±1% of range maximum
- Total harmonic distortion 1% up to 31st harmonic
- Temperature co-efficient Voltage and current = 0.013%/°C typical
Active energy = 0.018%/°C, typical
- Response time to step input 1s, typical, to >99% of final reading, at 50 Hz.

Interfaces for External Monitoring

Three interfaces are provided:

- an RS485 communication channel that can be programmed for Modbus RTU protocol
- an Pulse output(Pulse 1) indicating real-time measured energy.(configurable)
- an Pulse output(Pulse 2) 400imp/kWh

The Modbus configuration (Baud rate etc.) and the pulse output assignments (kW/kVArh, import/export etc.) are configured through the Set-up screens.

Pulse Output

The unit provides two pulse outputs. Both pulse outputs are passive type.

Pulse output 1 is configurable. The pulse output can be set to generate pulses to represent total / import/export kWh or kVarh.

The pulse constant can be set to generate 1 pulse per:

dFt = 2.5 Wh/VArh

0.01 = 10 Wh/VArh

0.1 = 100 Wh/VArh

1 = 1 kWh/kVArh

10 = 10 kWh/kVArh

100 = 100 kWh/kVArh

Pulse width: 200/100/60ms

Pulse output 2 is non-configurable. It is fixed up with active kWh. The constant is 400imp/kWh.

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 *nnn* – 3-digit number, 001 to 247

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

Reference Conditions of Influence Quantities

Influence Quantities are variables that affect measurement errors to a minor degree. Accuracy is verified under nominal value (within the specified tolerance) of these conditions.

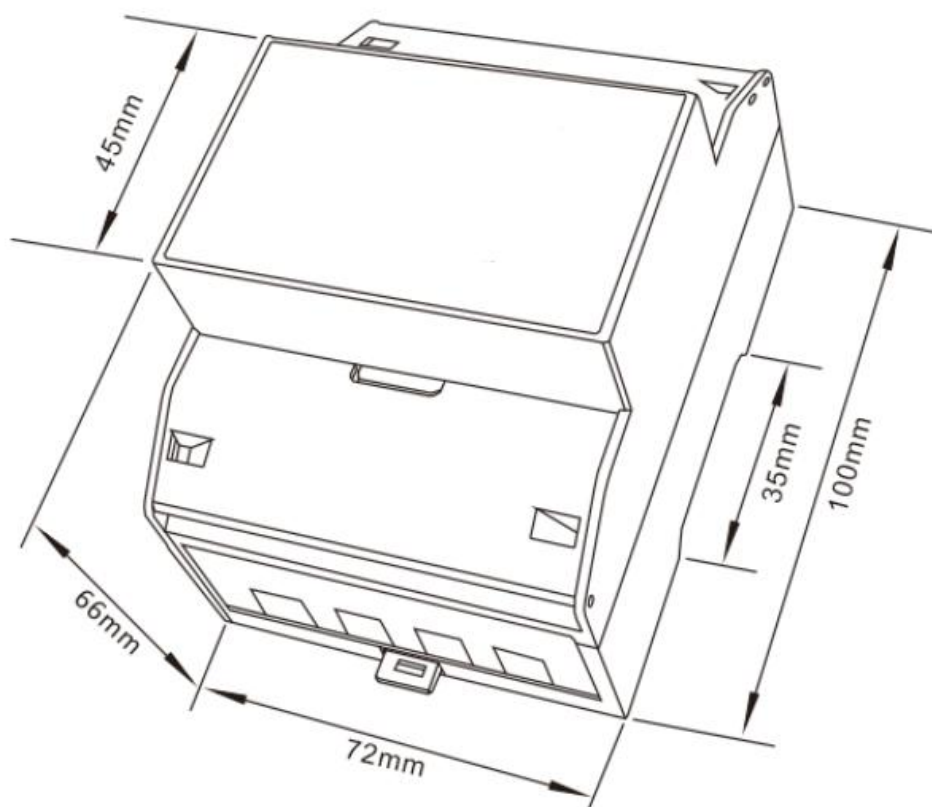
- Ambient temperature 23°C ±1°C
- Input frequency 50 or 60Hz ±2%
- Input waveform Sinusoidal (distortion factor < 0.005)
- Magnetic field of external origin Terrestrial flux

