

PDA 1252

For Portable Power Analysis

Accu-Measure™
Technology

Watertight Portable Power Quality Analyzer

- Comprehensive Power Quality Analysis
- Circuit Analyzer Functions
- Load Flow and Historical Trending Capability
- Watertight Outdoor Enclosure
- Advanced Software Analysis Tools Included
- Optional Artificial Intelligence Reporting Package
- Easy to Use and Operate
- Touch-Screen Graphical Display
- Based on the Nexus 1252 Platform



Description

The PDA1252 is a portable power quality analyzer designed to be used with outdoor ready connections. The unit is ideal for load surveys, monitoring transformer banks, indoor and outdoor electrical monitoring and power quality analysis. The PDA 1252 is mounted in its own watertight carrying case and uses watertight connectors to connect voltage and current leads.

Power Quality Recording Capability

The PDA 1252 is a comprehensive Energy and Power Quality Analyzer. It measures every aspect of power and provides extensive tools for recording trends and power quality events. Recorded capabilities include:

- Voltage Surges and Sags
- IEC 61004-15 Flicker Analysis
- Current Fault Signatures
- Harmonics / Interharmonics
- Graphical Waveforms Recorded
- Transient Events on a Cycle by Cycle Basis
- View Data Using Top Rated Communicator EXT Software
- Optional Artificial Intelligence Reporting of Power Quality Causes and Solutions

Historical Trending / Load Profiling

The analyzer has extensive on-board data-logging for any desired historical analysis. Monitor the following over any desired historical trending window:

- Voltages
- Current Distribution
- PF
- Watt/VAR/VA
- Frequency
- Energy Accumulated
- Log Both Instantaneous and Average Readings
- Programmable Trending Profiles
- Easy to Use and Set Up

A Quantum Leap in Metering Technology

Superior Mechanical Design

The unit was designed using a watertight outdoor rated enclosure. All terminations are additionally watertight. This allows the analyzer to be used in harsh environments or outside the incoming utility feed to a building. The unit can be powered using line voltage or through a separate line cord.

Two Models

Low Voltage - PDA1252-1A

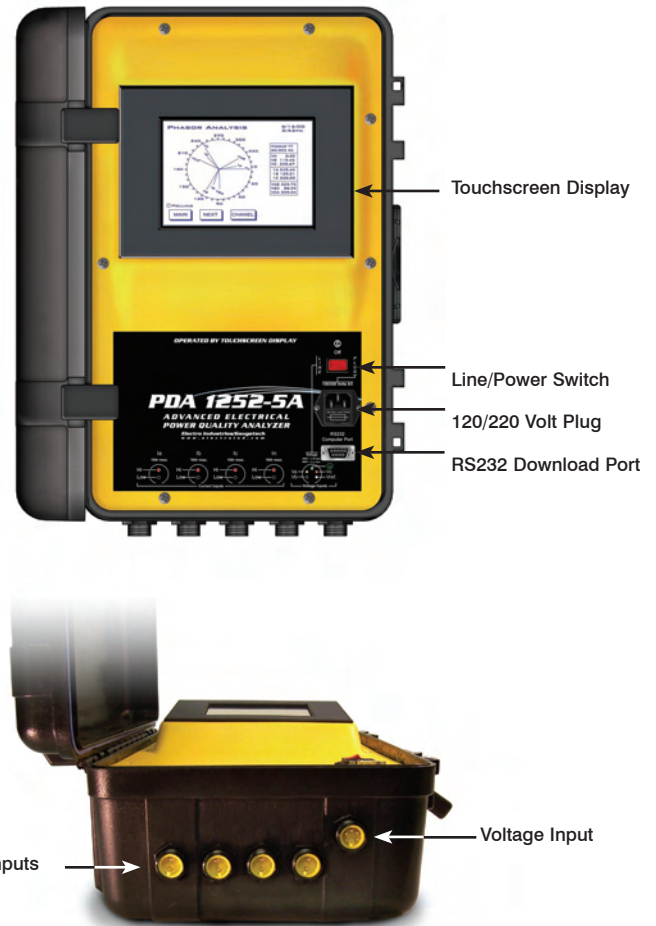
This version of the unit offers a 1 amp secondary input for low voltage applications. This allows the unit to work with up to 600 Volts Phase to Phase. There are 3 clamp on probes available for 100 amps, 1000 amps and 3000 amps primary circuits.

Hi-Voltage - PDA1252-5A

This version of the unit takes a direct 5 amp input for use with test leads on existing hi-voltage installed current transformers or with 5 amp rated probes. This allows the unit to be used as a circuit analyzer as well as a portable power quality monitor. In this mode, the unit can be used as a circuit analyzer allowing users to verify CT and PT connection wiring to meters and protective relaying equipment.

