

ANTENNA FEEDER SPECTRUM ANALYZER

TFA[®] SERIES 100H

ANTENNA FEEDER SPECTRUM TESTER



100 SERIES ANTENNA FEEDER SPECTRUM TESTER CAN TEST THE STANDING WAVE RATIO AND MATCHING OF BASE STATION ANTENNA AND FEEDER, AS WELL AS CABLE LOSS AND LONG-DISTANCE FAULT LOCATION. IT CAN QUICKLY EVALUATE THE CONDITION OF TRANSMISSION LINE AND ANTENNA SYSTEM, AND SPEED UP THE INSTALLATION AND DEBUGGING TIME REQUIRED FOR NEW BASE STATIONS. 100 SERIES 1 MHZ ~ 6 GHZ ULTRA WIDE TEST FREQUENCY RANGE, 60 DB LARGE DYNAMIC RANGE, A VARIETY OF OPTIONS TO FUNCTION WIDELY SUITABLE 2 G / 3 G / 4 G / 5 G/WLAN/WIFI/WIMAX SYSTEM UNDER TEST. THE 100 SERIES IS DESIGNED WITH A 7-INCH SUPER-LARGE TOUCH SCREEN AND HAS AN ULTRA-LONG BATTERY LIFE OF 8 HOURS, PROVIDING EXCELLENT USER EXPERIENCE. 100 SERIES IS A NEW GENERATION OF WIRELESS NETWORK CONSTRUCTION, UPGRADE, MAINTENANCE ESSENTIAL MEASUREMENT TOOLS.

PRODUCT FEATURES

PRODUCT CHARACTERISTICS



1MHZ~6GHZ DESIGN, WIDELY SUITABLE FOR 2G/3G/4G/WIMAX

60DB LARGE DYNAMIC RANGE

LIMIT LINE/MARK LINE/CURVE CALCULATION ISOMETRIC LINE INTELLIGENT
JUDGMENT FUNCTION

8 HOURS LONG ENDURANCE

7 INCH LCD COLOR TOUCH LARGE SCREEN DISPLAY

POWERFUL INSTRUMENT FILE BATCH EDIT/DELETE/FILTER AND OTHER
MANAGEMENT FUNCTIONS

CW SIGNAL SOURCE FUNCTION

SUPPORT FOR MULTIPLE MEASUREMENT MODES

MULTIPLE MEASUREMENT MODES ARE SUPPORTED



The instrument supports multiple measurement modes such as fault distance return loss, fault distance standing wave ratio, frequency return loss, frequency standing wave ratio, cable loss, Smith chart, phase, power meter and spectrum analyzer. The main interface design is exquisite, and the user can operate easily

