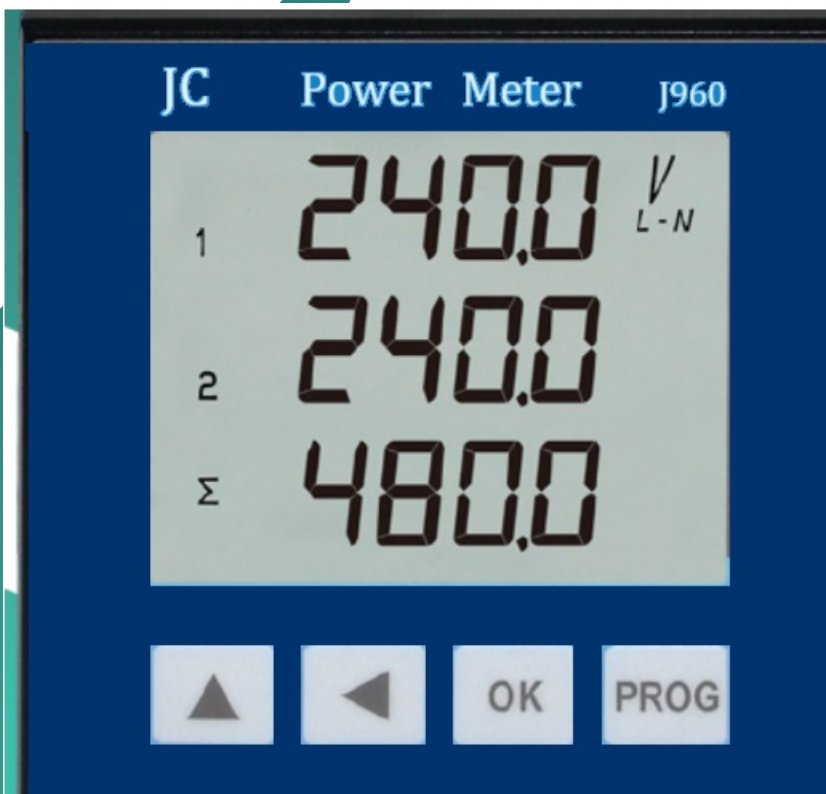
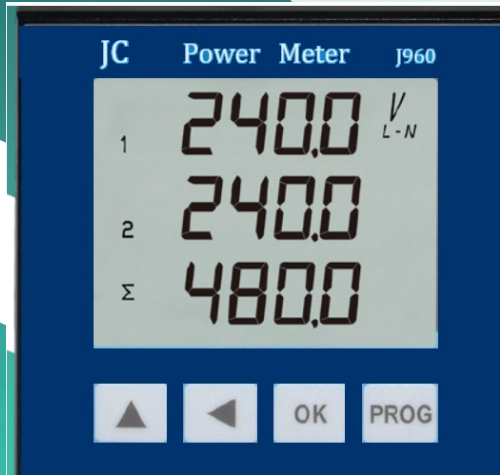




960

J960 Power Meter



Benefits

- User-friendly
- Cost-effective
- Quick installation
- Light and short depth
- Quick setup parameters
- Energy-saved protection mode

Features

- True RMS measurement
- Dual energy measurement
- Installation without using mounting clips
- THD measurement up to 31st harmonics
- Measurement in 1P/3P3W/3P4W systems
- Actual demand/max. demand in watt & current
- Modbus RS485 communication or pulse output
- ON Hour indication as the auxiliary supply being powered on

Option

- G (generator) sensing signal at digital input (status detect)
- G (generator) sensing signal at (18-60V DC/ 80-300V AC)
- Dual energy measurement in utility register & generator register

Certification

- CE

Specifications:

Measured Parameters and Accuracy:

