Radian Research, Inc.

RD-3X Three-Phase Analyzing Standards

Three Instruments in One

True Power & Energy Reference Standard for In-Service Meter Testing

Power Quality Analyzer

Site Analyzer

The Radian Research Three-Phase **Analyzing Standards**, consisting of the RD-30/31/33, are the ultimate instruments for on-site accuracy testing of electricity meters, performing power quality analysis, testing CTs, and site wiring confirmation. Built upon the robust and world renowned performance of the Radian Research RD-3X family of reference standards, these Analyzing Standards provide for unsurpassed accuracy, functionality, and ease of operation. Radian Research Analyzing Standards are designed to work with customer load or with a stand-alone current source.

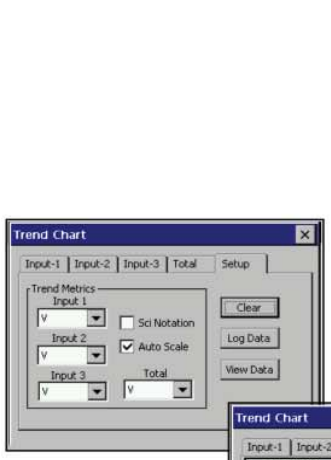
FEATURES

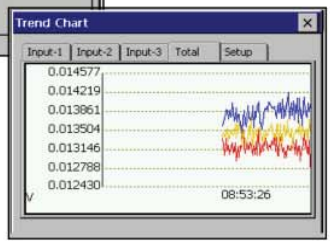
- Extremely accurate and trusted Radian Research Reference Standard
- Selectable accuracy classes
- Four quadrant measuring instrument for Active, Reactive, and Apparent power measurements
- Built-in computer with touch screen and anti-glare color display
- Integrated MobileSuite analysis software
- Wide measuring range with autoranging potential and current inputs
- Analysis up to the 200th Harmonic with Intra-harmonics
- Standard RS-232 Serial communication link with Bluetooth option
- Data Storage and Transfer
- Lightweight and rugged
- Two Year Warranty
- Easily tested & certified

Versatile • Accurate • User Friendly

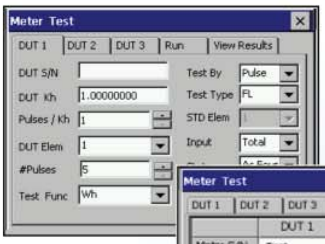
RADIAN

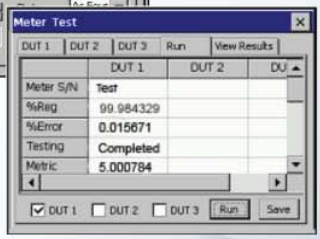
A TRUE Reference Standard Plus Much More!