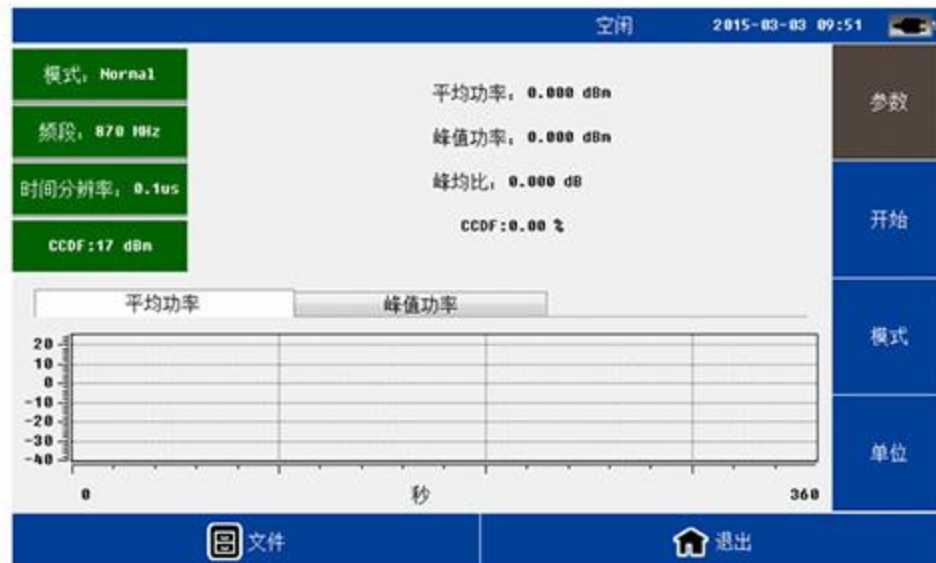


A VARIETY OF ACCESSORIES ARE AVAILABLE

A VARIETY OF OPTIONS ARE AVAILABLE



USB, high-precision power meter probe can be connected to the meter to realize the power test and display, and can be separately connected to the PC terminal, to achieve the test results display and analysis, greatly meet the needs of customers in many aspects. Terminal power meter, through the spectrum power meter can intuitively and clearly measure a variety of signals to meet the needs of different levels of customers.

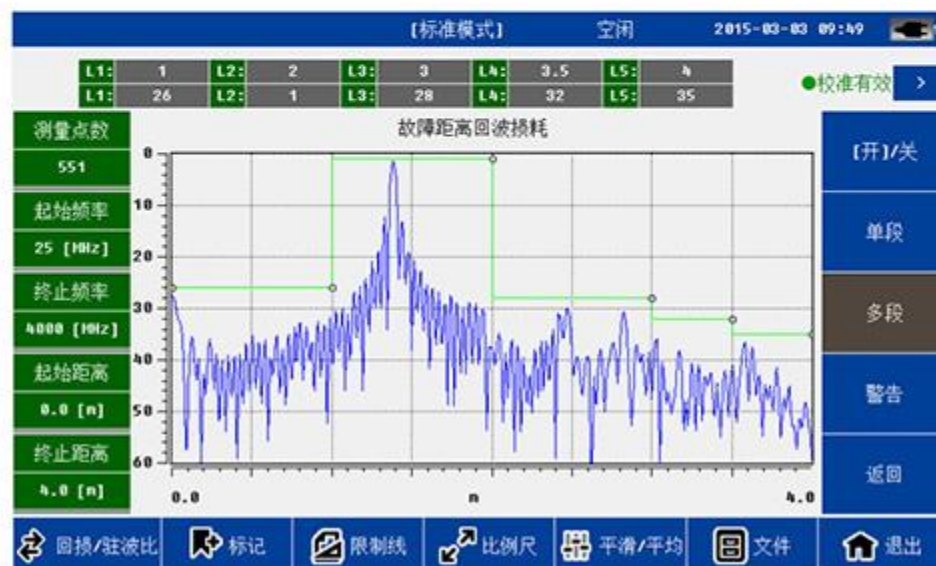


INTELLIGENT ANALYSIS AND JUDGMENT OF TEST CURVE

INTELLIGENT ANALYSIS AND JUDGMENT OF TEST CURVE



Support single and multi-segment limit line analysis, mark line analysis and curve operation analysis of the test curve, the results are accurate and clear.



CONVENIENT AND ACCURATE CALIBRATION METHOD

CONVENIENT AND ACCURATE CALIBRATION METHOD



T design, single port calibration, convenient and accurate. And after calibration, there is no need to recalibrate when the number of scanning points is reduced, which greatly facilitates the on-site use efficiency of customers. ECAL electronic calibrator provides consistent calibration results. Remove calibration errors that may be introduced by manual calibration.