Display	SYS	L1	L2	L3	Accuracy
L-L volt	● *	●	●	●	0.2%
L-N volt	● *	●	●	●	0.2%
Current	● *	●	●	●	0.2%
Active power	●	●	●	●	0.5%
Reactive power	●	●	●	●	0.5%
Apparent power	●	●	●	●	0.5%
Power factor	● *	●	●	●	0.5%
Frequency	●				0.05Hz
Import (KWH)	●				IEC62053-22 Class 0.5S
Ind(KVarH)	●				IEC62053-23 Class 2
Export (KWH)	●				IEC62053-22 Class 0.5S
Cap (KVarH)	●				IEC62053-23 Class 2
THD	● *	●	●	●	2%
Demand	●				0.5%

* Average Value

Accuracy : F.S.%

Characteristics

Dielectric strength	IEC 60688, AC 2.3KV 1 min. between input/output/power AC 3KV 1 min. between all terminals/case
Operating temperature	0 ~ 60℃
Storage temperature	-10 ~ 70℃
Temperature coefficient	≤100PPM/℃
Max. humidity	95%
IP Enclosure	IP 50 (Front plate) IP 20 (Rear side)
Sampling time	1 sec.
Measurements	1 ϕ 2W, 1 ϕ 3W, 3 ϕ 3W, 3 ϕ 4W
Actual demand	Amp, Watt
Max.demand	Amp, Watt
Demand time of period	1 ~ 60 min.(programmable)
Total harmonic distortion	up to 31 st
Harmonic analysis	Volt, Amp

Measurement Accuracy

Current	0.2 %
Voltage	0.2 %
Active power	0.5 %
Reactive power	0.5 %
Apparent power	0.5 %
Power factor	0.5 %
Frequency	0.05Hz
Active energy (Import/Export)	(IEC 62053-22, class 0.5S)
Reactive energy (Ind/Cap)	(IEC 62053-23, class 2)
Harmonics	2 %
Demand (W,A)	0.5%

Accuracy Performance Range

Current range	0.2 ~ 120 %
Voltage range	0.6 ~ 120 %
Power & energy	Amp. 0.2 ~ 120%, Volt. 0.6 ~ 120 %
Power factor range	cosθ (sinθ) 0.5 ~ 1
Frequency range	45 ~ 65 Hz
Distortion level (THD)	from 10% to 120% (Volt) from 1% to 120% (Amp)

Input Voltage

Voltage range (line to line)	AC 3 ~ 520V
Voltage range (line to neutral)	AC 2 ~ 300V
Maximum overload	AC 750V
Input impedance	≥ 800KΩ
Input burden	≤ 0.1VA

Input Current

Current range	AC 5A (Standard) or 1A (Option)
Input burden	≤ 0.1VA
Isolation	Each phase, AC 600V
Starting current	0.2 % F.S.

Power Supply

Auxiliary power supply	AC/DC 85-265V DC 20-60V (Option)
Power consumption	≤4.5VA (Without RS 485) ≤5VA (With RS 485)
Frequency range	45 ~ 65HZ

Display Screen

Format	LCD white backlit
Character height	3 rows of 4 digits, 0.5", 13.0mm

Set-up/Memorized Value

Memory method	FRAM
Memory period	At least 20 years

Communication

Interface	RS 485
Protocol	MODBUS, RTU
Baud rate	1200 ~ 38400 programmable
Address	1 ~ 255 programmable
Data format	N.8.1, N.8.2, O.8.1, E.8.1
Parallel connection	Up to 32 meters

Electromagnetic compatibility (EMC)

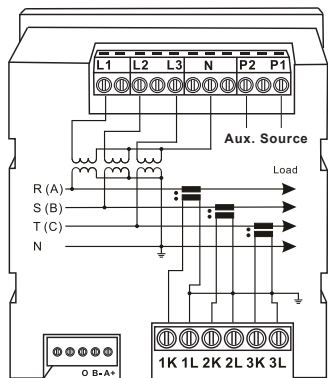
Electrostatic discharge	IEC 61000-4-2
Electromagnetic field immunity	IEC 61000-4-3
Electrical fast transient/burst immunity	IEC 61000-4-4
Surge immunity	IEC 61000-4-5
Immunity to conducted disturbances	IEC 61000-4-6
Power frequency magnetic field immunity	IEC 61000-4-8
Short interruptions and voltage variations immunity	IEC 61000-4-11
Harmonic current emissions	IEC 61000-3-2
Voltage changes, voltage fluctuations and flicker	IEC 61000-3-3