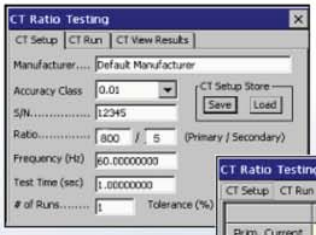


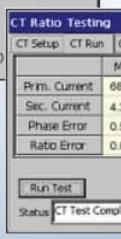
Trend Charts



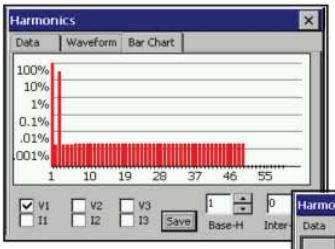


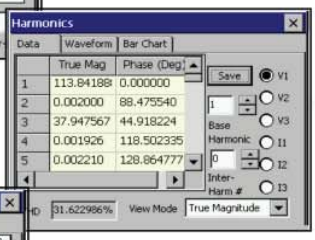
Run Meter Test



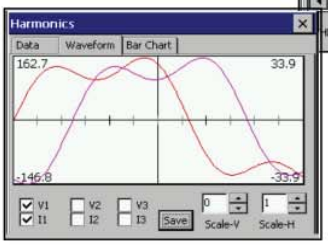


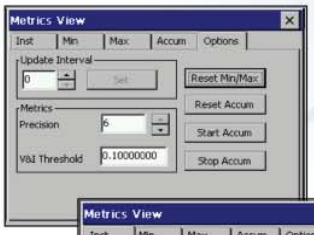
CT Ratio Test

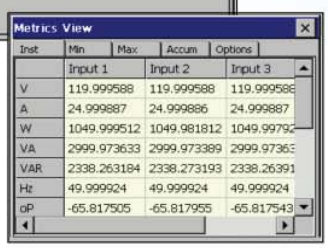




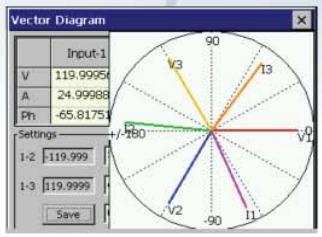
Harmonics





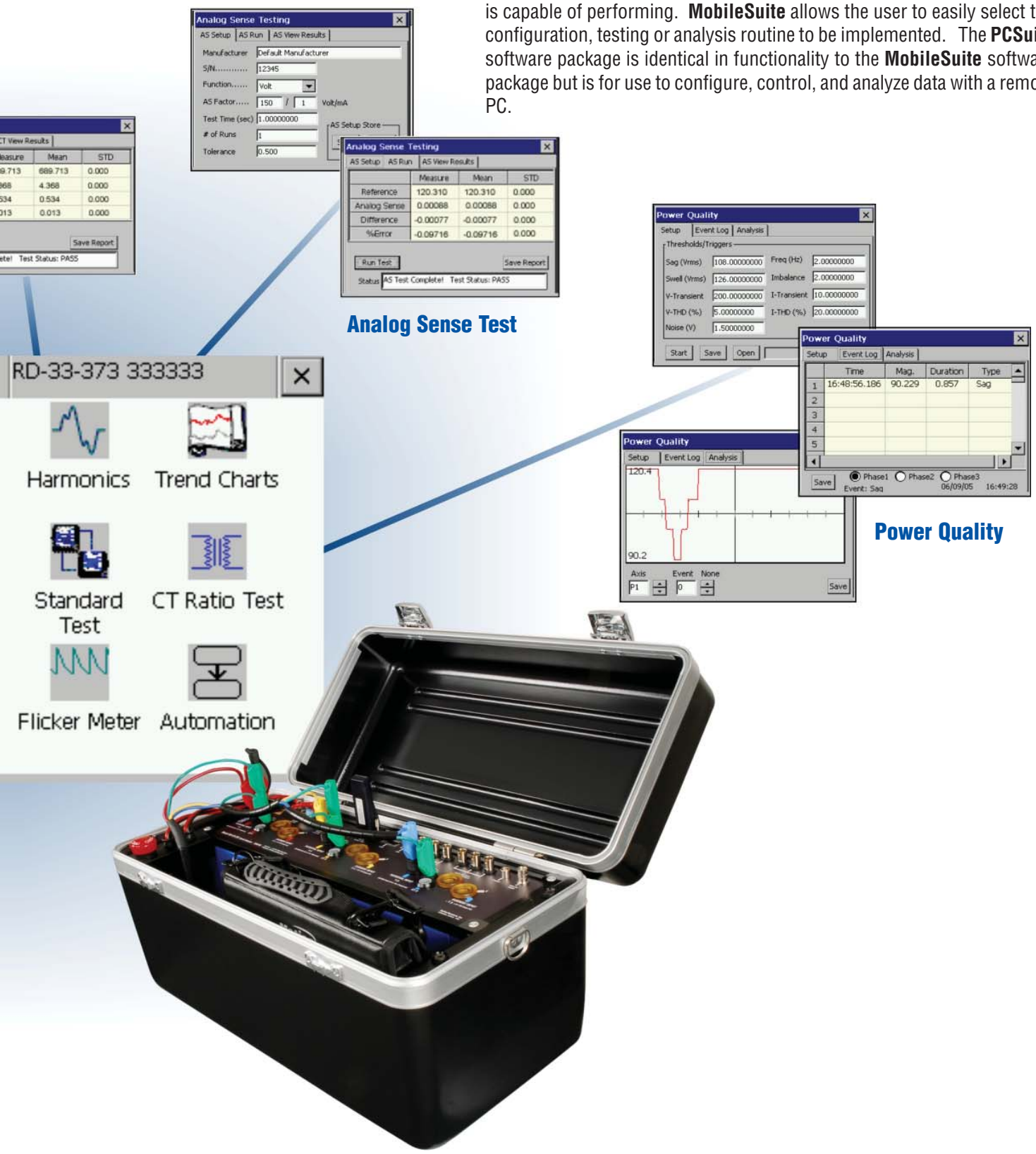


Metrics



Vector Diagram

The RD-3X Analyzing Standard is shipped from the factory with Radian's custom developed **MobileSuite** software pre-loaded. The **MobileSuite** software package is a powerful, but easy to comprehend and use, set of tools to facilitate the full array of testing and analysis the Analyzing Standard is capable of performing. **MobileSuite** allows the user to easily select the configuration, testing or analysis routine to be implemented. The **PCSuite** software package is identical in functionality to the **MobileSuite** software package but is for use to configure, control, and analyze data with a remote PC.



Technical Specifications

RD-3X Three-Phase Analyzing Standards

Probes & Leads

RD-3X Analyzing Standard Measurement & Functionality Configurations

The second digit of the first two digits and the last three digits determine the full RD-3X model number. The second digit of the first two digits designates the accuracy class. The first digit of the last three digits determines the measurement functions; the second digit of the last three digits determines if the instrument has a built-in computer with touch screen display, power analysis, and analog sense capability; the third of the last three digits determines the current input configuration.

Specifying the second of the first two digits: RD-3X-xxx

	Accuracy
RD-30-xxx	0.04%
RD-31-xxx	0.02%
RD-33-xxx	0.01%

Specifying the first of the last three digits: RD-3x-Xxx

RD-3x-2xx	Whrs, Volts, Amps, VARhrs, VAhrs, Qhrs, Watts, VARs, VA, Phase Angle, Power Factor, Frequency
RD-3x-3xx	Whrs, VARhrs, VAhrs, Qhrs, Volts, Amps, Watts, VARs, VA,Vhr, Ahr, V2hr, A2hr, Phase Angle, Power Factor, Frequency Min & Max measurements: All indicating functions
