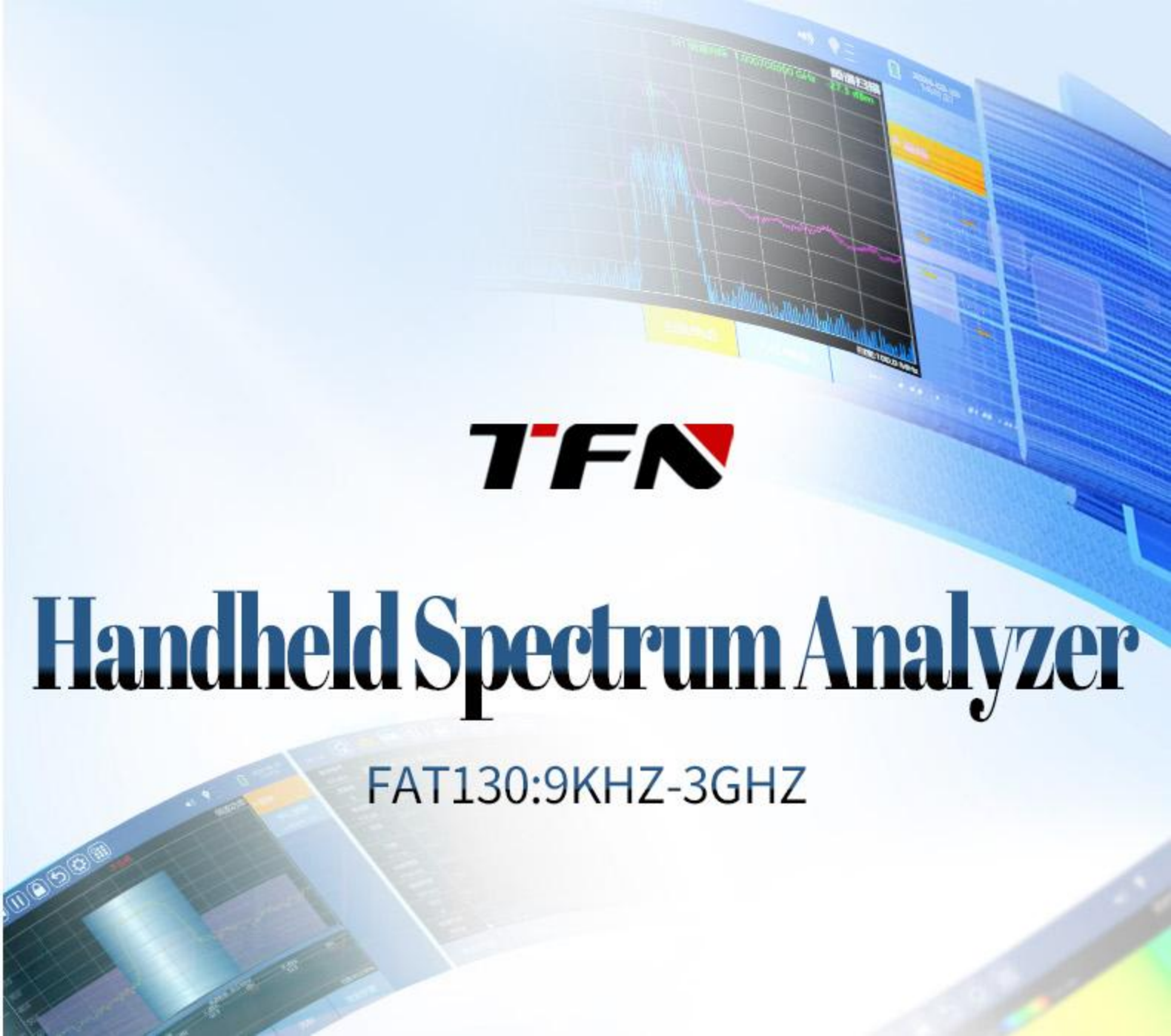


TFN

Handheld Spectrum Analyzer

FAT130:9KHZ-3GHZ


TFN SPECTRUM ANALYZER FAT130
通道带宽
频率
幅度
带宽
扫描
光标
测量配置
检波方式
START
STOP

FAT130

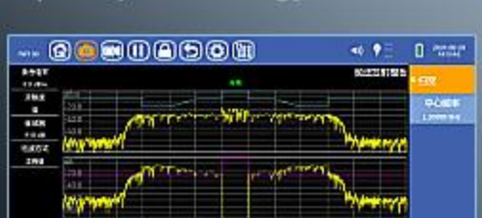
Function Highlights

Resolution bandwidth: 1Hz-3MHz, quickly identify and capture irregular transient interference signals, optimize test