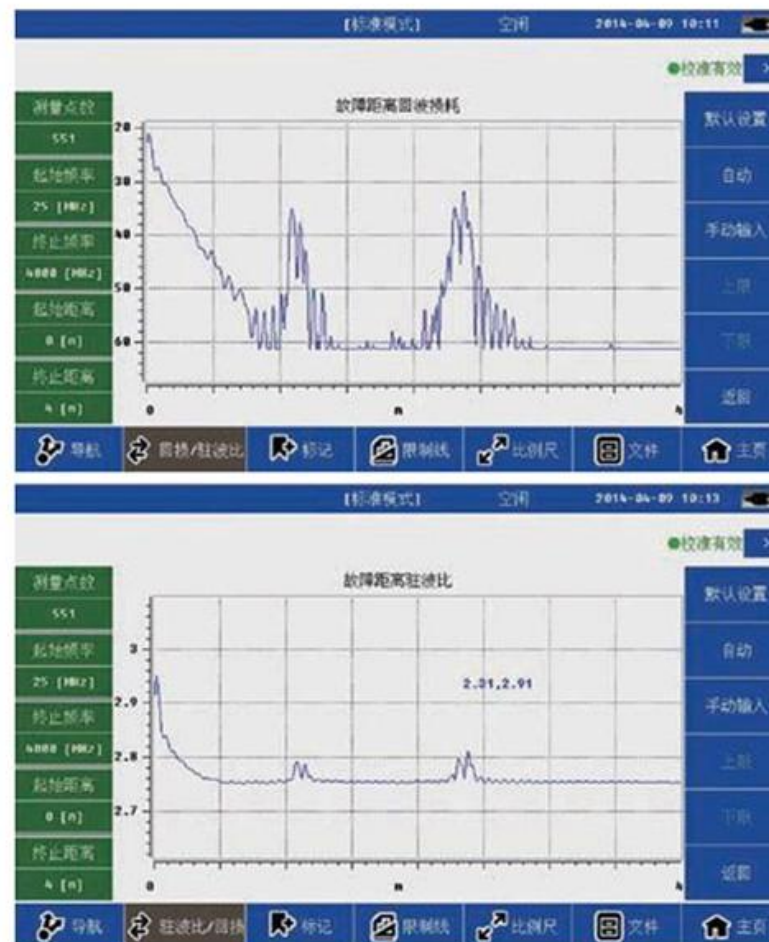


REAL TIME SWITCHING OF RETURN LOSS / VSWR

INSTANT SWITCH OF LOSS/STANDING WAVE RATIO



The return loss and standing wave ratio can be tested simultaneously, and the observation results can be switched by clicking, which greatly improves the working efficiency



BATCH PROCESSING OF TEST FILES CAN BE REALIZED

CAN REALIZE BATCH PROCESSING TEST FILES



Instrument with file filtering function, can easily achieve batch editing, analysis and save test files, effectively improve efficiency.



FIELD CALIBRATION OF CABLES AND ACQUISITION OF CABLE PARAMETERS

METER SUPPORTS ON-SITE CABLE CALIBRATION AND CABLE PARAMETER ACQUISITION



Users can manually input cable parameters (propagation speed; Cable loss) or select the known cable type, or if you do not know the cable information and parameters, you can use the existing cable on hand, using the system's built-in "cable calibration" tool to get accurate cable parameters. Provide convenience for field testing.

电缆校准

电缆长度: m

请使用开路校准件进行校准

✓ 确定✕ 返回

MANUAL AND PRESET FREQUENCY SELECTION

YOU CAN SET THE FREQUENCY MANUALLY AND SELECT A PRESET FREQUENCY



Users can "select preset signal standard" or "Customize frequency" according to test requirements.

频率参数设定

信号标准:

Custom

起始频率:

25

MHz

终止频率:

4000

MHz

测量点数

☐ 137

☐ 275

☒ 551

☐ 1103

✓ 确定

✕ 返回

HUMANIZED INTERFACE DESIGN

ENERGY SAVING, ENVIRONMENTAL PROTECTION HUMANIZED INTERFACE DESIGN



With low power consumption design, large capacity rechargeable lithium battery and AC configurator dual power supply, 8-hour ultra-long working time, and shortcut keys can set four display modes: normal, black and white, high light and night vision, suitable for use in different external environments. With convenient backlight management, fan management, power management and other functions, easy to operate, energy saving and environmental protection.

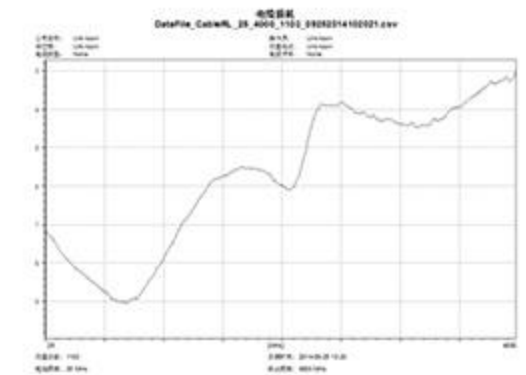
POWERFUL PC ANALYSIS SOFTWARE

POWERFUL UPPER COMPUTER ANALYSIS SOFTWARE



DATA MANAGEMENT FUNCTION

File transfer with the host, including uploading files from the host to the workstation/downloading files to the host and PC for file interaction, including opening local files/saving files to the local support report print preview and print, and can fully display the company name, test parameters, measurement time and other information