Environment

- Operating temperature -25°C to +55°C*
- Storage temperature -40°C to +70°C*

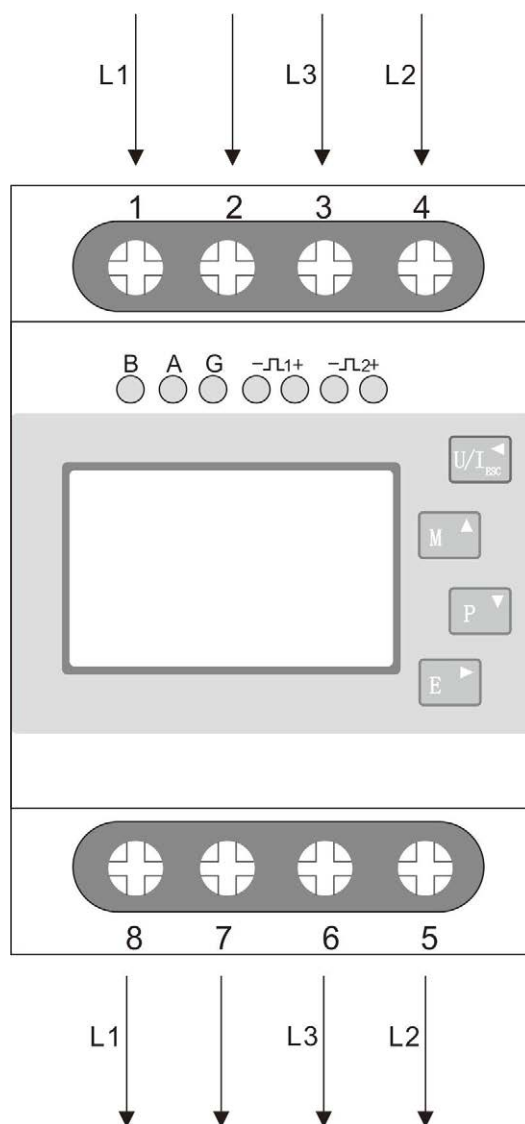
- Relative humidity 0 to 90%, non-condensing
- Altitude Up to 2000m
- Warm up time 1 minute
- Vibration 10Hz to 50Hz, IEC 60068-2-6, 2g