Power Line or Power Port Power Supply

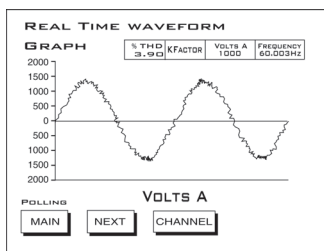
The PDA 1252 is designed to be powered using two different methods. The first method allows the unit to power from a 208 - 480 V AC Phase A-B Voltage line connection. The unit also utilizes a wall plug for remotely powering the unit. The wall plug allows the unit to be used in conjunction with a UPS to remain powered during power outages.



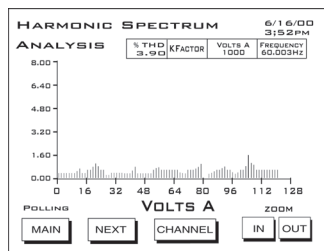
Advanced Touch Screen Display

Touch screen display allows real-time data to be viewed easily. Stored logs and recordings are viewed with a simple RS232 port.

Waveform Scope



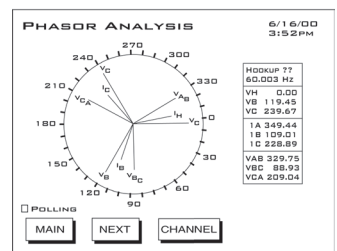
Harmonics



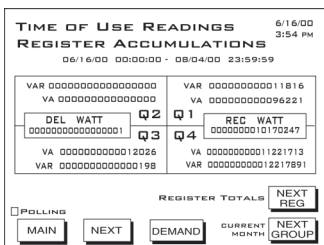
Alarms Mode

ID	ITEM	VALUE	LN	HT	SETTINGS
1	35 High Volts ON	14.160 V	IN	>	15.000 V
2	Two Volts AN	2.94 V	IN	>	0.000 V
3	Two Volts BN	2.56 V	IN	>	0.000 V
4	Two Volts CN	2.73 V	IN	>	0.000 V
5	THD I-A	3.98 %	IN	>	15.000 %
6	THD I-B	3.12 %	IN	>	15.000 %
7	THD I-C	2.73 %	IN	>	15.000 %
8	35 High Volts ON	5.440 V	IN	>	6.000 V

Phasor Diagram



Real Time Trending



Real Time Readings

	INSTANT	AVERAGE	PREDICTED
WATTS	3606.8	3606.8	3606.8
VARs	-21.0	-21.0	-26.0
VA	3607.0	3607.0	2867.1
PF	-0.999	-0.999	LEAD

Real Time Trending



EN50160 Flicker

TIME	START/WSPK	12/29/2004 16:20:61
STOP	00/00/0000	00:00:00
CURRENT	05/04/2005	16:03:22
BASE PWT	50Hz	38sec
MAX PWT	118min	38sec

STATUS - ACTIVE	INST.	VOLTAGE
FREQUENCY	60.003 Hz	HEADINGS
BASE	60 Hz	Volts A
CURRENT	50.078 Hz	Volts B
BASE VOLTAGE		Volts C
		VBC

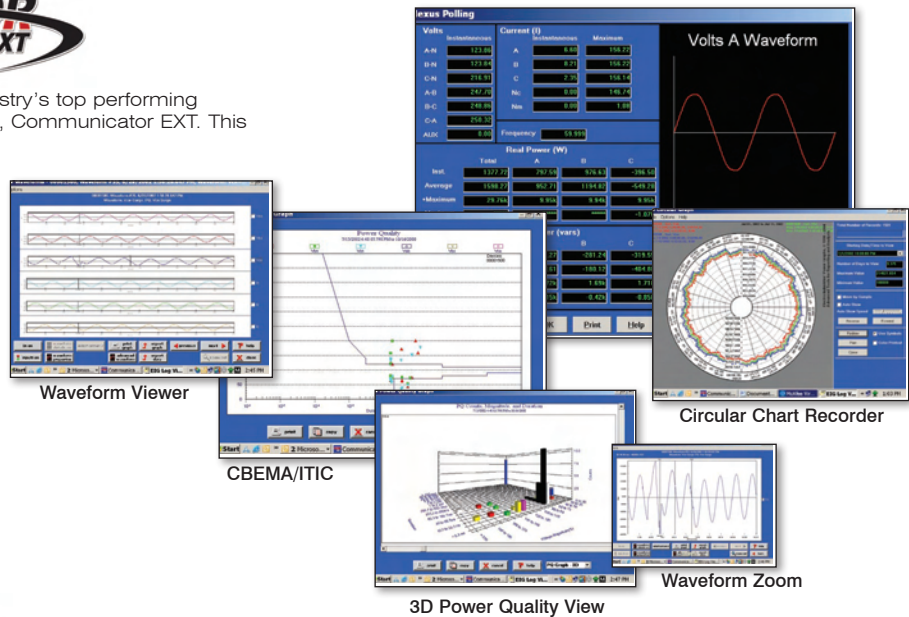
The Most Advanced Revenue Metering Technology