Easily determine and measure two similar signals

Large screen with bright display, clear indoor and outdoor

FM/AM audio demodulation, frequency technology



Integrated USB HOST & DEVICE, support USB storage, WIFI/LAN optional

FAT130

Application Scenarios

Equipment interference

Electromagnetic environment detection

Interference query

Shielding test

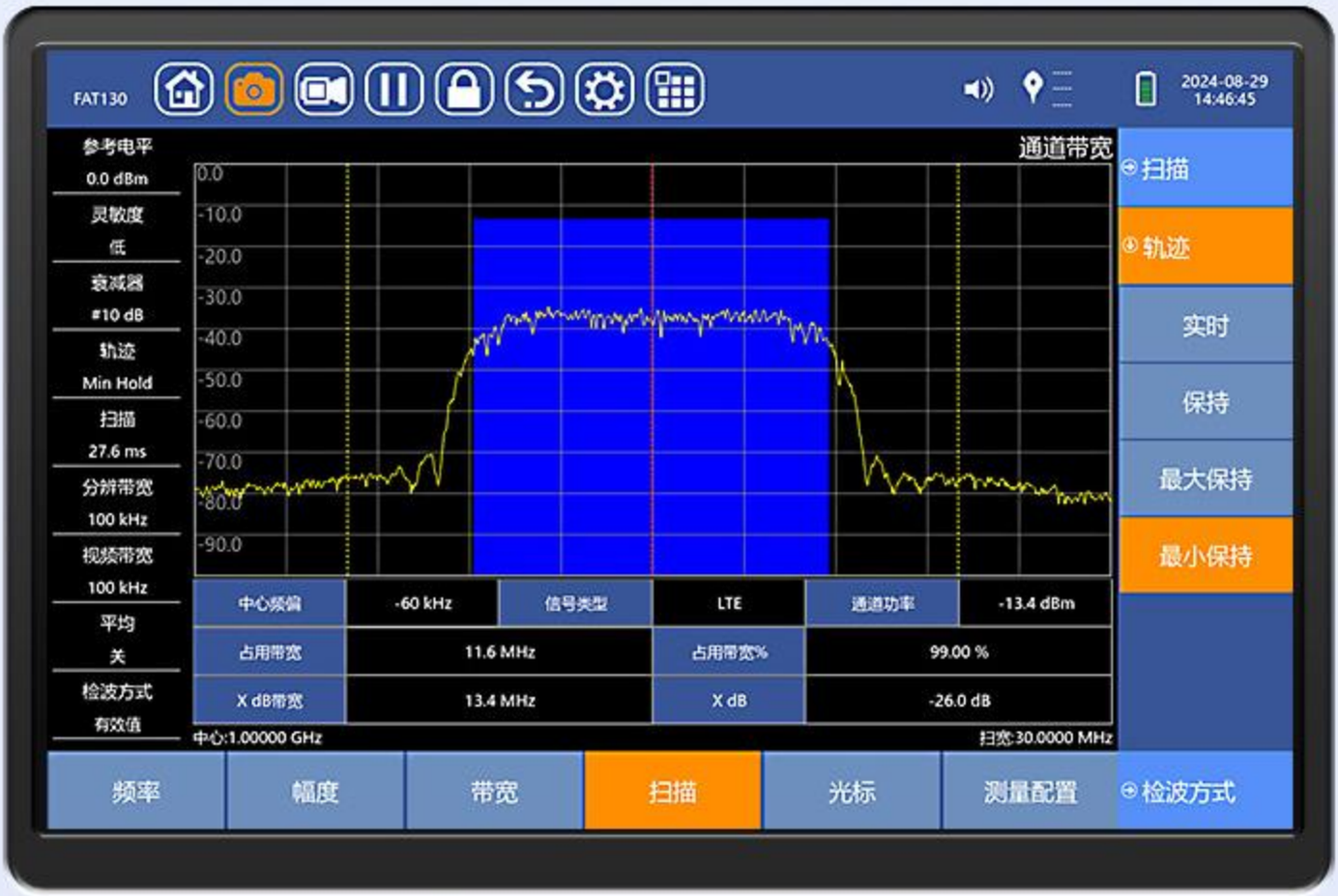
Signal detection

Sweep frequency clearing test

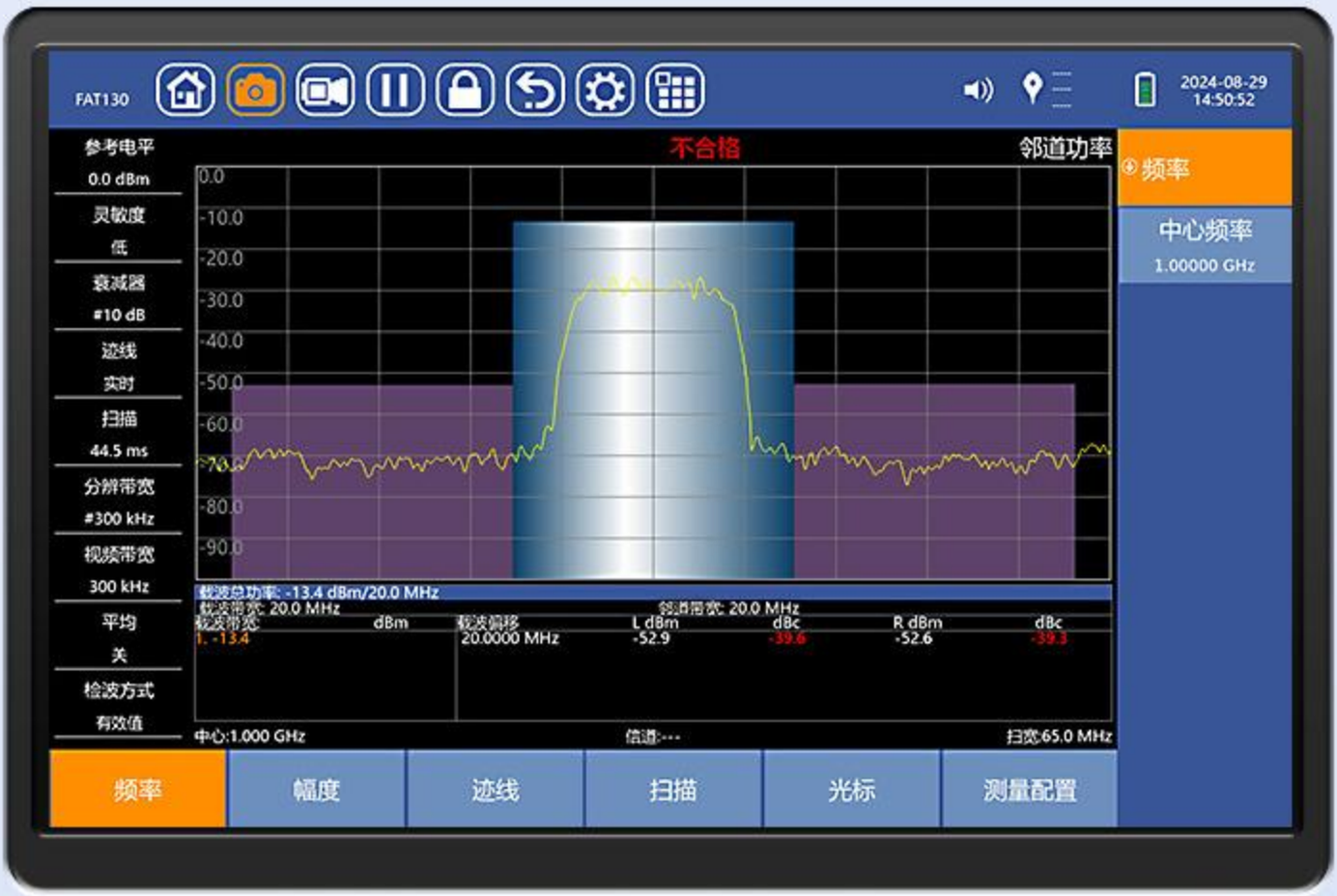
FAT130

Complete Spectrum Functions

【Spectrum scanning】

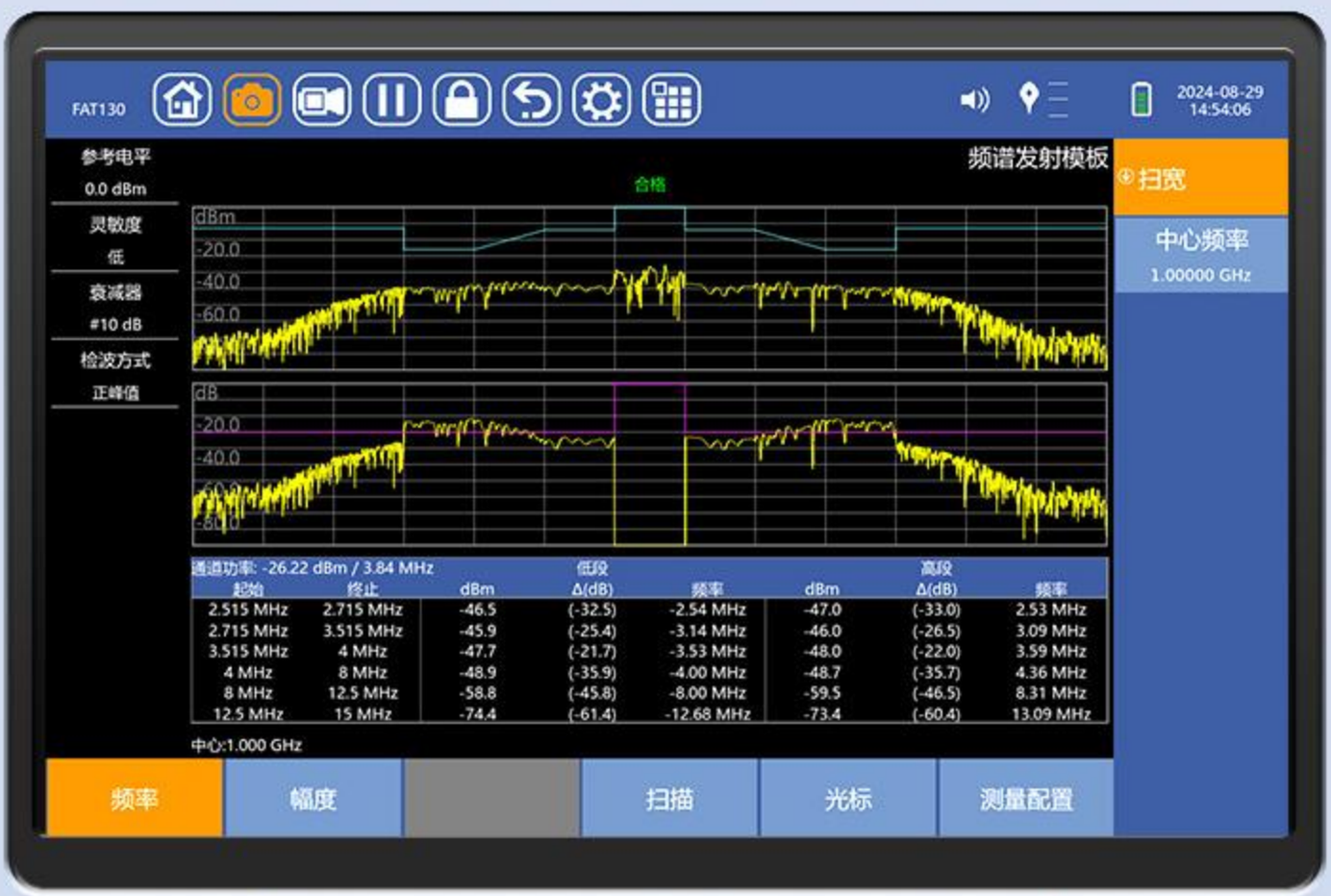


【Channel bandwidth】