APPLICATION TOOL FUNCTION

DISTANCE-TO-FAULT function

Convert to Smith circle chart function

computer

Signal standard editing

Cable parameter editing



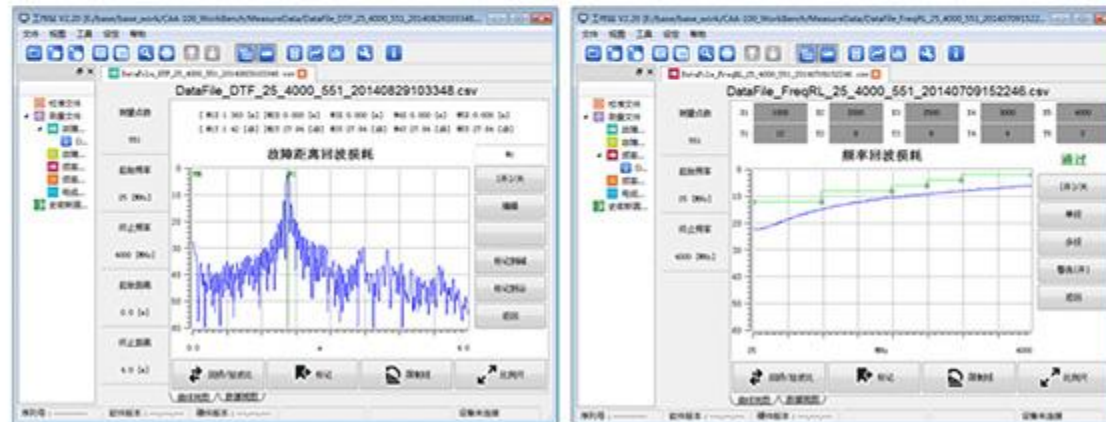
DATA ANALYSIS FUNCTION

Support mark line

Support limit line

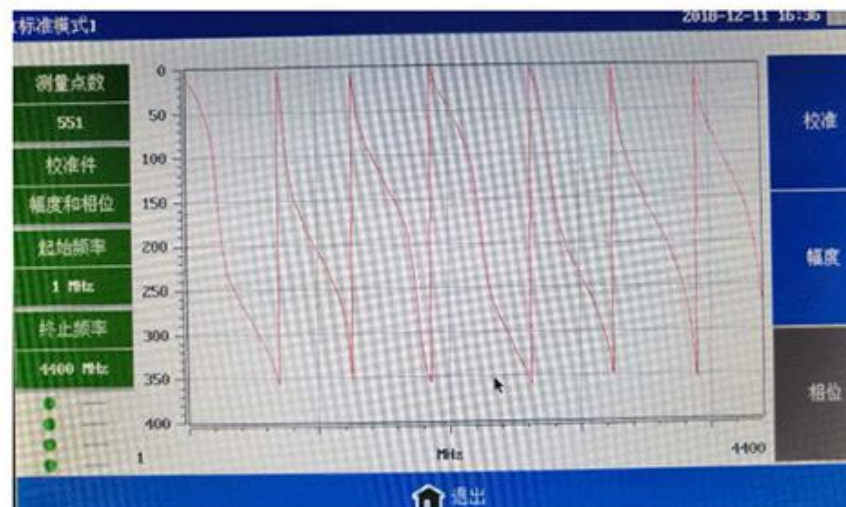
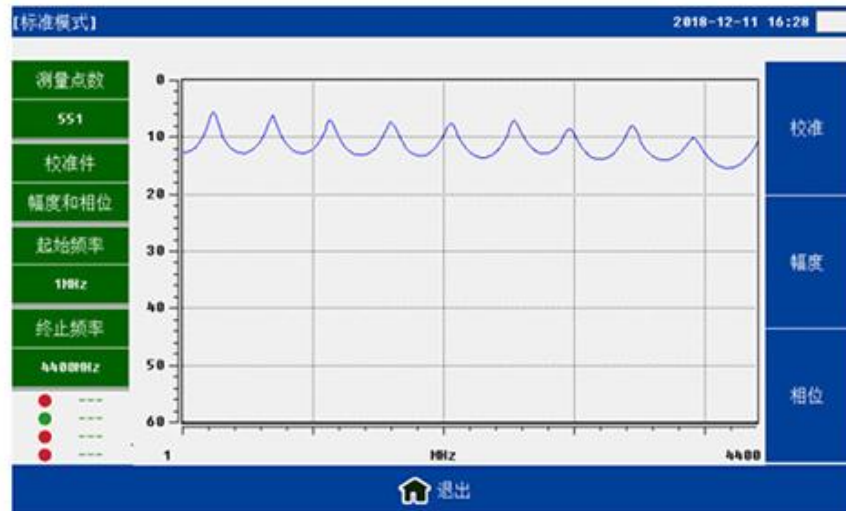
Supports the scale function

