PC software MAS400

Spectrum display
Setting of zoom

Setting of measuring function
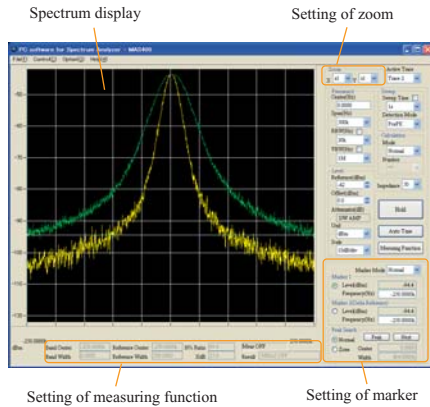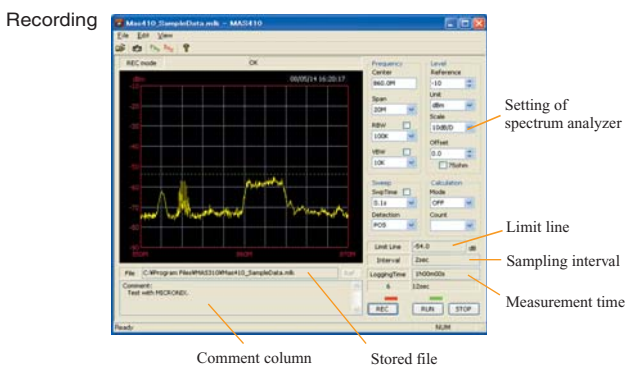Setting of marker

MAS400 is a software that controls the spectrum analyzers of four models by the PC. 1001 points are captured in the spectrum analyzer. Although 501 points are displayed on its screen, the number of points transferred to the PC is all of 1001 points.

The screen image is stored by BMP format and the spectrum is stored by CSV format each point (frequency and level).

Logging software MAS410

MAS410 is a logging software that collects the measurement data by uninhabited. It is optimum for watching an abnormal signal at night and recording the data by uninhabited for a long time.

・Logging at specified frequency band, sampling interval and measurement time.
・Makes it possible to fast-forward and fast-rewind the images in the file like a video recorder, and moreover, to jump to the image with spectrum exceeding the limit line.
・ERROR is automatically displayed when the signal exceeding the limit line is input.

Recording

Setting of spectrum analyzer

Limit line
Sampling interval
Measurement time

Comment column
Stored file

Playback

Track bar
Operation button

Number of screens

Comment recorded

VSWR bridge MVS300

Frequency range：5 to 3000MHz
Directivity：more than 40dB @ 50 to 3000MHz
　　　　　　more than 25dB @ 5 to 50MHz
Insertion loss：
　　　　less than 7dB @ SOURCE to DUT
　　　　less than 8dB @ DUT to REFLECTED
Dimensions：50(W)×31(H)×114(D)mm
Weight：approx.240g
Connectros：SMA(J) (for three ports)

Dipole antenna M401 to M406

M401　M402　M403　M404　M405　M406

Model	Freq.range	Antenna gain	VSWR	Dimensions	Weight
M401	0.8 to 1GHz	＞1dBi	＜1.5	7.5ϕ×280mm	approx.58g
M402	1.25 to 1.65GHz	＞1dBi	＜1.5	7.5ϕ×280mm	approx.60g
M403	1.7 to 2.2GHz	＞1dBi	＜1.5	7.5ϕ×210mm	approx.58g
M404	2.25 to 2.65GHz	＞1dBi	＜1.5	7.5ϕ×210mm	approx.56g
M405	300 to 500MHz	＞1dBi	＜1.5	8.0ϕ×212mm	approx.62g
M406	4.7 to 6.2GHz	＞1dBi	＜1.5	7.5ϕ×152mm	approx.54g

1）Antenna gain and VSWR are specified at a center of frequency range.
2）Connector : N(P)

Magnetic field probe CP-2S

Frequency range：10MHz to 3GHz
Space resolution：approx.0.25mm
　　　　　　　　(depending on objects)
Dimensions：outside 12ϕ×135mm
　　　　　　probe tip　2mm(W)×1mm(T)
Connector：SMA(P)

USB printer

Printing method：Thermal line dot method
Paper：80mm width thermal paper
Power source：
　internal : AA-sized alkaline battery (4 pcs)
　external : 7.5VDC/3A (dedicated AC adapter)
Dimensions：134(W)×60(H)×180(D)mm
Weight：approx.450g (mainframe only)
Interface：USB 2.0