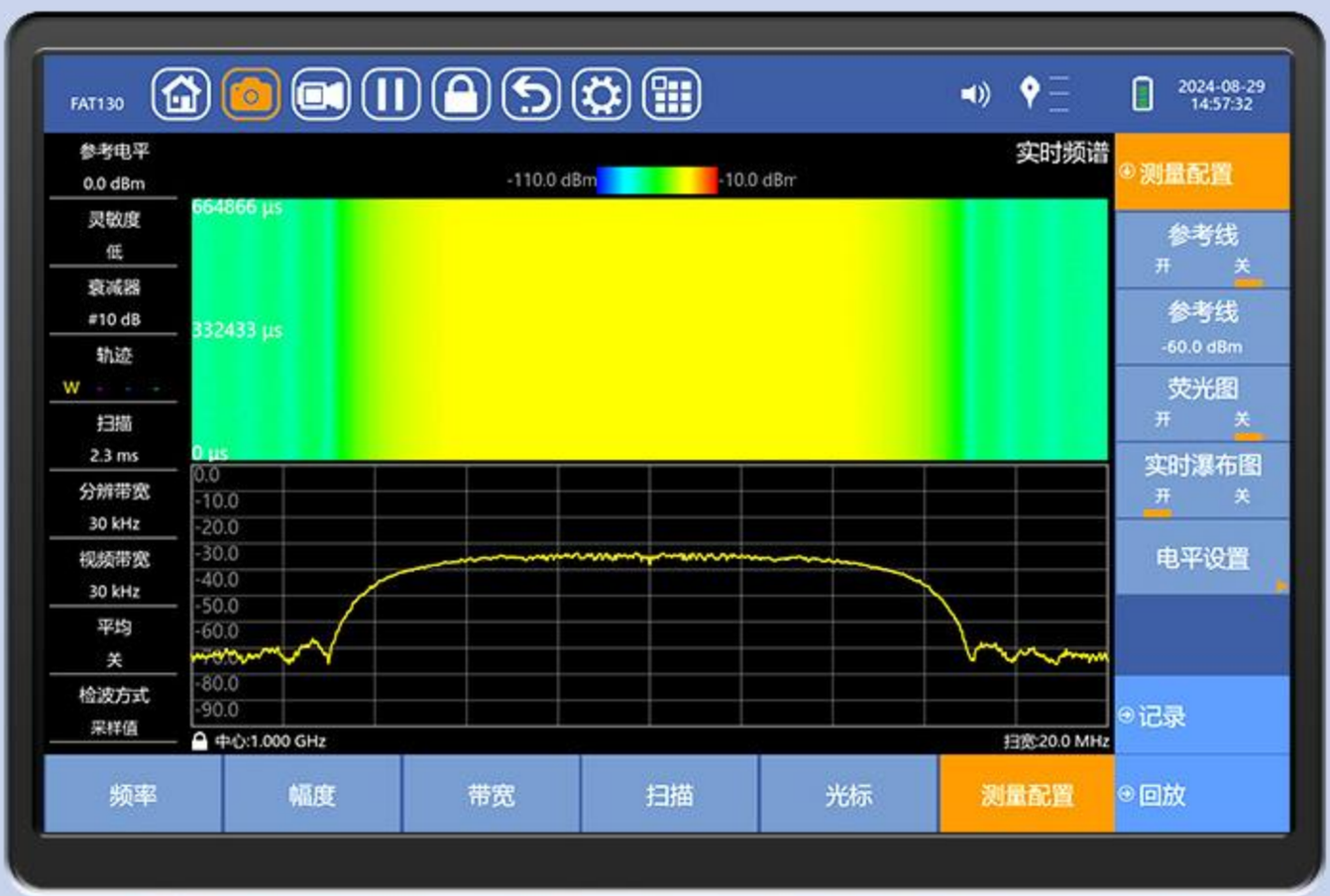
【Adjacent channel power】

【Spectrum scanning】



【Spectrum emission template】

【Real-time spectrum fluorescence diagram】



【Real-time spectrum waterfall diagram】

FAT130

Dual operation of touch screen buttons

Meet the operation preferences of different customers