RD-3x-4xx	Whrs, Volts, Amps, VARhrs, Qhrs, Vahrs, Watts, VARs, VA,Vhr, Ahr, V2hr, A2hr, Phase Angle, PF, Frequency Min & Max: All indicating functions AVG response: VAhrs, VA, Volts, Vhrs, Amps, Ahrs

Specifying the second of the last three digits: RD-3x-xXx

-x2x	Power Analysis (Harmonics, Trending, Vector Analysis, and Power Quality Analysis)
-x3x	Built-in Computer (with color, touch screen display and MobileSuite software) and Power Analysis
-x6x	Power Analysis and Analog Sense Input
-x7x	Built-in Computer, Power Analysis and Analog Sense Input

Specifying the third of the last three digits: RD-3x-xxX

-xx3	120 Amp (6mm insert) current inputs, Portable
-xx4	200 Amp (bolt on) current inputs, Portable

For Example, a **RD-30-233** Analyzing Standard is a 0.04% accuracy class instrument with capability to measure Whrs, Volts, Amps, VARhrs, VAhrs, Qhrs, Watts, VARs, VA, Phase Angle, Power Factor, and Frequency, has the built-in computer and power analysis capability, has 120A current inputs, and is portable.

OPTIONS

RR-CTT	CT Ratio and Burden Testing
RR-PCSuite	Testing and Analysis PC software for RD Standards
RR-Kit	Software for Custom Application Development
RR-1H	Optical Pickup for Infrared LED, 4-Pin plug
RR-DS/sm	Meter Disk Sensor with 4-Pin plug, suction mount
RR-DS/f	Meter Disk Sensor with 4-Pin plug, field mount
RR-DS/s	Meter Disk Sensor with 4-Pin plug, shop mount
RR-KYZ	Pulse Input Adapter with 4-Pin plug
RR-TABPC	Tablet PC for in-the-field control of RD analyzing standards
RR-BT	Bluetooth Communication Link
RC-MN106	Electronically Compensated 0.2 to 150A AC Current Probe *
RC-SR704	Electronically Compensated 0.01 to 800A AC Current Probe *
RC-JM800A	Electronically Compensated 1.0 to 2400A AC Current Probe *
RC-FLEX3000A	Electronically Compensated AC Flexible Current Probe *
RC-HV2000A	High Voltage Current Probe
RC-100135	Test Switch Current Probe, 25A

* Please contact Radian Research for application and specification information regarding the compensated AC current probes

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