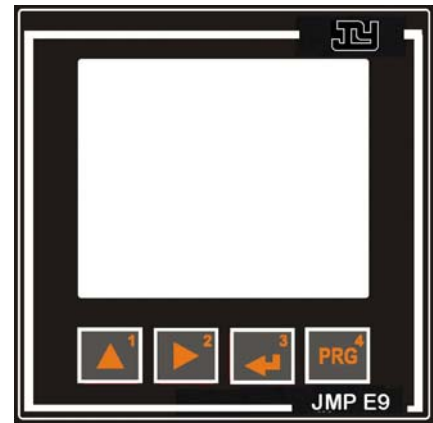


Excellent Precision of Power Monitoring



General Information

- True RMS measurement (TRMS)
- Class 0,5 measurement accuracy for effective energy (kWh, .. /1A/5A)
- Integrates G (generator) sensing signal at digital input (status detect) and voltage signal at 18-60VDC/80-300VAC.
- Harmonics analysis up to 31st order
- Dual source measurement for utility/ generator registers
- Incorporates RS485 (Modbus RTU) communication interface

Characteristics

- Type of measurement → Constant true RMS up to 31st harmonics
- Nominal voltage, 3 phase 4 wire grid (L-N, L-L) → 300/520VAC
3 phase 3 wire grid (L-N) → 300VAC
- Measurement in quadrants → 4
- Networks → TN, TT, IT
- Measurement in single / multi-phase networks → 1P2W , 1P3W ,3P3W and 3P4W

Technical date

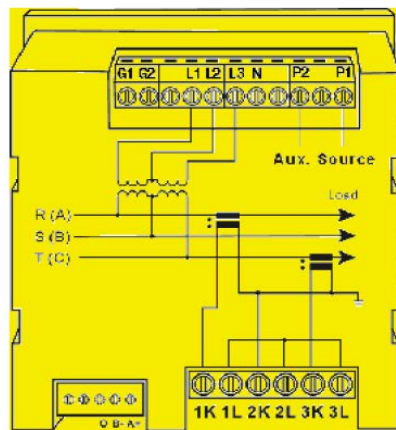
Voltage Input		Current Input	
Over voltage	750V	Rated current	5A, 1A (option)
Impedance	≥ 800K Ω	Over voltage	600VAC
Burden	≤ 0.1VA	Burden	≤ 0.1VA
Supply Voltage		Display and inputs / outputs	
Nominal ragne	85-265V AC/DC 20-60V DC (optional)	LCD display with backlight	Yes
Power consumption	≤ 5VA	Digital input / output (as switch or pulse outputs)	1
Communication		Environmental conditions	
Interface	RS485	Temperature range	Operation : 0- 60 °C
Protocol	Modbus RTU	Relative humidity	Max. 95%
Baud rate	Up to 38.4 kbps	Degree of pollution	2
Data format	N8.1, N8.2, O.8.1, E8.1	Installation position	User-defined
Mechanical properties		Standards	
Weight	280g	Standards	IEC60529, IEC61557-12, IEC 62052-11
Device dimensions (mm)	96 x 96 x 50.7		EN50470-1, EN50470-3
Protection class	IP50(front); IP20(rear) In Accordance with IEC 60529		ANSI C12,20
Electromagnetic compatibility			
Electrostatic discharge	IEC 61000-4-2	Immunity to conducted disturbances	IEC61000-4-6
Electromagnetic field immunity	IEC 61000-4-3	Power frequency magnetic field immunity	IEC61000-4-8
Electrical fast transient / burst immunity	IEC 61000-4-4	Harmonic current emissions	IEC61000-3-2
Surge immunity	IEC 61000-4-5	Voltage Variations , fluctuations and flicker	IEC61000-3-3
Short interruptions and voltage variations immunity			IEC 61000-4-11

Technical date

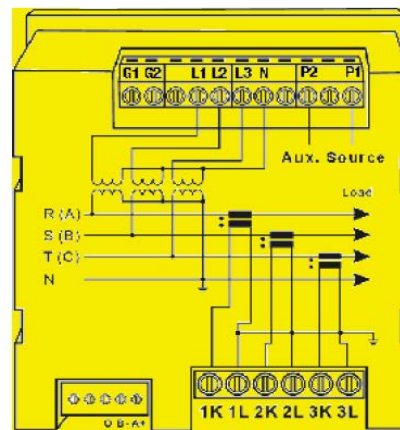
Measurement parameter	Display range	Accuracy
Voltage L-N / avg. per phase	0... 3000 kV	0.2 %
Voltage L-L / avg. per phase	0... 5200 kV	0.2 %
Current / avg. per phase	0... 50 kV	0.2 %
Frequency	45 .. 65 Hz	0.05 %
Effective power / Reactive power / Apparent power (total)	0..450 GW / 0..450 GVar / 0..450 GVA	0.5 %
Power factor / avg. per phase	0.00 ind .. 1.00 .. 0.00 cap	0.5 %
Effective energy, consumed / supplied	0.. 9999999.99 GWh	0.5 %
Reactive energy, inductive / capacitive	0.. 9999999.99 GVarh	2.0 %
Maximum demand (current , effective power)	0...450.0 GW ; 0...50 kA	0.5 %
Harmonics, 1-31 st order	Current , voltage , L1, L2, L3	2.0 %
Operating hour meter	0 ~ 9999 day / 23h / 59m	0.5 %

Connection Digrams

3-Phase 3-Wire System
(2 PTs, 2 CTs)



3 Phase 4 Wire System
(3 Pts, 3 CTs)



Dimension (mm)

Cut - out