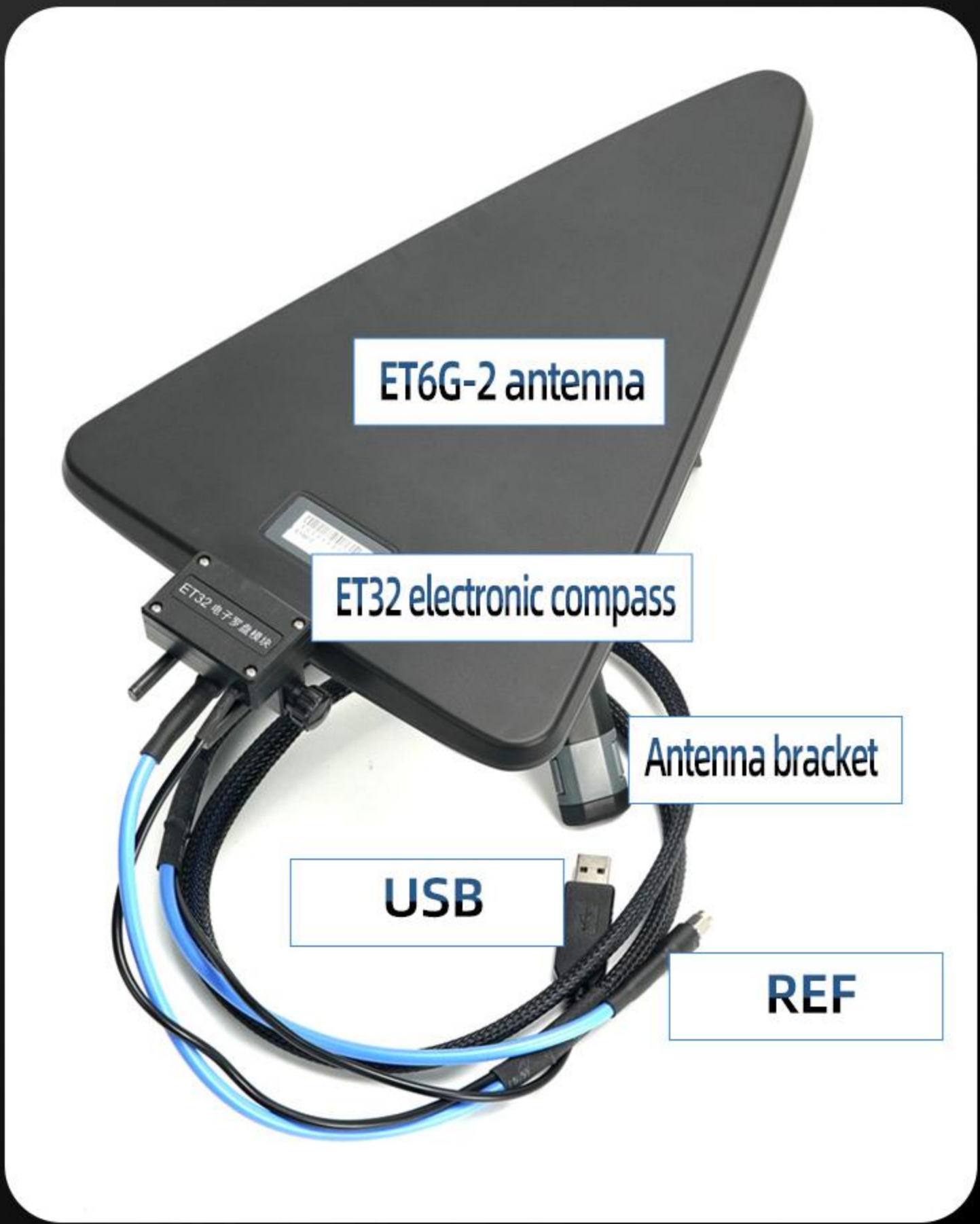

FAT130
2024-08-29
15:19:07
频谱扫描
参考电平
0.0 dBm
灵敏度
低
衰减器
#10 dB
迹线
实 大 小 均
扫描
21.9 ms
分辨带宽
#1 MHz
视频带宽
1 MHz
平均
关
检波方式
采样值
0.0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
中心:1.000 GHz
扫宽:200.0 MHz
扫描
迹线
实时 轨迹1
开 关
最大保持 轨迹2
开 关
最小保持 轨迹3
开 关
频率/扫宽
幅度
带宽
扫描/轨迹
光标/峰值