Standards

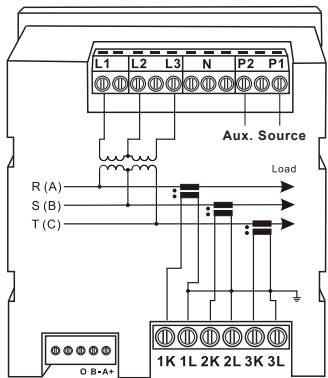
EN 61326-1	EN 55011	IEC 61000-4-3	IEC 61000-4-6
EN 61326-2	IEC 60529	IEC 61000-4-4	IEC 61000-4-8
EN 61000-3-2	IEC 62053-22	IEC 61000-4-5	IEC 61000-4-11
EN 61000-3-3	IEC 61000-4-2		

CONNECTIONS

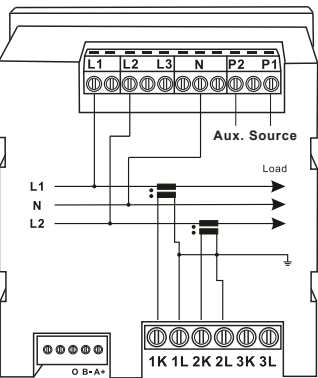
3 Phase 4 Wire(3 PTs, 3 CTs)



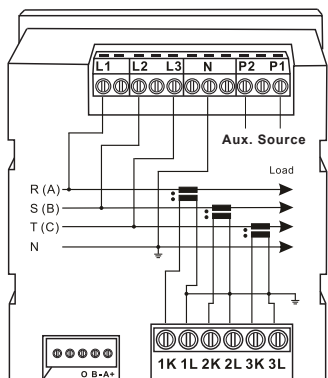
3 Phase 3 Wire(2 PTs, 3 CTs)



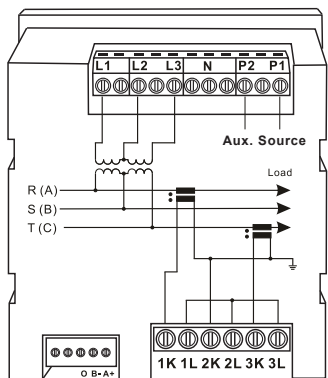
1 Phase 3 Wire(Only 2 CTs)



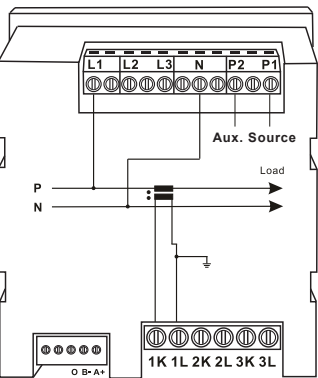
3 Phase 4 Wire(Only 3 CTs)



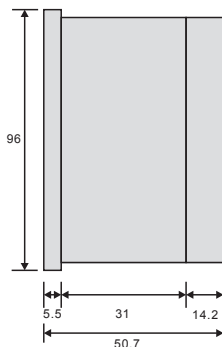
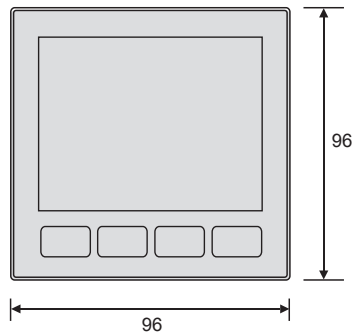
3 Phase 3 Wire(2 PTs, 2 CTs)



1 Phase 2 Wire(Only 1 CT)



DIMENSIONS (Unit: mm)



PANEL CUT-OUT

