



HIGHLIGHTS

SP12CH SINGLE PHASE 12 CHANNEL SMART METER is a Single Phase Energy Meter that measures 12 different loads (12 in 1 energy meter) with Modbus RTU enabled.

Supplied with 100A Split-Core Clip On CTs (1 no x 12 channel).

It is compliant to IEC 62053-21 "Static meters for active energy (Class 1 & 2)" and IEC 62053-23 "Static meters for reactive energy (Class 2 & 3)".

FEATURES

- Each of the 12 channel has an independent high-precision energy metering chip, to ensure metering accuracy and reliability.
- 4 quadrant energy measurement; each channel can measure both import energy and export energy with nett energy calculations.
- Electrical parameters measured by each channel includes V, I, F, PF, kW, kVAr, kVA.
- Able to record and alarm events like undervoltage, overvoltage, voltage spike, phase loss, etc.
- Reading closing date can be set to enable automatic bill settlement for each month.
- Timed data freeze, hourly data freeze and daily data freeze. Meter can freeze data of energy, etc. There are 30 timed freeze, 254 hourly freeze, 62 daily freeze.
- LCD digital display, loop display of various parameter (of each channel).
- Data from meter can be read by handheld unit (IR port) and thru RS485 interface.
- Compliant to standard 35mm din rail installation.
- Accuracy Class: Active: 0.5S, 1, Reactive: 1, 2
- Clock Accuracy: $\leq 0.5s/day$ (23°C), variation with temperature change $< 0.1s/day$
- Connection Type: by CT
- Working Voltage: DC 40V~273V, AC 40V~264V
- Voltage Range (no phase loss)

	Function	Parameter		
Telemetry	Voltage	L1, L2, L3, L4, L5, L6, L7, L8, L9, L10, L11, L12		
	Current	L1, L2, L3, L4, L5, L6, L7, L8, L9, L10, L11, L12		
	Active power	L1, L2, L3, L4, L5, L6, L7, L8, L9, L10, L11, L12		
	Power factor	L1, L2, L3, L4, L5, L6, L7, L8, L9, L10, L11, L12		
	Frequency	L1, L2, L3, L4, L5, L6, L7, L8, L9, L10, L11, L12		
	Active energy	L1, L2, L3, L4, L5, L6, L7, L8, L9, L10, L11, L12		
Remote Control	Clock synchronization	The smart meter can be remotely calibrated through the RS485 communication interface		
Alert	Voltage alarm	Low voltage, High voltage, Voltage spike, Phase failure, Ac input power failure alarm		
	Lighting arrester alarm	Lightning arrester failure alarm, lightning protection air circuit breaker disconnection alarm		
I/O	Input	6 dry contact inputs	1 channel : mains switch status	Normally closed, failed open
			2 channels : oil engine switch status	Normally closed, failed open
			3 channels : Lightning arrester failure	The default is normal open, failure closed, the state before leaving the factory can
			4 channels : air open state of the arrester	Normally closed, failed open
			5 channels, 6 channels	Reserved
	Relay output	1 relay output	Automatic	Mains power failure: closed Mains power: disconnect
Manual			Key setting	
Communication	RS485	1 channel		
Pulse	Active pulse	Active pulse output of 1~12 loops		
Infrared	Infrared communication	38K modulation baud rate 1200bps		

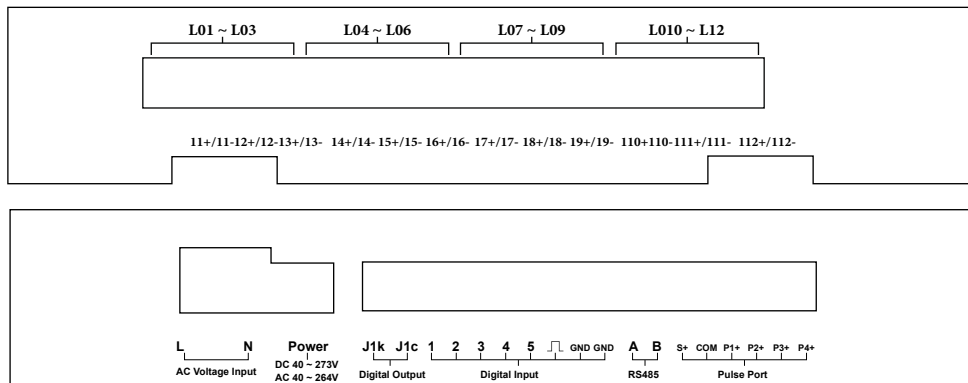
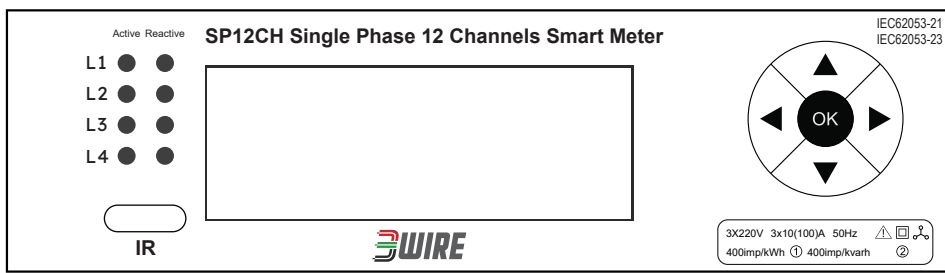
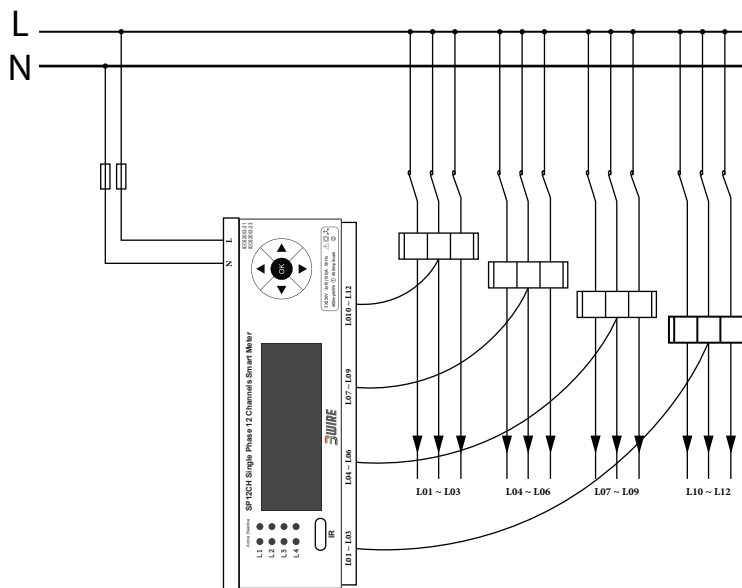
Specified Operation Voltage	0.3Un~1.1Un	
Extended Operation Voltage	0.15Un~1.15Un	
Working Voltage Limit	0.0Un~1.15Un	

- Frequency: 50Hz
- Power Consumption (nominal condition)

Basic Current	<10A	≥10A
Voltage Circuit of Each Phase	≤1.5W, 6VA	≤1.5W, 6VA
Current Circuit of Each Phase	≤0.2VA	≤0.4VA

- Temperature & Humidity: 23°C±2°C & RH 40% ~ 60%
- Weight: 350g

• Connection Diagram



• Dimension:

