

Appendix C: Specifications

SYSTEM		
PARAMETER	TYPICAL SPEC.	MIN. / MAX. SPEC.
Sweep Speed, Per Point ¹	6 msec. (2 GHz PC)	PC Dependent
Source/ Receiver Isolation	120 dB	100 dB min.
Temperature, Operating		5 °C / 35 °C
Temperature, Storage		-40 °C / 70 °C
Source/Receiver:		
Weight	5 lbs.	
Dimensions	3.5"H x 10"W x 15."L	
Interface Adapter :		
Weight	1 lbs	
Dimensions	1"H x 6"W x 9"L	
Analyzer (BNC) ground to PC ground common mode voltage		42V Peak

SOURCE		
PARAMETER	TYPICAL SPEC.	MIN. / MAX. SPEC.
Frequency Accuracy		100 ppm +/- 0.0116 Hz
Frequency Resolution	0.0116 Hz	
Frequency Range		0.0116 Hz - 15 MHz
Flatness, DC to 1 Mhz ²	+/- 0.2 dB	
1 to 15 Mhz	+/- 1.5 dB	
Harmonics	- 40dBc	
Spurious, Exc. Harmonics	- 55dBc	
AC Output Level Range		1.25mV/1.77V rms (1M Ohm)
AC Output Level Error ²		+/- 15%
DC Offset Range		-10/+10 V Peak
DC Offset Error		+/- 5%
Residual DC Offset		+/-15mV
Current Limit	80mA	
Output Impedance	50 Ohms	
Absolute Maximum Safe Voltage at Source Output		-/+ 15 Volts Peak

Appendix C: Specifications

RECEIVER

PARAMETER	TYPICAL SPEC.	MIN. / MAX. SPEC.
Dynamic Range ³ <5MHz	110 dB	100 dB min.
>=5MHz	95 dB	90 dB min.
B/A Magnitude Accuracy ³	+/- 0.025 dB	See appendix B
>=1MHz	+/- 0.05 dB	
Abs. Magnitude Accuracy ⁴	+/- 2%	
Phase Accuracy ³	+/- 0.2 degree	See appendix B
>=1MHz	+/- 0.8 degree	
Resolution (IF) Bandwidth	Depends on frequency and Bandwidth selection	0.01Hz / 1KHz
Input Signal Range(AC) ³	5 uV to 1.77 V rms	17.7uV / 1.77 V rms
Input Signal Range(AC+DC)	-12/+12 V Peak	-10/+10 V Peak
A to B Isolation <5MHz	110 dB	100 dB min.
>=5MHz	95 dB	90 dB min.
Input Imped., x1 probe	1 Megohm	
Input Imped., x10 probe	10 Megohm	
Input Cap., at BNC conn.	22 pF	
Absolute Maximum Safe Voltage at Receiver Input		-/+ 15 V Peak

¹ For measurement frequencies > 11KHz. A minimum of 1.2 cycles at the source frequency are used giving a minimum time per point of (1.2/frequency) + 2 ms.

² Ratioed measurements cancel source flatness deviations and absolute source level errors.

³ Using (IF) bandwidth of 10 Hz or less and 50 sweep Averages.

⁴ With an Absolute Magnitude Full Spectrum calibration as described in Chapter 3.

Specifications subject to change without notice.