

6250 Phase Angle Voltmeter

The 6250 PAV
(Phase Angle Voltmeter)
comes pre-configured for
most LVDT/RVDT tests,
and is ready to go —
right out of the box.

Quality and Reliability

XiTRON Technologies, founded in 1990, is the premier source of precision power testing and measuring equipment for industrial and consumer product development and manufacturing. XiTRON's sophisticated technology provides companies the edge in design verification and product manufacturability. XiTRON is ISO 9001:2008 certified.



The 6250 is the latest in XiTRON's 6000 family of high-performance, field-proven instruments that have been at work and trusted for over a decade. It offers an easy-to-use, pre-configured solution to slower, older, less user-friendly technology.

The 6250 continuously self-tests its internal circuitry ensuring the most accurate results possible and eliminating lengthy recalibrations. These minimal calibration requirements, coupled with field-proven superior reliability and a two-year warranty, make the cost of ownership low.

The instrument requires less set-up and maintenance than competing products, saving customers in manufacturing down time and loss of product throughput. And, because of its simplicity, it can be used by virtually anyone who wants to access results more quickly and more reliably in critical manufacturing and testing environments.

- > Wide bandwidth (0.1Hz – 100kHz)
- > 0.05% basic amplitude accuracy
- > 0.05° phase accuracy
- > Total & individual harmonic analysis
- > 100ppm accuracy, 1ppm resolution, frequency measurements
- > 4-line scrollable (50 lines total) display and 101 element nullmeter
- > Separate amplitude and frequency scaling and phase offset on all outputs
- > Phase sensitive or frequency selective voltage, current power and impedance measurements
- > Frequency response and distortion analysis
- > Front panel configuration lockout for dedicated production and QC test applications
- > Can be configured to emulate older analog PAVs that exist in the market

INDUSTRIES SERVED

- LVDT/RVDT Manufacturers • Synchro/Resolver Manufacturers
- Accelerometer and Gyroscope Manufacturers • Military • Aerospace

25
Years Industry
EXPERTISE

6250 Phase Angle Voltmeter

Test Like You
MEAN IT



Condensed Specifications

(Contact XITRON for complete specifications.)

VOLTAGE INPUTS

Amplitude: 0.05% + 0.005%/kHz for any single input and for matching between any inputs multiply by 2 for voltages in excess of 300Vpk

Phase: 0.05° + 0.005%/kHz between A and B on same range, + 0.0025°/kHz per range when differing ranges, + 0.05°/kHz between unpaired inputs, multiply by 2 for voltages in excess of 300Vpk

Noise: 20nV + 0.00001% of full-scale range/√Hz of measurement bandwidth

DC Offset: 100μV + 0.03% of full-scale range

Distortion: -80dB at any harmonic

Voltage Range: 10mV to 1000Vpk full scale (10Vrms max for 50Ω input) in 3:1 steps. Fixed or auto range

Trigger Level: Zero, TTL, ECL, CMOS, or Variable. 1% of input range accuracy Bandwidth: >2.5MHz or user-defined upper limit in the range of 5Hz to 100kHz (-3dB)

Configuration: Balanced Differential BNC input pairs with separate Guard binding posts. DC + AC or AC only coupling (0.1Hz cut off). Guard may be externally driven or internally connected to either input Lo

Impedance: 600kΩ to Guard from each input node, selectable 50Ω input impedance, in parallel with less than 35pF

Common Mode: Guard isolated from ground (100MΩ || 1000pF) for voltages <1000Vpk. Inputs may have voltages to Guard of up to the larger of the range full-scale value or 10V. CMRR referred to Guard is >80db for frequencies up to 10kHz, decreasing linearly to >60dB at 100kHz. CMRR referred to ground is >140dB at DC to 10kHz, decreasing linearly to >100dB at 100kHz

CURRENT INPUTS

Current inputs are as voltage inputs with an internal current shunt, yielding full-scale current ranges of up to 300mA peak in 3:1 steps. Maximum burden is 250mV External shunts may optionally be used on the voltage inputs to extend the current ranges up to 20A RMS

PHYSICAL

Power: 80 – 265 Vrms autoselect, 40 – 400 Hz @ 25VA max

Size: 7”h x 17”w x 14”d

Weight: 20 lbs

Operating Range: 0°C to 50°C, less than 85% RH at 40°C (non-condensing)

Storage Range: -30°C to +65°C, less than 95% RH at 40°C (non-condensing)

WARRANTY

Two Years

ORDERING INFORMATION

PART #	DESCRIPTION
822-6250	Two-Input Phase Angle Voltmeter
822-AIO	12 Channel Analog Output, 16 Channel Digital Output
RE	Rack Adapter Kit
UG6250	Additional 6250 Operating Manual

All 6250 instruments have IEEE488, RS232 and Parallel Printer Interfaces as standard.

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TECHNOLOGIES

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CERTIFIED
ISO 9001:2008



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