

Meridian™ Ultra Portable Power Quality Analyzer

FOR POWER QUALITY, LOAD STUDIES, AND FLICKER ANALYSIS AT POWER PLANTS, SUBSTATIONS, AND OTHER FACILITIES



POWER QUALITY ANALYZER

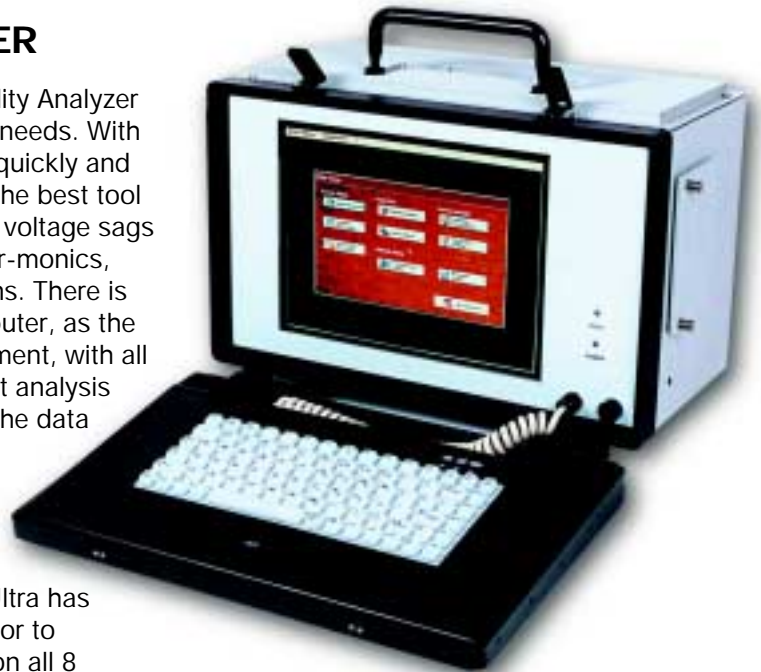
The AMETEK Meridian Ultra Power Quality Analyzer is the one tool for all your power quality needs. With the ability to diagnose power problems quickly and accurately, the Meridian Ultra is simply the best tool available for the capture and analysis of voltage sags and swells, high frequency impulses, harmonics, transients, and all other power distortions. There is no need to bring along a separate computer, as the Meridian Ultra is a self-contained instrument, with all configuration, real time display, and post analysis performed directly on the unit. Analyze the data effortlessly with our automatic report generator that provides professional reports with all measurements and graphs on your own letterhead.

The compact, self-contained Meridian Ultra has a powerful 500 MHz Pentium III Processor to perform cycle-by-cycle measurements on all 8 channels (4 voltage and 4 current) with absolutely no sampling or measurement gaps. The Meridian Ultra features a convenient touch screen display, backlit keyboard, and easy-to-use Windows operating system. Quick set up with predefined surveys and real time display of any measured or calculated value ensures that you capture the most important data with minimal effort.

The Meridian Ultra has an enormous capacity for storing weeks or months of data. For the power users, you have the capability to customize your own surveys with triggering of any parameter, including harmonics and flicker. Capture only the information you need, instead of sorting through stacks of useless information. The Meridian Ultra features a built-in Ethernet and internal modem connection for remote control of your survey configurations or post disturbance analysis.

The Meridian Ultra is built tough to handle any application with a durable weatherproof enclosure, AC and DC measurements, and a wide operating range.

The Meridian Ultra is an excellent tool for monitoring power quality in a plant or substation when you need fast accurate answers to the most complex situations you can encounter.



FEATURES AND BENEFITS

- Self-contained unit provides complete setup, real time display, measurements, and post analysis
- Pentium Power performs over 10,000 measurements each and every cycle synchronously on 8 input channels (4 voltage and 4 current) with absolutely no sampling or measurement gaps
- Simultaneously measures power, harmonics, waveform, flicker, and transients
- Built-in Ethernet, internal modem, serial and parallel ports
- Compact portable weatherproof enclosure
- 256 samples per cycle waveform analysis and 4 MHz peak detector provides high resolution measurements with sub-cycle triggering
- 10.0 GB data storage capacity enables long surveys lasting multiple days

AMETEK®

**POWER
INSTRUMENTS**

Experience the Power™

SPECIFICATIONS

INPUTS

Voltage

- Four voltage inputs, phase A, B, C, neutral to ground voltage

Current

- Four current inputs, phase A, B, C, and neutral current

Circuit Type

- Single phase, split phase, 3-phase wye, 3-phase delta

Input Impedance

- 5 Megohm

Digital

- 8 selectable inputs and 8 outputs through external I/O (optional)

MEASUREMENT RANGE AND CAPABILITY

Voltage

- 5-750 VAC and 0-800 VDC

Current

- 0-10,000 amps through external current clamps (0-3 VAC input)

Frequency

- DC, 45 to 65 Hz, and 400 Hz

Sample Rate

- 256 samples per cycle, (nominal 15.3 KHz @ 60 Hz, 12.8 KHz @ 50 Hz), 400 Hz mode; 32 samples per cycle (nominal 12.8 KHz)

Peak Detector

- Sampling at 4 MHz

MEASUREMENT CAPABILITY

Voltage and Current

- True RMS (minimum, maximum, and average), peak (hi, lo, abs), waveform, instantaneous

Power

- Watt, VAR, VA, power factor, phase angle, unbalance

Energy/Demand

- Watthours, varhours (supplied, delivered, and totaled), thermal demand

Transient

- 250 nanosecond w/ 4 MHz peak detect

Harmonics

- To 63rd voltage, current and power, THD, meets IEC61000-4-7

Flicker

- Pst, Plt, instantaneous, meets IEC 61000-4-15, IEC 868

MEASUREMENT ACCURACY

Resolution

- 14 bit

Voltage, Current

- $\pm 0.05\%$ of full scale

Power

- 0.1% of full scale (VA, VAR, Watt, PF)

Energy

- 0.1 % of full scale

RECORDING RATE AND DATA STORAGE

Continuous, or by Exception

Recording Rate

- Adjustable from one cycle up to one week, multiple rates per measurement type

Data Storage

- 10 GB Hard Drive, 1.44 MB 3.5 inch Floppy, 64 MB RAM

EVENT TRIGGERING

Voltage and Current

- All measured or calculated values; internal and external
- Up to 32 triggers on any measurement, pre-trigger up to one second, post trigger unlimited

COMMUNICATIONS

Ethernet

- TCP/IP, 10BaseT

Modem

- 56 kBps, V.90 (internal)

Serial

- RS232

Parallel

- Centronics for local printer

USER INTERFACE

Display

- 12.1 inch Active color Hibrite SVGA display with fully sealed Touchscreen

Keyboard

- 84 key QWERTY, sealed, backlit

REAL TIME CLOCK

Internal

- 1 sec/day at 77°F (25°C), 4 seconds per day over temperature, keeps time on loss of power.

POWER SUPPLY

Input

- 80 to 230 VAC, 50-60 Hz: 125 to 250 VDC (self or externally powered)

Battery (optional)

- 5 minute ride through

PHYSICAL AND ENVIRONMENTAL

Enclosure

- Weatherproof

Operating Temperature

- 32° to 122°F (0° to 50°C) option for -22° to 122°F (-30° to 50°C)

Humidity

- 5 to 95% non-condensing

Dimensions

- 10 in. H x 16 in. W x 10 in. D (254mm x 406mm x 254mm)

Weight

- 18 lbs.



For customer support call:

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ISO 9001 Certified