测量配置
检波方式

FAT120

Test with directional antenna

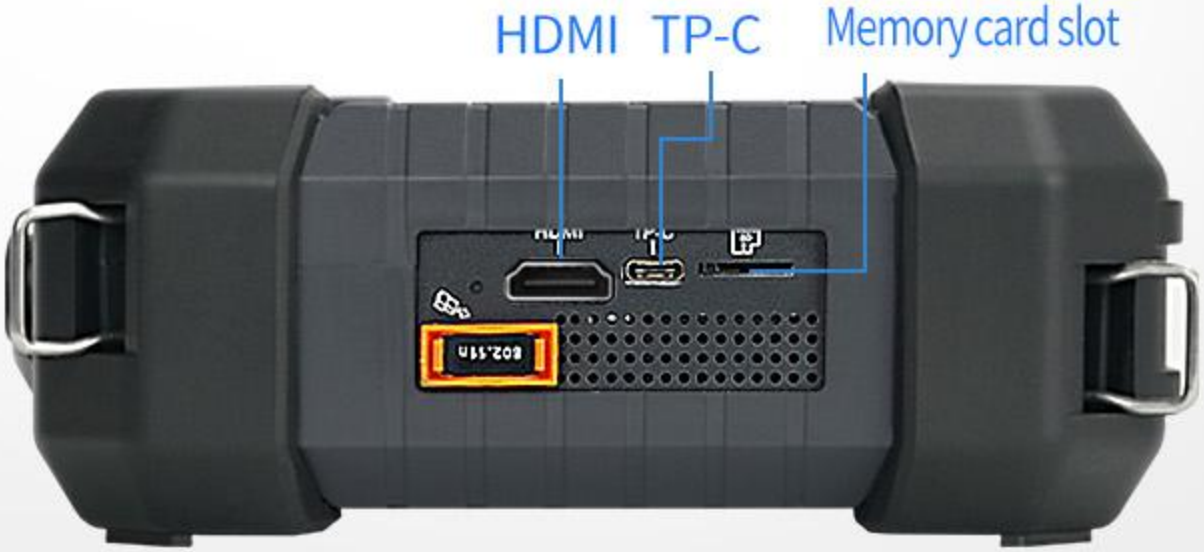
FAT13A

Directional Antenna Group


ET6G-2 antenna
ET32 electronic compass
Antenna bracket
USB
REF

FAT130

Appearance Introduction



FAT130

Device Components

Technical Parameters

Model	FAT130
Frequency range	9kHz～3100MHz
Frequency parameters	
Aging speed	$<\pm 0.5 \times 10^{-6}$/year
Temperature stability	$<\pm 0.5 \times 10^{-6}$ (0 - 50)°C
Frequency standard counting accuracy	Signal-to-noise ratio is 25dB, resolution bandwidth (RBW)/span width = 0.01
Counting accuracy	$\pm 0.5 \times 10^{-6} \pm 1$
Resolution	1Hz

