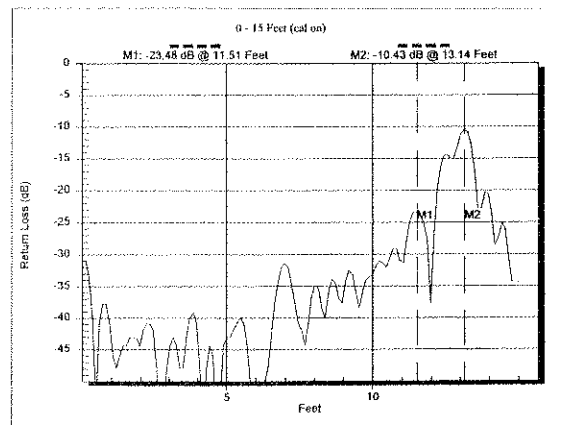
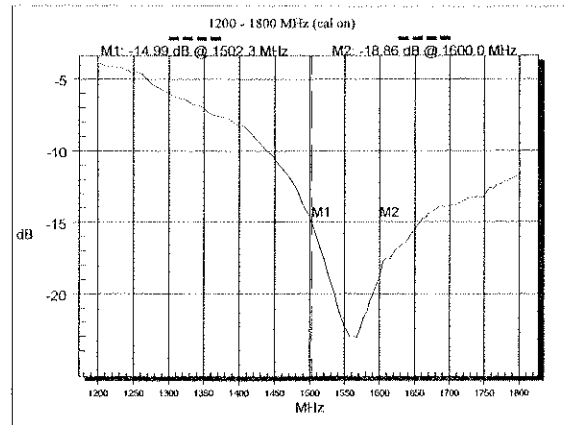


SITE MASTER

S100/S200A/S300A series

5 to 3300 MHz



Site Master is the instrument of choice for transmission line/antenna installation and maintenance. It is the best way to reduce maintenance expenses and improve quality. It replaces stacks of heavy, expensive and complex test equipment. Site Master's frequency domain reflectometry technique allows it to find problems before they become catastrophic faults, thereby creating a huge cost savings.

The Site Master is a precision, hand-held return loss/SWR and fault location measurement instrument. Site Master series offers a wide frequency coverage with products covering 5 to 3300 MHz. Built-in fault location and wattmeter capabilities are available. Light weight, rugged design and wide temperature range make it ideal for field applications. Site Master's proprietary design provides immunity to RF interference, which is important for live site testing.

Site Master Software Tools is a Windows® compatible software program provided with every Site Master unit. This software program provides many useful features including a database for Site Master measurements, Smith Chart display of S_{11} , "drag-n-drop" overlay for measurement comparison, capability to download data to a PC and distance-to-fault calculation from return loss or SWR plots. Advanced printing capabilities are provided by Site Master software tools including user definable plot scaling and a multiple plots per page option.

Site Master is the first test tool to provide the required accuracy, interference immunity and repeatability for transmission line/antenna commissioning and maintenance of today's wireless systems infrastructures.

Features

- Accurate return loss/SWR measurements
- Built-in distance-to-fault, S11, S331A, S120A, S235A and S250A only
- Accurately tests RF transmission lines and antennas
- Immunity to live site RF interference
- Distance-to-fault windowing functions
- Insertion Loss/Gain
- Optional wattmeter
- Synthesizer accurate to 75 ppm
- Internal memory saves up to 50 traces
- Direct printing via RS-232 serial port
- Remote operation via RS-232 serial port

Applications

Cellular, ISM, PCS/PCN and paging service, Safety service, Avionics, Two-way radio, Military

Site Master allows implementation of preventative maintenance procedures. Unlike TDRs and spectrum analyzers/tracking generators, Site Master can spot RF degradation before failures occur. Problems can be fixed before expensive cables are ruined.

Site Master is designed for field requirements. Its rugged construction survives rough field treatment. Battery power, light weight, small size, wide temperature range and simple user interface are exactly what field technicians want today. Technicians can test antennas from ground level because Site Master's distance-to-fault measurement compensates for cable insertion loss. Site Master offers a new and better method to install and maintain cables and antennas.

