

N4418A Test set (ATN-4112A)

System performance summary

The following specifications are applicable for a system in the following configuration:

Network analyzer	8720ES, Option H32
Test set	N4418A
Calibration kit	85052C precision 3.5 mm
Test port cables	N4418A Option B20

Dynamic range

Transmission measurements at 10 Hz IF bandwidth with full error correction and +5 dBm maximum output power.

.050 to 0.84 GHz	77 dB
0.84 to 20 GHz	90 dB

Measurement port characteristics

Residual uncertainties for corrected data using 4-port error correction. These apply for 25 °C with less than 1°C variation from calibration.

Frequency range	0.05-2 GHz	2-8 GHz	8-20 GHz
Directivity	48 dB	48 dB	43 dB
Source match	41 dB	41 dB	33 dB
Load match	48 dB	48 dB	43 dB
Refl. tracking (\pm)	.005 dB	.005 dB	.008 dB
Trans. tracking (\pm)	.014 dB	.014 dB	.035 dB

Test set typical performance

Frequency range	0.05-20.0 GHz
Impedance	50 ohms
Insertion loss, nominal	8 -10 dB
Isolation, port to port	85 dB
Maximum operating level	+20 dBm
Damage level	+30 dBm
DC bias range (Option UNK)	40 VDC, 500 mA
Test port connectors	3.5 mm (m)
VNA connectors	50 ohm SMA (f)
Weight	9 kg

Supported peripheral equipment

Network analyzer	8720D/ES, Option H32, H42
Calibration kit	SOLT-type with calibration coefficients of open and short standards
Computer	Pentium II with \geq 64 MB RAM, Windows 95/98/NT
Monitor	1024 x 768 minimum resolution
IEEE-488 card	Agilent 82340, 82341, or National Instruments (any model)

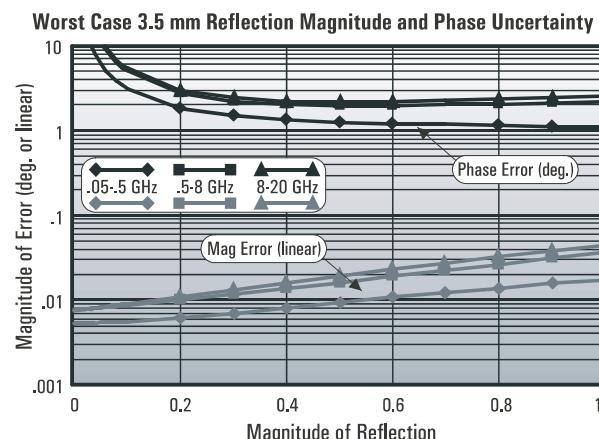
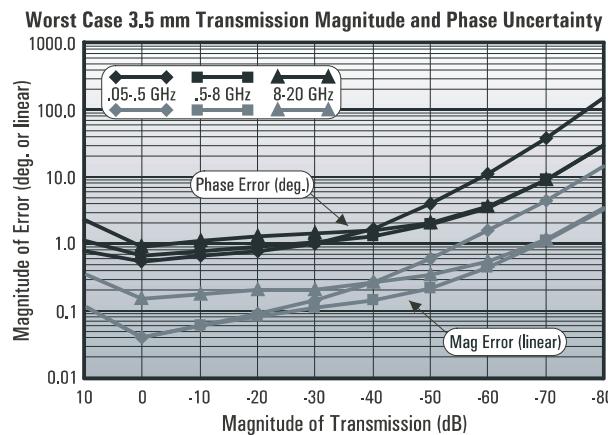
Ordering information

N4418A	50 MHz to 20 GHz S-parameter test set
Option 105 ⁸	Balanced measurement software
Option 110 ⁸	Balanced measurement software with time domain analysis
Option UNK	Bias networks
N4446A	Balanced measurement system, 50 MHz to 20 GHz. Includes 8720ES Option H32 and N4418A Options UNK and 105 (Source attenuator included).
Option 110	Time domain analysis

The following options are available for the N4418A and N4446A:

Option 301	DC-bias cable and adapter kit
Option 1CP	Rack-mount and handle kit
Option B20	Test port cables, 3 ft. 3.5mm (m-f) (quantity 4)

Measurement uncertainties



⁸ Either Option 105 or 110 must be ordered at time of initial purchase.