COMMUNICATOR EXT

Advanced Analysis Software

The PDA1252 comes equipped with the Industry's top performing viewing and power quality reporting package, Communicator EXT. This program has the following functions:

- **Easy Program Configuration**
- **Real Time Data Viewing**
- **Phasor Analysis**
- **Extensive Harmonic Analysis**
- **Waveform Viewer with Zoom and Pan**
- **Historical Trending**
- **Direct Export to Microsoft Office Products**



AiREPORTS EXT

Electro Industries, in conjunction with Kreiss Johnson Technologies, the leader in power quality analysis software, introduces the quantum leap in power quality reporting technology, AiReports EXT.

This unequalled in power quality software package not only provides a comprehensive report on the status of the equipment being monitored, but it also uses artificial intelligence to diagnose PQ events and provide the possible cause of the event. Accuracy is generally as high as 80%. Having this advanced analysis will cut down endless hours of engineering analysis.

*Diagnose Problems Quickly
with a Detailed Report*



Accessory Items

Optional 1 Amp Model Accessories



MD304, 100:1A clamp on CT with 5ft Male Banana Leads (Range 10-100A, 600V Rating)
- Includes leads



SR604, 1000:1A, clamp on CT with 5ft Male Banana Leads (Range 100-1000A, 600V Rating)
- Includes leads



JM830, 3000:1A clamp on CT with 5ft Male Banana Leads (Range 1000-3000A, 600V Rating)
- Includes leads

Optional 5 Amp Model Accessories



KBTP1, Knife blade test plug with 3ft Male Banana Leads
- For use with test switches



SR632, Clamp On CT, 1000/5A clamp on CT with 5ft Male Banana Leads (Range 1000/2.5amps, 600V Rating)
- Includes leads

Specifications

Voltage Input

0 to 300 Volts L-N (plug powered)
 0 to 600 Volts L-L (plug powered)
 100 to 300 Volts AC L-N (line powered)
 200 to 600 Volts AC L-L (line powered)
 3 or Single Phase Power Systems

Power Supply

Line Powered 200 to 600 Volts L-L
 (Must be powered using two phases of Voltage)
 Wall Plug Powered 120/220 Volt AC

Current Inputs

1252-5A – 5 Amp Secondary Direct Wiring
 Max Energy and RMS Calculation Range

(10 Amp Secondary)
 Max Waveform Recorder Range (40 Amp Secondary)
 1252-1A – 1 Amp Secondary Direct wiring
 Max Energy and RMS Calculation Range (2 Amp Secondary)
 Max Waveform Recorder Range (8 Amp Secondary)

Burden

Voltage (Line Powered) – 20 VA
 Voltage (Plug Powered) – 0.05VA
 Current – 0.05VA

Frequency

20 to 410Hz

Operating Temperature

0-50°C

Accuracy

Voltage and Current: 0.15% of Reading
 Watts and Energy: 0.2% of Reading
 Freq: +/- .01 Hz
 %THD: +/- 1% of Full Scale

Construction

NEMA 4 Rated Outdoor Enclosure

Compliance

ANSI C12.20 (Class 0.2 Accuracy)
 IEC 687 (Class 0.2 Accuracy)
 IEC 61000-4-15 (Flicker)

Ordering Specifications

	Model	Current Input	Memory	Frequency
Option Numbers:	-	-	-	-
Example:	PDA 1252	1A	S	50
	PDA 1252	-1A 1 Amp	-S Standard Memory	-50 50 Hz System
		-5A 5 Amp	-A Advanced Memory	-60 60 Hz System

Accessory Options

Included Accessories

VLP1252: Voltage Lead Set
ALP1252: Current Lead Set (QTY 4)
COMEXT3.0C: Communication Software
9PINC: Straight DB9 RS232 Cable
RC5589: 14" x 14" x 3" EIG Nylon Accessory Carrying Case with Shoulder Strap

Optional 1 Amp Model Accessories

MD304, 100:1A clamp on CT with 5ft Male Banana Leads (Range 10-100A), 600V Rating
SR604, 1000:1A, clamp on CT with 5ft Male Banana Leads (Range 100-1000A), 600V Rating
JM830A, 3000:1A clamp on CT with 5ft Male Banana Leads (Range 1000-3000A), 600V Rating

Optional Software

AIEXT3 - AI Reports - Artificial Intelligence Reporting Package

Optional 5Amp Model Accessories

KBTP1, Knife blade test plug with 3ft Male Banana Leads
SR632, Clamp On CT, 1000/2.5amps



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