Performance Specifications

Performance specifications are provided in Table 1-1.

Table 1-1. Performance Specifications (1 of 2)

Specifications are valid when the unit is calibrated at ambient temperature after a 5 minute warmup.

10 kHz

<u>Description</u>	<u>Value</u>
Frequency Range:	
Site Master S112	5 to 1000 MHz
Site Master S113	5 to 1200 MHz
Frequency Accuracy (CW Mode)	75 parts per million @25°C*

SWR:

Range 1.00 to 65.00 Resolution 0.01

Return Loss:

Range 0.0 to 54.00 dB
Resolution 0.01 dB

Cable Insertion Loss:

Frequency Resolution

Range 0.0 to 20.00 dB Resolution 0.01 dB

**Distance-To-Fault (DTF):

Range 0 to (Resoution x 129)

Resolution (in meters) $\frac{(15 \times 10^8)(V_p)}{\Delta Frequency}$

Where $V_{\scriptscriptstyle \rho}$ is the cable's relative

propagation velocity.

Table 1-1. Performance Specifications (2 of 2)

Wattmeter Power Monitor:

Range –50.0 to +20 dBm *or*

10.0 nW to 100.0 mW

Offset Range 0 to +60.0 dB

0.1 dB *or*

Resolution 0.1 xW
Test Port, Type N 50 Ohms

***Immunity to Interfering signals

up to the level of +10 dBm

Maximum Input (Damage Level):

Test Port, Type N +22 dBm RF Detector +20 dBm

Measurement Accuracy:

Measurement accuracy depends on calibration components. Standard calibration components have a directivity of 35 dB. Precision calibration components have a directivity of 42 dB.

Temperature:

 $\begin{array}{ccc} Storage & -20^{\circ} \text{ C to } 75^{\circ} \text{ C} \\ Operation & 0^{\circ} \text{ C to } 50^{\circ} \text{ C} \\ \end{array}$ Weight: $\begin{array}{ccc} 2.2 \text{ pounds} \\ \text{Size:} & 8x7x2\frac{1}{4} \text{ inches} \\ \end{array}$

1 - 6

^{*} $\pm 2 \; ppm/\Delta^{\circ} C \; from \; 25^{\circ} C$

^{**} Fault location is accomplished by inverse Fourier Transformation of data taken with the **Site Master**. Resolution and maximum range depend on the number of frequency data points, frequency sweep range and relative propagation velocity of the cable being tested.

^{***} Immunity measurement is made in CW mode with incoming intefering signal exactly at the same frequency (worst case situation). Typical immunity is better when swept frequency is used.