(With AC adaptor and one rollpaper)

※ Option : Rollpaper (10 rolls)

Frequency counter (factory option)

Items	Specifications
Freq.range	1MHz to 3.3GHz@MSA438/438TG/438E 1MHz to 8.5GHz@MSA458
Measured level	+10 to −70dBm@1MHz to 2GHz,RBW100kHz +10 to −60dBm@2GHz to 8.5GHz,RBW100kHz
Measurement resolution	100Hz
Display digits	8 digits max
Reference x'tal	Accuracy：±2ppm@23℃ Temp.characteristics：±5ppm@0 to 40℃

Lithium-ion battery　MB400

7.4V/5000mAh

Coaxial attenuator　MG-XXdB

Model	Attenuation error		V S W R	Rated power
	DC to 12.4GHz	12.4GHz to 18GHz		
MG-1dB、2dB、3dB、4dB	＜±0.5dB	＜±1dB	＜1.15@DC to 4GHz ＜1.2@4 to 12.4GHz ＜1.3@12.4 to 18GHz	1W
MG-5dB、6dB、7dB、8dB	＜±0.7dB	＜±1.2dB		
MG-9dB、10dB、12dB、13dB	＜±1.0dB	＜±1.25dB		
MG-14dB、15dB、20dB	＜±1.2dB	＜±1.3dB		
MG-30dB	＜±1.2dB@DC to 8GHz		＜1.2@DC to 8GHz	

※Connector, impedance : SMA(P)/SMA(J), 50Ω

Terminator

Model	Freq.range	V S W R				Rated power	Connector
		DC to 4GHz	4 to 8GHz	8 to 12.4GHz	12.4 to 18GHz		
MG−50S	DC to 18GHz	＜1.08	＜1.10	＜1.15	＜1.20	0.25W	SMA(P)
MG−50N	DC to 8GHz	＜1.2@DC to 8GHz				2W	N(P)

※Impedance : 50Ω

Coaxial cable

Model	Connector	Length	Freq.range
MC102	SMA(P)/BNC(P)	1.5m	DC to 2GHz
MC201	SMA(P)/SMA(P)	0.5m	DC to 18.5GHz
MC202	SMA(P)/SMA(P)	3m	DC to 18.5GHz
MC203	SMA(P)/SMA(P)	4m	DC to 18.5GHz
MC204	SMA(P)/SMA(P)	1.5m	DC to 12.4GHz
MC301	SMA(P)/SMA(P)	0.5m	DC to 10GHz
MC302	SMA(P)/SMA(P)	1m	DC to 10GHz
MC303	SMA(P)/SMA(P)	1.5m	DC to 10GHz
MC304	SMA(P)/N(J)	0.2m	DC to 4GHz
MC305	SMA(P)/N(P)	0.2m	DC to 4GHz
MC306	SMA(P)/BNC(J)	0.2m	DC to 2GHz
MC307	SMA(P)/BNC(P)	0.2m	DC to 2GHz
MC308	N(P)/N(P)	0.5m	DC to 10GHz
MC309	N(P)/N(P)	1m	DC to 10GHz
MC310	N(P)/N(P)	1.5m	DC to 10GHz
MC311	N(P)/SMA(J)	0.2m	DC to 10GHz
MC312	N(P)/BNC(J)	0.2m	DC to 2GHz
MC313	N(P)/BNC(P)	0.2m	DC to 2GHz
MC314	BNC(P)/BNC(P)	1.5m	DC to 2GHz

※Impedance : 50Ω

Adapter

Model	Connector	Impedance	Freq.range
MA301	BNC(P)/BNC(J)	50Ω/75Ω	DC to 2GHz
MA302	BNC(P)/N(J)	75Ω/75Ω	DC to 1.8GHz
MA303	BNC(P)/N(P)	75Ω/75Ω	DC to 1.8GHz
MA304	BNC(P)/F(J)	75Ω/75Ω	DC to 1.8GHz
MA305	BNC(P)/F(P)	75Ω/75Ω	DC to 1.8GHz
MA306	N(P)/SMA(J)	50Ω/50Ω	DC to 12.4GHz
MA307	N(P)/BNC(J)	50Ω/50Ω	DC to 2GHz
MA308	N(P)/BNC(J)	50Ω/75Ω	DC to 2GHz
MA309	N(J)/BNC(P)	50Ω/50Ω	DC to 2GHz

USB cable　MI400

Connector : A plug/B plug
Length : 1m