Dimensions

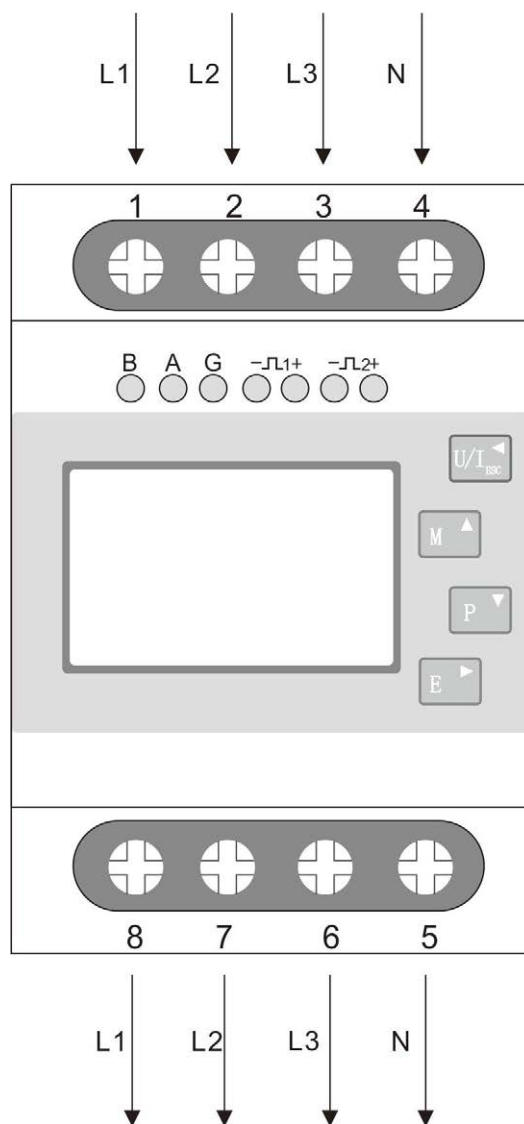


Wiring diagram

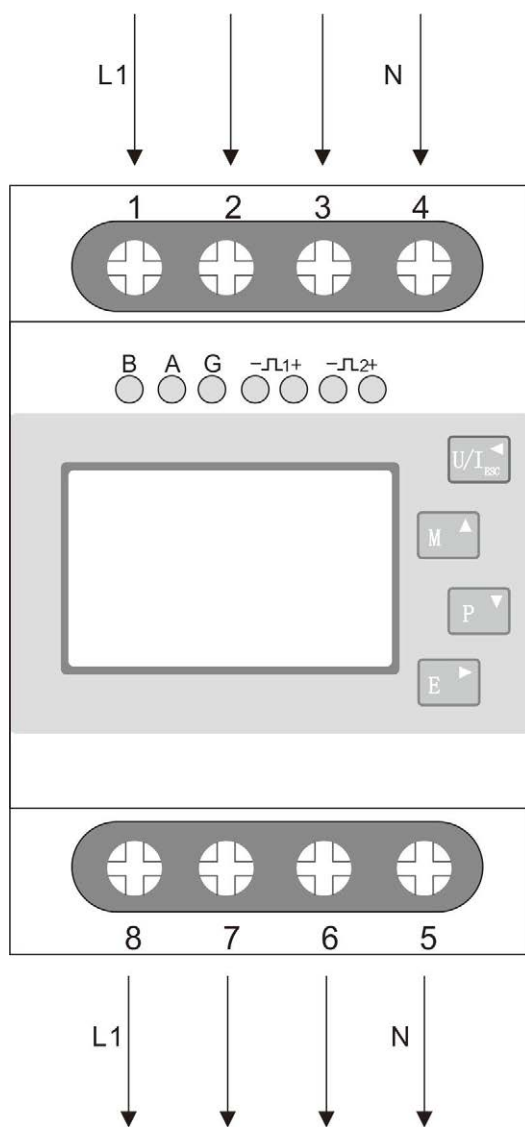
- Three Phase Three Wires:



- Three Phase Four Wires:



- Single Phase two Wires:



Certificate of Compliance



No. 01170302.JEE0C36

Certificate's Holder: Jiaxing Eastron Electronic Instruments Co., Ltd.
 Building 4, No. 1369 Chengnan Rd., Jiaxing, Zhejiang, China

Certification ECM Mark:



Product: Smart Energy Meter
Model(s): SDM120 series, SDM220 series, SDM230 series, SDM320 series, SDM530 series, SDM630 series, SDM630-2C series, SDM72 series, Smart X203 series, Smart X48 series, Smart X72 series, Smart X96 series, Smart X835 series, Smartconnect X835 series, FEM-3 series

Verification to: Standard: EN61010-1:2010, EN6132G-1:2013

related to CE Directive(s):
 2014/35/EU (Low Voltage)
 2014/30/EU (Electromagnetic Compatibility)

Remark: The product(s) has been verified on a voluntary basis. The product(s) satisfies the requirements of the Certification Mark of ECM, in reference to the above listed Standard(s). The above Compliance Mark can be affixed on the product(s) accordingly to the ECM regulation about its release and its use. The regulation can be found at www.entecerma.it. This Certificate of Compliance can be checked for validity at www.entecerma.it

This verification doesn't imply assessment of the production of the product(s).

Additional information, clarification about the CE Marking:



We attest that a TCF for the CE Marking process is in place. Whereas the Manufacturer is Responsible to start the **CE Marking Certification Procedure** and to perform all the necessary activities, as required by the Directive before placing the CE Mark on the product(s).

Date of issue 02 March 2017

Expiry date 01 March 2022

Chief Manager
 Marco Morino

Deputy Manager
 Amanda Payne

Ente Certificazione Macchine Srl



SGS

EC Type Examination Certificate Number: **0120/SGS0151**

Jiaxing Eastron Electronic Instrument Co., Ltd.

No. 1369, Chengnan Road,
Jiaxing,
Zhejiang,
China,
314001.

