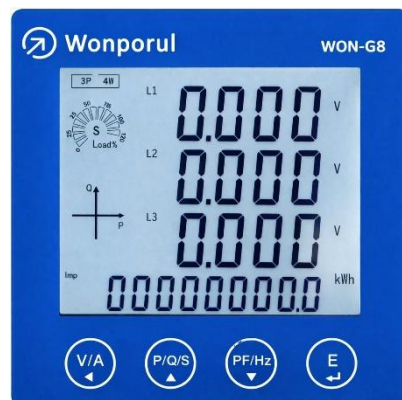


WON-G8

The WON-G8 is a high-performance three-phase multifunctional electrical measurement instrument integrating high-precision measurement, intelligent analysis, flexible expansion, and robust communication capabilities.

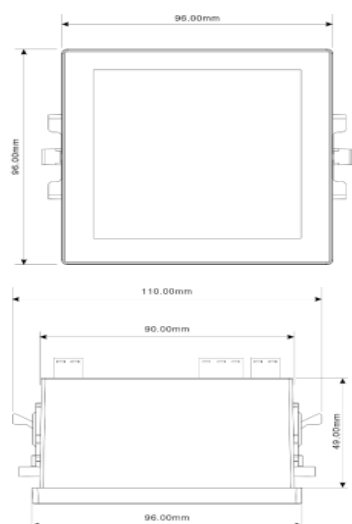
It is specifically designed for modern power monitoring, energy efficiency management, and power quality diagnostics. Its core strengths are built upon a leading hardware architecture: equipped with a high-speed 32-bit dual-core processor, it delivers exceptional computational power and real-time responsiveness.



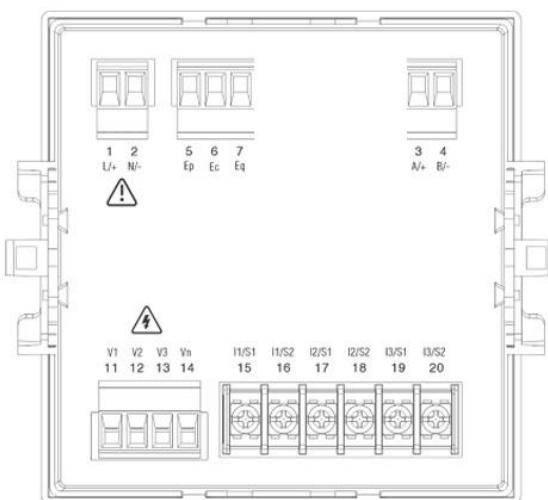
Product Features

Universal AC/DC Power Supply	Supports 85-265V AC/DC wide voltage input, compatible with India, GCC and International power grids.
Dual-Core Processor Architecture	32-bit dual-core processor handles data acquisition and computation separately, significantly boosting response speed.
High-Precision Metering Chip	Dedicated ASIC chip supports 128 points/cycle high-speed sampling with 0.5S-class accuracy
Wide Dynamic Current Range	120% overload current measurement, suitable for industrial impact load scenarios.
Low Power Consumption Design	Built-in sleep mode with standby power consumption <1W for energy efficiency and environmental protection.
Full Parameter Monitoring	Real-time measurement of over 50 electrical parameters including voltage, current, power, frequency, and energy
Bidirectional energy metering	Simultaneously records forward/reverse active, reactive, and apparent energy
Deep harmonic analysis	Supports diagnosis of voltage/current harmonic distortion rate (THD) from 2nd to 63rd order
Three-phase imbalance monitoring	Real-time calculation of voltage/current imbalance to warn of grid faults
Maximum Demand Statistics	Adjustable sliding window to record 15minute demand peaks
Large Multi-Character LCD	3.5-inch white-background black-character graphical FSTN LCD with wide viewing angle and high contrast for clear visibility
Industrial-Grade Protection	Industrial-grade triple protection, wide operating temperature range - 20°C to 70°C
EMC Electromagnetic Compatibility	Passed surge, burst pulse, electrostatic discharge, and withstand voltage tests; meets National Standard Level 3 protection
RS485 Communication	Standard Modbus-RTU/DTL645 (optional) protocols for SCADA/EMS platform integration
Full-Touch Key Design	Eliminates physical contacts to prevent mechanical wear, incorporates anti-misoperation algorithms with audible feedback
Ultra-slim chassis design	Eliminates physical contacts to prevent mechanical wear, incorporates anti-misoperation algorithms with audible feedback
UL94 V0-rated flame-retardant housing	Fire-resistant ABS material certified for non-dripping combustion

Dimensions



Wiring Diagram



Technical Specification

Parameters		Details
Type	Multifunction Energy meter	
Power supply	Power supply	AC/DC85...265V
	Total power consumption	≤3W
	Overvoltage protection	≥AC350V/DC460V, internal components, nonreplaceable
	Overcurrent protection	≥0.5A, internal components, non-replaceable
Voltage	Rated voltage	AC220V*3/400Vrms (±10%)
	Measurement range	Phase voltage: 10...400 Vrms; Line voltage: 10...690 Vrms
	Measure the starting value	10Vrms
	Measure the maximum value	Phase voltage: 450 Vrms; Line voltage: 780 Vrms;
Current	Rated current	x/1 or x/5A
	Measurement range	0.005-5A
	Measurement start value	0.005A
	Measurement maximum value	6A; 10 times maximum current sustained for 10 sec
Frequency	Rated frequency	50/60Hz
	Measurement range	45...65Hz
Communication	Type	RS485
	Communication Protocol	Modbus-RTU
	Communication Address	1-255
	Baud Rate	2400/4800/9600/19200bps
	Parity/Data/Stop Bits	Even/Odd/None; 8 data bits; 1 stop bit
Pulse parameters	Pulse constant	3200imp/kwh
Environment	Temperature	Operating temperature: -20°C to 70°C Storage temperature: -30°C to 80°C
	Humidity	0-90% RH, non-condensing, in environments free from corrosive gases
	Altitude	≤2000m
IP Rating		IP20

Compliant with standards	Basic error	Basic errors for current/voltage/power/power factor/frequency comply with GB/T 22264.1-2022 5.2.2 GB/T 22264.8-2022 7.1
	Harmonic error	Harmonic current/voltage error compliance GB/T 13729-2019 5.5.2/6.2.4
	Insulation performance	Insulation resistance/dielectric strength conforms to GB/T 13729-2019 5.6/6.7
	Electromagnetic Compatibility (EMC)	High-frequency interference test compliant GB/T 13729-2019 5.7.1/6.8.1 Fast Transient Pulse Group Test Compliant GB/T 13729-2019 5.7.2/6.8.2
		GB/T 17626.4-2018
		Surge interference test complies with GB/T 13729-2019 5.7.3/6.8.3 GB/T 17626.5-2019
Dimensions	96x96mm	
		Electrostatic discharge immunity test complies with GB/T 13729-2019 5.7.4/6.8.4 GB/T 17626.2-2018

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