Support standing wave ratio and return loss format conversion



SUPPORT SELF CALIBRATION

THE METER SUPPORTS SELF-CALIBRATION



SUPPORT GPS SWITCH FUNCTION

SUPPORTS THE GPS SWITCH FUNCTION AND CARD 0 AND CARD SERIAL NUMBER INPUT MEMORY FUNCTION



Supports GPS positioning and switching
Support card ID and card serial number input

SUPPORT CW SIGNAL SOURCE FUNCTION

METER SUPPORTS CW SIGNAL SOURCE FUNCTION



Support CW signal output
Output frequency range (typical value) 50MHz-6GHz
Output power range (typical value)-8dBm-0dBm

TECHNICAL INDEX

TECHNICAL INDEX



TECHNICAL INDEX	
MODEL NUMBER	100H
FREQUENCY RANGE	1~6000MHz
FREQUENCY RESOLUTION	1kHz
FREQUENCY ACCURACY	± 2ppm
OUTPUT LEVEL	0dBm (TYPICAL)
MEASURED VELOCITY	1.5MS/ POINT
MEASUREMENT NUMBER	137,251,551,1103,2207,3310
ANTI-INTERFERENCE CAPABILITY	
FREQUENCY	-5dBm
CHANNEL	+ 17dBm
DIRECTIVITY	42dB (AFTER CALIBRATION)(TYPICAL)
RETURN LOSS	
RETURN LOSS RANGE	0~60dB
RETURN LOSS RESOLUTION	0.01dB
STANDING WAVE RATIO	
STANDING WAVE RATIO RANGE	1~65
STANDING WAVE RATIO RESOLUTION	0.01
CABLE LOSS	
CABLE LOSS RANGE	0~30dB
CABLE LOSS RESOLUTION	0.01dB
DTF	
RETURN LOSS RANGE	0~60dB
STANDING WAVE RATIO RANGE	1~65dB
DISTANCE RANGE	1500 M
RESOLUTION	1.5*10^8*VP/(F2-F1)VP: CABLE PROPAGATION SPEED; F1, F2: START AND CUT OFF FREQUENCIES
PHASE	
MEASURING RANGE	-180° - +180°
RESOLUTION	0.01°
SMITH DIAGRAM	
RESOLUTION	0.01
CW SIGNAL SOURCE	
OUTPUT FREQUENCY RANGE (TYPICAL VALUE)	50MHz-6GHz
OUTPUT POWER RANGE (TYPICAL VALUE)	-8dBm - 0dBm

UNIVERSAL INDEX	
CONNECTOR TYPE	N-TYPE NEGATIVE HEAD
INPUT IMPEDANCE	50 OHMS
DISPLAY	7 INCH RESISTIVE TOUCH SCREEN WITH 800*480 RESOLUTION
DATA INTERFACE	ONE USB HOST PORT, ONE USB DEVICE PORT, AND ONE 10M/100M ADAPTIVE LAN
STORAGE SPACE	>2000 CURVES
LANGUAGE	CHINESE, ENGLISH
BUILT-IN BATTERY	11.1V 7800MAH LITHIUM RECHARGEABLE BATTERY
EXTERNAL ADAPTER	110 TO 240 50 TO 60HZ AC INPUT, 16V 3.75A DC OUTPUT
OPERATING TEMPERATURE	-10°C ~ 50°C
STORAGE TEMPERATURE	-40°C ~ 70°C
RELATIVE HUMIDITY	0~85%(NO CONDENSATION)
WEIGHT	2.5KG (NET WEIGHT)
VOLUME (LENGTH × WIDTH × HEIGHT)	290×175×75 mm