Instrument Identification:
SDM630 100A Series Version 1
SDM630 100A Series Version 2

Instrument Traceable Number
0120/SGS0151

Polyphase, Active Import/ Export (kWh), Indoor, Electricity Meter

has been assessed and certified as meeting the requirements of

EC Directive 2014/32/EU

Measuring Instruments Annex II Module B

It is certified that the manufacturer's technical design and specimen for the above instrument has been examined and, based on the evidence submitted, it is considered that the instrument conforms to the requirements of Annex V of EC Directive 2014/32/EU

This certificate must be used in conjunction with a certificate covering the product verification as required in Annex II, Module D or Annex II Module F

This certificate is valid for 10 years from 6th January 2015 to 5th January 2025
Issue 2

Certification is based on report number(s) SHES130800321501 dated 26th December 2014
EMA198278/1 dated 26th December 2014
EMA198278/2 dated 21st June 2016

Authorised Signature

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SGS

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EC-Type Examination Certificate Number:

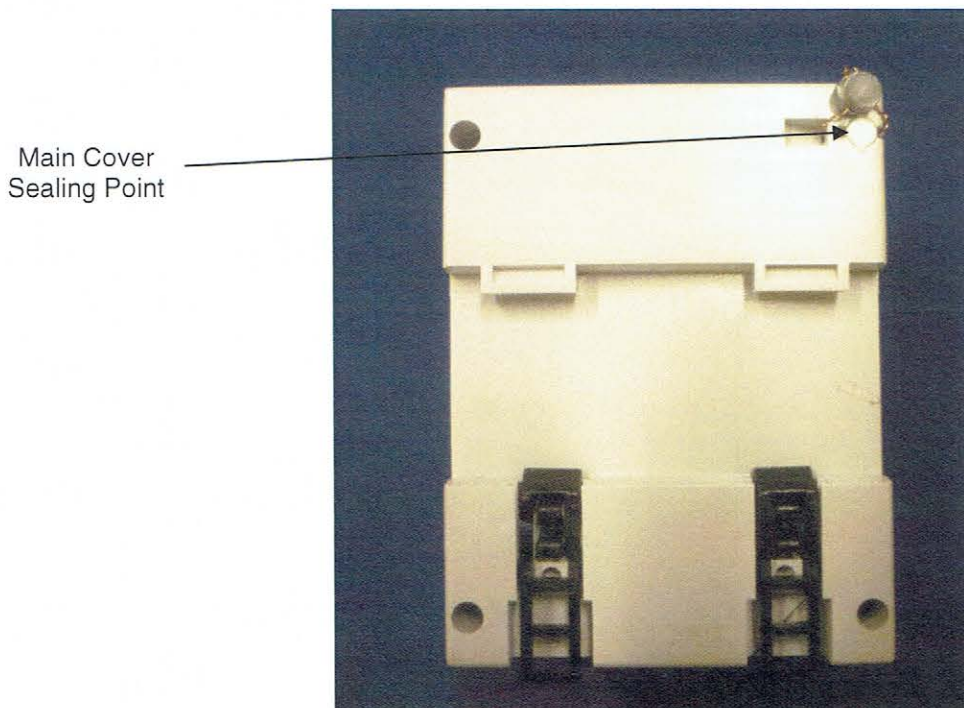
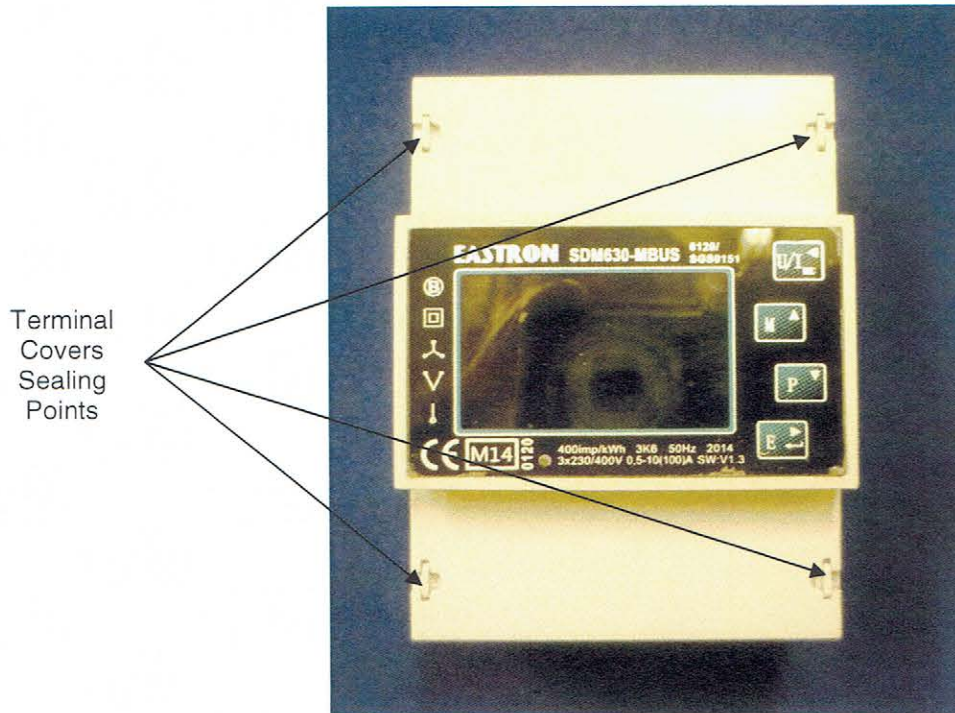
0120/ SGS0151