Specifications*1

Model	S120A/S235A/S250A	S112/S113	S330A/S331A
Frequency range	600 to 1200 MHz (S120A) 1250 to 2350 MHz (S235A) 1750 to 2500 MHz	5 to 1000 MHz (S112) 5 to 1200 MHz (S113)	700 to 3300 MHz (S330A) 25 to 3300 MHz (S331A)
Frequency accuracy (CW mode)	75 ppm		
Frequency resolution	100 kHz		
Immunity to interfering RF signals up to*2	+10 dBm, Reflection +30 dBc, Transmission	10 kHz +10 dBm	100 kHz -15 dBm
Return loss	Range: 0 to 54 dB, Resolution: 0.01 dB		
SWR	Range: 1 to 65, Resolution: 0.01		
Insertion Loss/Gain	Display range: -120 to 100.0 dB Resolution: 0.1 dB (S120A, S235A)		
Distance-to-fault (S113, S120A, S235A, S331)	Vertical range Return loss: 0 to 54 dB SWR: 1 to 65 Horizontal range: 0 to 128X (resolution) Horizontal resolution, rectangular windowing resolution: 1.5×10^3 (Up/Δ frequency)*3		
Wattmeter (RF power monitor, Option 5)	Display range: -80 to +80 dBm, 10 pW to 100 kW Detector range: -50 to +20 dBm, 10 nW to 100 mW Offset range: 0 to +60 dB Resolution: 0.1 dB, 0.1 xW		
Cable loss	Range: 0 to 20 dB, Resolution: 0.01 dB		
Test port connector	Precision N female		
Maximum input without damage	N(f) test port: +22 dBm RF power detector: +20 dBm, 50 Ω		
General	Electromagnetic compatibility: Meets European community requirements for CE marking. Temperature: 0° to 50°C (operating), -20° to 75°C (storage) Weight: 2.2 lbs. Mass: 8 x 7 x 2.25 inches		

- *1: All specifications apply when calibrated at ambient temperature after a five minute warm up.
 *2: Immunity performance is represented for a typical worst-case condition. Measurements were made in CW mode by injecting a signal into the Site Master through a coupler with the same signal injected through the coupled arm. In field applications, signals are modulated and varying in frequency rather than CW. Immunity is typically better when swept frequencies are used.
 *3: Where Up is the cable's relative propagation velocity. Wide frequency sweeps improve resolution but reduce maximum display range.

Ordering Information

Please specify model/order number, name and quantity when ordering.

Model/Order No.	Name	Model/Order No.	Name
S112	Main frame	510-90	Adapter, 7/16 (f)-N (m), 3.5 GHz
S113	Site Master (5 to 1000 MHz)	510-91	Adapter, 7/16 (f)-N (f), 3.5 GHz
S120A	Site Master (600 to 1200 MHz, built-in DTF)	510-92	Adapter, 7/16 (m)-N (m), 3.5 GHz
S235A	Site Master (1250 to 2350 MHz, built-in DTF)	510-93	Adapter, 7/16 (m)-N (f), 3.5 GHz
S250A	Site Master (1750 to 2500 MHz, built-in DTF)	SM/STS	Standard N Type Short, 3.5GHz
S330A	Site Master (700 to 3300 MHz)	D41955	Spare Soft Carrying Case
S331A	Site Master (25 to 3300 MHz, built-in DTF)	40-74	Spare AC-DC adapter
	Standard accessories	806-62	Spare automotive 12 Volt adapter
	Operating manual	800-441	Spare serial interface cable
	Soft carrying case	760-194A	Transit case for site master
	AC-DC adapter	12N75B	50W to 75W Adapter DC-3GHz
	Automotive cigarette lighter/12 Volt DC adapter	10580-00007	Spare site master S330A, S331A user's guide
	One year warranty	10580-00009	Spare site master S112, S113 user's guide
	3.5 inch floppy disk containing fault location (DTF),	10580-00016	Site master S120A, S235A User's guide
	Smith chart and software management tools	10580-00008	Spare site master II/III maintenance manual
	Serial interface cable	2000-766	Desk-jet printer includes: Interface cable, black print cartridge, and U.S. power cable
	Options	2000-753	Spare serial-to-parallel converter cable
Option 5	RF watt meter power monitor (RF detector not included)	2000-661	Black print cartridge
	Optional accessories	2000-662	Rechargeable battery for desk-jet printer
5400-71N50	RF detector (1 to 3000 MHz)	2000-663	Power cable (Europe) for desk-jet printer
1N50C	5W Limiter, N (m)-N (f), 18 GHz	2000-664	Power cable (Australia) for desk-jet printer
22N50	Precision N (m) Open/Short, 18 GHz	2000-665	Power cable (U.K.) for desk-jet printer
22NF50	Precision N (f) Open/Short, 18 GHz	2000-667	Power cable (So. Africa) for desk-jet printer
SM/PLNF	Precision N (f) load, 42 dB, 3.5 GHz	2000-754	Seiko DPU-411-21BU (120VAC) includes: Thermal printer with internal battery, thermal printer paper, serial cable, and U.S. power cable
SM/PL	Precision N (m) load, 42 dB, 3.5 GHz	2000-761	Seiko DPU-411-21BE (220VAC) includes: Thermal printer with internal battery, thermal printer paper, serial cable, and Euro power cable
15NNF50-1.5A	Test port cable armored, 1.5 meter, 3.5 GHz	2000-756	Spare serial 9 pin to 25 pin D-sub cable
15NNF50-3.0A	Test port cable armored, 3.0 meter, 3.5 GHz	2000-755	Five (5) rolls of thermal paper
15NNF50-5.0A	Test port cable armored, 5.0 meter, 3.5 GHz		
34NN50A	Precision N (m)-N (m) Adapter, 18 GHz		
34NFNF50	Precision N(f)-N (f) Adapter, 18 GHz		
2000-767	Precision open/short/load, 7/16 (m), DC to 3.5 GHz		
2000-768	Precision open/short/load, 7/16 (f), DC to 3.5 GHz		