TPM (OPTIONAL)... TERMINAL TYPE RF POWER	
METER	50~4000MHz
FREQUENCY RANGE	-40~20 dBm
POWER RANGE	<23 dBm
MAXIMUM TOLERABLE POWER	$\leq \pm 0.3\text{db}$ (15~35°C) ; $\leq \pm 0.5\text{dB}$ (0~50°C)
TEST ACCURACY	<1.2
INPUT STANDING WAVE RATIO	1us~60ms
BURST WIDTH	15Hz
MINIMUM TEST CYCLE	5MHz
VIDEO BANDWIDTH	200ns
MINIMUM PULSE WIDTH	FOURTH GEAR: 0.1US,LUS,15US,150US
TIME RESOLUTION	<12dB
MODULATING SIGNAL PEAK-TO-AVERAGE RATIO	0.1% ~ 100%
CCDF TEST RANGE	$\pm 3\%$
CCDF TEST ACCURACY	0.1% ~ 100%
BURST SIGNAL DUTY CYCLE	USB
POWER SUPPLY MODE	0°C ~ 50°C
OPERATING TEMPERATURE	-20°C ~ 70°C
STORAGE TEMPERATURE	0~85%(NO CONDENSATION)
RELATIVE HUMIDITY	0.3kg
WEIGHT VOLUME (LENGTH × WIDTH × HEIGHT)	125×45×35mm
ANTI-VIBRATION CHARACTERISTIC	MEETS MIL-PRF-28800F CLASS3
ELECTROMAGNETIC COMPATIBILITY CHARACTERISTIC	COMPLY WITH EMC STANDARD GB/T 18268-2000

DPM MODULE (OPTIONAL) -- PASS-THROUGH RF POWER METER	
MEAN MEASUREMENT	
FREQUENCY RANGE	300-4200MHz
POWER RANGE	100mW-200W
DYNAMIC RANGE	≥ 33 dB
INSERTION LOSS	≤ 0.1 dB
STANDING WAVE RATIO	1.05-99.9
DIRECTIVITY	≥ 30 (< 3GHz); ≥ 28 (> 3GHz)
TEST ACCURACY	± 4%
INPUT IMPEDANCE	50Ω
RF INTERFACE	N TYPE NEGATIVE INTERFACE
DATA INTERFACE	USB
PEAK MEASUREMENT	
POWER RANGE	100mW-500W
MEASUREMENT ACCURACY	BURST PULSE WIDTH > 200 μs : ± 7% ; 1 μs < BURST PULSE WIDTH < 200 μs : ± 10% 0.5 μs < BURST PULSE WIDTH < 1 μs : ± 15% ; BURST PULSE WIDTH < 0.5 μs : ± 20%
PEAK-TO-AVERAGE RATIO	0 - 12dB
CCDF	
TEST RANGE	0.1% - 100%
TEST ACCURACY	± 3%
THRESHOLD MEASUREMENT RANGE	50mW - 500W
BURST POWER	
POWER RANGE	100mW - 200W
BURST WIDTH	1us - 60ms
MINIMUM TEST FREQUENCY	15Hz
DUTY CYCLE	0.001 - 1
TEST ACCURACY	± 6%
UNIVERSAL INDEX	
POWER SUPPLY MODE	USB
OPERATING TEMPERATURE	-10°C -50°C
STORAGE TEMPERATURE	-20°C -70°C
RELATIVE HUMIDITY	0-85% (NO CONDENSATION)
WEIGHT	0.48kg
VOLUME (LENGTH × WIDTH × HEIGHT)	130×124×34mm

ORDERING INFORMATION

STANDARD CONFIGURATION

HOST, LITHIUM BATTERY, AC ADAPTER, CD(UPPER COMPUTER SOFTWARE, INSTRUCTION MANUAL), CONVENIENT PACKAGE, T-TYPE CALIBRATION PARTS SET; TEST CABLE, ADAPTER HEAD.

OPTIONAL CONFIGURATION

TPM MOD-TERMINAL RF POWER METER;
 DPM MODULE - THROUGH TYPE RF POWER METER;
 ECAL ELECTRONIC CALIBRATION PARTS.