Issue Number: 2

Dated: 21st July 2016**1. Technical Data**

Manufacturer	Jiaxing Eastron Electronic Instruments Co., Ltd.
Meter Types Version 1 and Version 2	SDM630-Standard SDM630-MT SDM630-MODBUS SDM630-Mbus SDM630-Pulse
Voltage Rating (U_n)	3x230/400V
Current Rating (I_{min} – I_{ref} (I_{max}))	0.5-10(100)A
Frequency (F_n)	50Hz
Active Accuracy Class (kWh)	A or B (kWh)
Type of circuit	3p4w, 3p3w, 1p2w
Temperature Range	-25°C to +55°C
Software Version No. Identification Location	V1.3 Nameplate
Bill Of Materials Version 1 No.'s	SDM630-Standard V2.1 SDM630-MT V2.1 SDM630-MODBUS V2.1 SDM630-MBUS V2.1 SDM630-Pulse V2.1
Bill Of Materials Version 2 No.'s	SDM630-Standard V1.4 SDM630-MT V1.4 SDM630-MODBUS V1.4 SDM630-MBUS V1.4 SDM630-Pulse V1.4
IP Rating	IP51
Insulation Protective Class	Class II
LED Pulse Constant	400imp/ kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	1 x Wire & Crimp
Integrity of meter	Inaccessible without breaking seals
Intended Location of the Meter	Indoor
Type of Register	LCD
Location of Distributors Name and Address	On accompanying documentation

2. Photograph of Meter and Sealing Plan



Photographs of Original Meter Casing – SDM630 V1

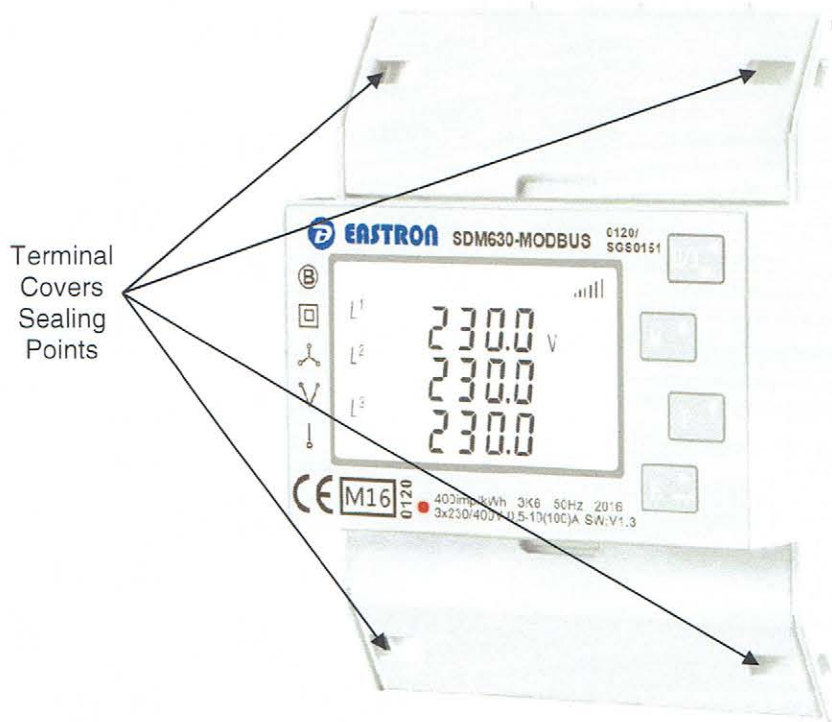
SGS

EC-Type Examination Certificate Number:

