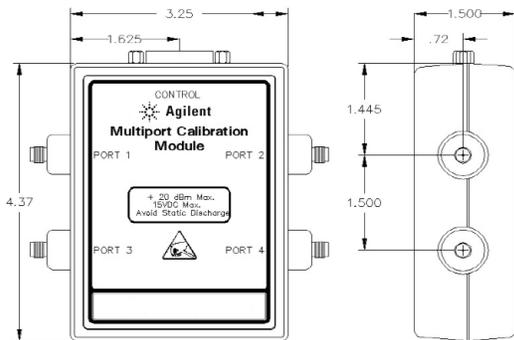


N4430A ECal module (ATN-4801A)

- Fast, single-connection electronic calibration
- Easy to use
- Accurate transfer standard with excellent repeatability



The N4430A 4-port ECal module is the perfect companion for Agilent's balanced measurement solutions. Fast, and easy-to-use, this ECal module replaces the standard SOLT-based mechanical calibration kit with a solid-state transfer standard.

With a single set of connections, the ECal module cycles through all of the impedance states required for a full, four-port, vector error-corrected calibration in under a minute. A comparable calibration, using the operator-intensive mechanical-standard technique, could easily take five times longer. Not only is ECal fast, it is also extremely repeatable and accurate. Control of the ECal module is built into the balanced-measurement application software – the same software that controls the measurement and provides the differential analysis. Ease of use is provided through an intuitive graphical user interface.

Product configuration

A complete system includes an Agilent vector network analyzer, an Agilent N441xA S-parameter test set, Agilent balanced-measurement application software, a Windows®-based PC with IEEE-488 control, and the N4430A electronic calibration module.

Performance summary

These specifications show the residual uncertainties for corrected data using four-port error correction. They apply for 25 °C with less than 1 °C variation from calibration, and are applicable for a system in the following configuration:

Network analyzer: 8753ES Options 006, 014
 Test set: N4415A S-parameter test set
 Test port cables: N4415A Option B20

Measurement port specifications

	30-300 kHz	0.3-300 MHz	0.3-3 GHz	3-6 GHz
Frequency range	30-300 kHz	0.3-300 MHz	0.3-3 GHz	3-6 GHz
Directivity	50 dB	52 dB	50 dB	45 dB
Source match	48 dB	48 dB	45 dB	43 dB
Load match	50 dB	50 dB	46 dB	42 dB
Refl. tracking (±)	.04 dB	.02 dB	.02 dB	.04 dB
Trans. tracking (±)	.06 dB	.02 dB	.022 dB	.022 dB

Typical performance

Frequency range	30 kHz - 6.0 GHz
Impedance	50 ohms
Maximum operating level	+20 dBm
Damage level	+30 dBm
RF port connectors	3.5 mm (f)
Control connector	DB-15
Weight	12 oz.

Supported peripheral equipment

S-parameter test sets	N4413/14/15/16A
Balanced measurement systems	N4441/42/43/44A
Computer	Pentium II with ≥64 MB RAM, Windows 95/98/NT
Monitor	1024 x 768 minimum resolution
IEEE-488 card	Agilent 82340, 82341, or National Instruments (any model)

Ordering information

N4430A	Four-port electronic calibration module, 30 kHz to 6 GHz
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