ROHDE&SCHWARZ

Make ideas real

R&S®NPA versus Hioki PW3335

Comprehensive power analysis in a compact package

Accurately testing standby power consumption is a challenge. The R&S®NPA power analyzer is a compact AC/DC load and standby current characterization tester that enables measurements in line with all common standards without needing additional computers or remote infrastructure.

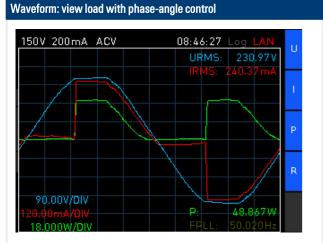
Your benefit	Features
Adapt the user experience to your needs	 Simultaneous display of up to 10 numerical measurement functions User configurable measurement display Graphical display modes for inrush, harmonic analysis, waveform and trend chart
Accurately measure to key compliance requirements	 Basic accuracy: 0.05 % 100 kHz bandwidth at a sampling rate of 500 ksamples/s Simultaneous display of current and voltage, each with 16 bit resolution
Integrated tools simplify measurements	 26 different measurement and mathematical functions Limit testing with pass/fail indication for up to six selectable limits Save logging and screenshots directly to your USB device

Parameter	R&S®NPA	Hioki PW3335
Inputs, voltage	5 V to 600 V (CF3) 2.5 V to 300 V (CF6) 1800 V (peak)	6 V to 1000 V (CF6)
Inputs, current	5 mA to 20 A (CF3) 2.5 mA to 10 A (CF6) 60 A (peak)	1 mA to 20 A (CF6)
Crest factor	switchable (1/3/6)	fixed (6)
Power accuracy	0.05 % of reading + 0.05 % of range	0.1 % of reading + 0.1 % of range
Bandwidth	100 kHz	100 kHz
Sampling rate	500 ksamples/s	700 ksamples/s
Voltage input impedance	2 ΜΩ	2 ΜΩ
Current input impedance	5 mA to 200 mA: 500 m Ω 0.5 A to 20 A: 10 m Ω	1 mA to 100 mA: ≤520 mΩ 200 mA to 20 A: ≤15 mΩ
Advanced I/O (model R&S®NPA501/701)	sensor input, analog I/O, digital I/O	sensor input (optional), analog/digital out (optional)
Standard testing (model R&S®NPA701)	In-device testing (EN50564, EN61000 3 2, IEC62301)	only via PC software
Remote control	USB, LAN, IEEE-488/ GPIB (R&S®NPAxxx-G models)	RS-232, LAN, GPIB (optional)
Dimensions (W x H x D)	222 mm × 97 mm × 291 mm	210 mm × 100 mm × 245 mm
Weight	3 kg	3 kg

6



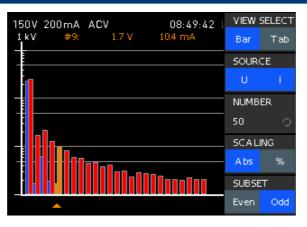




Waveform view quickly shows qualitative insights

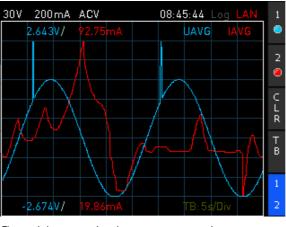
Numerical: precision at your fingertips 300V 500mA ACV 08:33:57 Log LAN URMS IRMS 232.10 V 231.73 mA URange IRange 500 m A 300V 51.88 W 53.78 VA LAMBDA 15.3 ° 0.965 UTHD ΠHD 1.97 % 5.28 % Numerical display enables quick quantitative insights

Analysis: harmonics breakdown



Intuitive 50 harmonics analysis simplifies understanding of measurements

Trend: see what's happening



The trend chart summarizes the measurements over time

Safe connection to the R&S®NPA-Zxx adapters



The DUT is simply and safely plugged into the R&S®NPA through the optional R&S®NPA-Zxx mains adapter. Country specific adapter models are available to enable connection in different countries.

Modern graphical display



Hioki PW3335: Seven-segment LED and only four are value configurable

300V 500mA ACV		08:33:57 Log LAN	
URMS	232.10 V	^{IRMS} 231.73 mA	
URange	300 V	Range 500mA	
P	51.88 W	₅ 53.78 VA	2
	15.3 °	LAMBDA 0.965	
UTHD	1.97 %	^{ггно} 5.28 %	

R&S®NPA:

color TFT with measurement parameters freely configurable

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