0120/ SGS0151

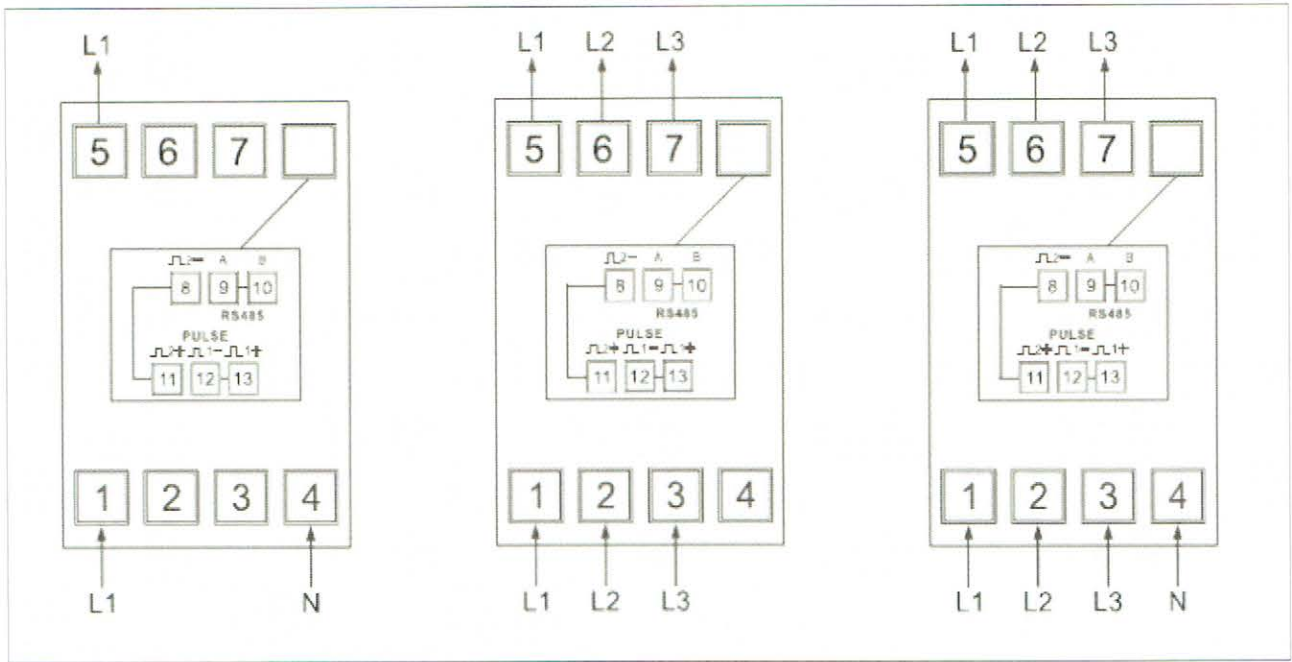
Issue Number: 2

Dated: 21st July 2016

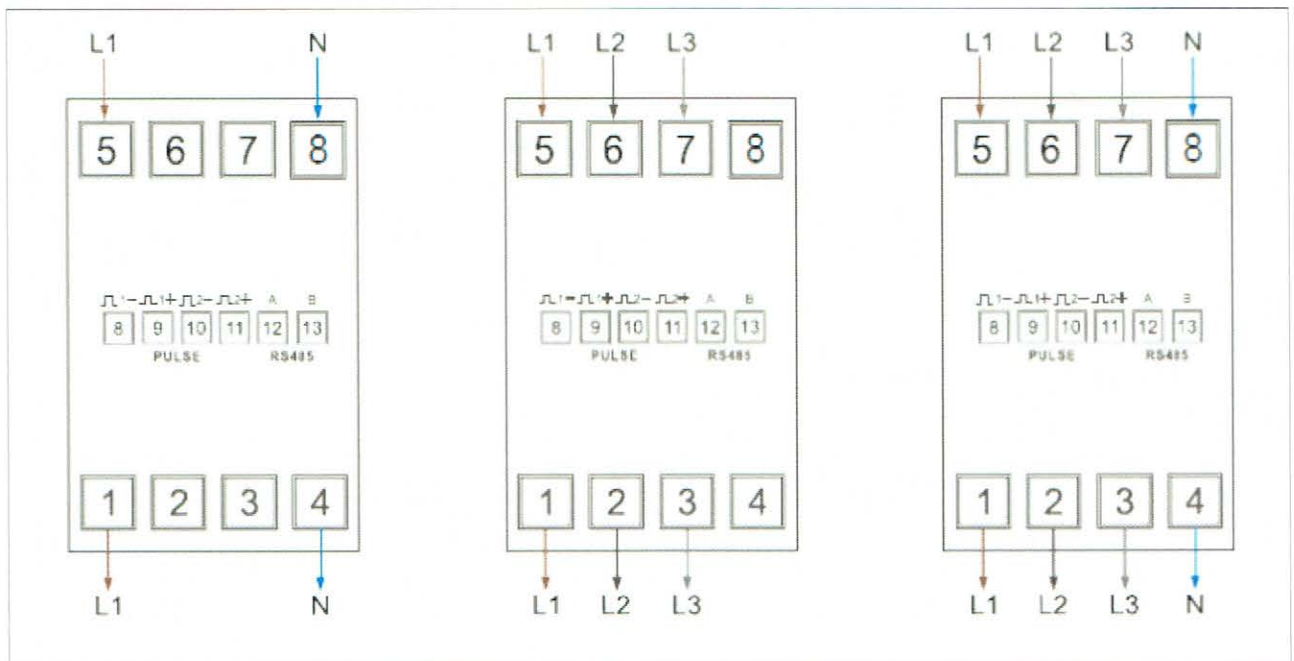


Photograph of Redesigned Meter Case – SDM 630 V2

3. Wiring Diagrams



SDM 630 V1 Wiring Diagram



SDM 630 V2 Wiring Diagram



EC-Type Examination Certificate Number:


0120/ SGS0151

Issue Number: 2

Dated: 21st July 2016

4. Influence factors for temperature, frequency and voltage

		Influence Factors for Temperature. Frequency & Voltage					
Current	PF Cos	-25	-10	5	30	40	55
I _{min}	1.0	0.46	0.34	0.14	0.18	0.29	0.52
I _{tr}	1.0	0.57	0.39	0.19	0.11	0.24	0.46
10I _{tr}	1.0	0.64	0.45	0.25	0.06	0.20	0.42
I _{max}	1.0	0.75	0.60	0.44	0.26	0.23	0.30
I _{tr}	0.5ind	0.56	0.40	0.20	0.14	0.24	0.49
10I _{tr}	0.5ind	0.60	0.43	0.23	0.11	0.23	0.45
I _{max}	0.5ind	0.62	0.47	0.30	0.05	0.10	0.28
I _{tr}	0.8cap	0.65	0.46	0.27	0.11	0.21	0.43
10I _{tr}	0.8cap	0.62	0.44	0.24	0.12	0.24	0.46