Frequency sweep width	
Zero span width	Support
Span width range	1KHz-3100MHz
Sweep time and trigger mode	
Sweep time range	20ms-250s (Frequency sweep width≥200Hz)
	10μm-1000s (Frequency sweep width=0Hz)
	1ms-250s (Frequency sweep width, Quick sweep mode)
Time accuracy	<±0.2%
Trigger mode	Free trigger, Single trigger, Video trigger, Line trigger
Resolution bandwidth	
Range	1Hz - 3MHz About 10% step
Bandwidth accuracy	<±10%
Selectivity	(60dB/3dB Bandwidth ratio):5:1
Video bandwidth	
Range	1Hz - 3 MHz About 10% step

Stability	
Phase noise	Typical value <-108dBc/Hz@ continuous signal offset 100KHz
Center 1GHz	Typical value <-95dBc/Hz@ continuous signal offset 100KHz
Amplitude specification	
Attenuator	
Range	0dB - 55dB
Step	5dB/(1dB Option)
Built-in amplifier	
Frequency range	1MHz–3100MHz
Gain	18dB （Typical value）
Noise figure	4dB （ Typical value ）
Maximum safe input level	+30dBm (Peak power/entry attenuation>15dB)
	50VDC
Third order intermodulation intercept point(TOI)	Typical value > 15dBm
Dynamic range	>100dB

Displayed average noise level	
No signal input, 0dB attenuation, 100Hz RBW, 100Hz VBW, sample value detection	
Amplifier off	⩽-125dBm，5MHz～1GHz
	⩽-120dBm，1GHz～3.1GHz
Amplifier on	⩽-140dBm，5 MHz～1GHz
	⩽-136dBm，1GHz～3.1GHz
Spurious signal response range	
Second harmonic	<-70dBc-20dBm single tone mixer input, amplifier off
Residual response	No signal input, attenuator is 0
	⩽-85dBm 5MHz-3100MHz
Display range	
Logarithmic scale	0.1-0.9dB/grid, 0.1dB step
	1-40dB/grid, 1dB step
Linear scale	10 grids
Scale unit	dBm， dBmV， dBμV， mV
Frequency marker reading resolution	0.03dB logarithm
	0.03% of reference level linear

Trace	Three trace outputs
Detection mode	Sample value, positive peak, negative peak, normal value, average value
Frequency marker function	Peak value, next peak, frequency marker to center, frequency marker to reference, etc.
Frequency marker display	Normal, difference, fixed, frequency count
Reference level	-130dBm— +30dBm
Level accuracy	Typical value ⩽ ±0.5dB@+25±5°C
Resolution bandwidth switching accuracy	Typical value< ±0.1dB
Input attenuator switching accuracy	Typical value< ±0.3dB
Input/output specifications	
RF input	
Input connector	N-type connector
Input impedance	50 Ω
VSWR	Typical value <1.8
	(10MHz～3100MHz,
	Attenuator ⩾10dB)

Power supply specifications	
Battery type	Rechargeable lithium battery
Adapter	19V/3.42A
Charging time	> 4.5 hours
Power supply time	> 3 hours(Excluding tracking source option)
	> 2.5 hours(With tracking source option)
Other indicators	
Operating temperature	-10°C - +55°C
Storage temperature	-40°C - +80°C
Dimensions (W x H x L)	257mm × 75mm × 185mm
Net weight (with battery)	Approximately 2.2 kg
Display	16cm (6.5 inches) TFT color LCD
Display resolution	640x480 pixels