I _{max}	0.8cap	0.69	0.55	0.37	0.16	0.14	0.28
L1							
I _{tr}	1.0	0.84	0.60	0.32	0.08	0.20	0.48
10I _{tr}	1.0	0.97	0.71	0.46	0.10	0.13	0.36
I _{max}	1.0	0.93	0.70	0.48	0.16	0.06	0.25
I _{tr}	0.5ind	0.60	0.32	0.09	0.25	0.42	0.66
10I _{tr}	0.5ind	0.79	0.56	0.29	0.12	0.27	0.53
I _{max}	0.5ind	0.84	0.63	0.40	0.10	0.11	0.33
L2							
I _{tr}	1.0	0.40	0.26	0.09	0.08	0.16	0.37
10I _{tr}	1.0	0.42	0.31	0.19	0.08	0.17	0.36
I _{max}	1.0	0.44	0.36	0.25	0.08	0.08	0.23
I _{tr}	0.5ind	0.20	0.09	0.24	0.27	0.35	0.53
10I _{tr}	0.5ind	0.43	0.30	0.17	0.10	0.20	0.40
I _{max}	0.5ind	0.46	0.35	0.25	0.09	0.06	0.20
L3							
I _{tr}	1.0	0.55	0.37	0.15	0.14	0.30	0.51
10I _{tr}	1.0	0.51	0.33	0.11	0.20	0.33	0.56
I _{max}	1.0	0.55	0.39	0.21	0.10	0.21	0.52
I _{tr}	0.5ind	0.41	0.24	0.06	0.32	0.46	0.66
10I _{tr}	0.5ind	0.41	0.22	0.04	0.31	0.46	0.67
I _{max}	0.5ind	0.43	0.30	0.34	0.17	0.30	0.53


	EC-Type Examination Certificate Number:	
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During the type approval examination the influence factors for temperature, frequency and voltage are determined per load point. The table above represents the sum of the square values per load, determined via the following formula:-

$$\delta e(T, U, f) = \sqrt{(\delta e^2(T, I, \cos\phi) + \delta e^2(U, I, \cos\phi) + \delta e^2(f, I, \cos\phi))}$$

where

- $\delta e(T, I, \cos\phi) =$ Additional error due to variation of the temperature at the same load
- $\delta e(U, I, \cos\phi) =$ Additional error due to variation of the voltage at the same load
- $\delta e(f, I, \cos\phi) =$ Additional error due to variation of the frequency at the same load


	EC-Type Examination Certificate Number:	
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5. Annex of Variants

Product Variant Identification Details of both Version 1 and Version 2:

Type Designation	Description of meter
SDM630-MT:	Three phase, multi-function, multi-tariff, 2 pulse outputs and 1 RS485 Modbus communication port
SDM630-Modbus:	Three phase, multi-function, 2 pulse outputs and 1 RS485 communication port
SDM630-Mbus:	Three phase, multi-function, 2 pulse outputs and 1 Mbus communication port
SDM630-Pulse:	Three phase, multi-function, 2 pulse outputs
SDM630-Standard:	Three phase, 2 pulse outputs and 1 RS485 communication port

Modifications to the meter(s) described according to approval No.**0120/ SGS0151** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).

	EC-Type Examination Certificate Number:	
	0120/ SGS0151	
	Issue Number: 2	Dated: 21 st July 2016

6. Document Revision History

Issue	Date	Comments
1	06/01/2015	Initial Issue
2	21/06/2016	Addition of redesigned meter case with new terminal layout and wiring diagrams. Updated EC Directive to 2014/32/EU

Certificate Number GB14/91415

The management system of

Zhejiang Eastron Electronic Instruments Co., Ltd

No. 1369 Chengnan Road, Jiaxing, Zhejiang, China

has been assessed and certified as meeting the requirements of

Directive 2014/32/EU

Note: This Directive was previously known as 2004/22/EC
Module D

For the following activities

Scope of registration appears on page 2 of this certificate

This certificate is valid from 16 May 2017 until 16 May 2020 and remains valid subject to satisfactory surveillance audits.
Re certification audit due before 14 March 2020
Issue 3. Certified since 16 May 2014



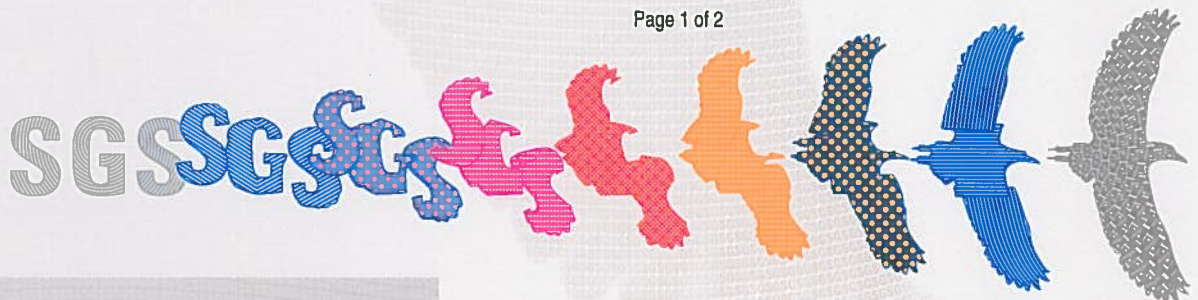
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Zhejiang Eastron Electronic Instruments Co., Ltd

Directive 2014/32/EU

Note: This Directive was previously known as 2004/22/EC

Module D

Issue 3

Manufacture of electricity meters listed below

Model Number	Instrument Traceable Number
SDM120*	0120/SGS0141
SDM 630M CT Series	0120/SGS0142
SDM220 Series	0120/SGS0172
SDM230 Series	0120/SGS0206
Smart X96-5	0120/SGS0288
SDM72D	0120/SGS0213
SDM72DR	0120/SGS0213
SDM72Bi	0120/SGS0213
SDM630 100A Series Version 1	0120/SGS0151
SDM630 100A Series Version 2	0120/SGS0151