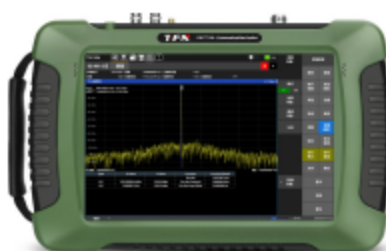




TFN RMT Handheld Spectrum Analyzer

Drive test and interference analysis all-in-one mobile test platform with full frequency coverage up to 40GHz



Product Overview

The TFN RMT series is a high-performance handheld tester that integrates spectrum analysis, interference troubleshooting, base station testing, and drive testing. Covering frequencies from 5kHz to 40GHz, it boasts an exceptionally high receive sensitivity of -170dBm/Hz and a 100MHz real-time analysis bandwidth. This device integrates multi-standard analysis capabilities for 5G NR, LTE, NB-IoT, and other standards, supports signal direction finding and positioning, and supports remote cloud control. It is an ideal solution for field testing and interference troubleshooting for telecommunications operators, military, power, and railway industries.

Core Feature Highlights

- Full frequency band coverage and high-performance analysis
Wide frequency range: 5kHz ~ 40GHz (multiple models available), meeting test requirements from low frequency to millimeter wave
Extremely high sensitivity: Sub-6G can reach -170dBm/Hz, high frequency band can reach -165dBm/Hz
Fast scan: 137GHz/s scan speed (@25KHz), 100% signal capture rate
100MHz real-time bandwidth: supports real-time spectrum analysis and IQ data export
- Analysis of Multi-standard Communication Systems
5G NR in-depth analysis: supports key indicators such as beam ID, cell ID, SSB constellation diagram, EVM, etc.
Full network standard support: 5G/4G/3G/2G/NB-IoT signal analysis
Base station test function: support PCI tracking test, multi-beam simultaneous demodulation
- Professional interference troubleshooting and positioning
Intelligent interference analysis: waterfall diagram, afterglow spectrum, four-window interference troubleshooting
Accurate signal positioning: supports AOA direction finding, single/online multi-point



positioning

Map integration: GPS maps of different countries can be configured , and base station and interference source map positioning can be supported

- Advanced platform and operating experience

10.5-inch high-definition touch screen: supports multiple display modes such as daylight and dark

Cloud remote control: support multi-terminal collaborative processing

Lightweight design: $\leq 2.3\text{kg}$ weight, ≥ 6 hours of battery life, truly portable

Customer Pain Points & Solutions

Customer Pain Points	Solutions
High-frequency band testing requirements cannot be met	40GHz full-band coverage, supporting millimeter wave testing
Burst signals are difficult to capture	137GHz/s ultra-fast scan rate, 100MHz real-time bandwidth
Insufficient field positioning accuracy	Integrated AOA direction finding, GPS positioning, and map annotation
Complex multi-standard test equipment	All-in-one 5G/4G/3G/2G/NB-IoT analysis
Low team collaboration efficiency	Support cloud remote control and multi-terminal collaboration

Product Parameters

Item	Specification
Frequency range	RMT714A: 5KHz-4.5GHz RMT716A: 5KHz-6.32GHz RMT717A: 5KHz-7.5GHz RMT719A: 5KHz-9GHz RMT720A: 5KHz-20GHz RMT740A: 5KHz-40GHz
Phase noise	$\leq -105\text{dBc/Hz}$ @10kHz offset
Displays the average noise level	-170dBm/Hz (Sub-6G, preamplifier on)
Real-time bandwidth analysis	100MHz
Scan speed	137GHz/s (@25KHz RBW)
Level accuracy	$\pm 1.5\text{dB}$ (6GHz/9GHz/20GHz platform)
Maximum input power	+26dBm
Third-order intermodulation intercept point	$\geq +12\text{dBm}$ (3GHz~6.3GHz)
Display screen	10.5-inch high-definition capacitive touch screen
Weight	$\leq 2.3\text{kg}$
Battery life	≥ 6 hours
Operating temperature	$0^{\circ}\text{C} \sim 40^{\circ}\text{C}$



Application Scenario

- 5G network deployment optimization: beamforming analysis, PCI trace testing
- Field Interference Troubleshooting: Operator Network Interference Location and Analysis
- Drive testing and coverage assessment: indoor and outdoor signal coverage quality assessment
- Military Industry and Defense: Complex Electromagnetic Environment Monitoring and Analysis
- Scientific research and education: teaching and research on wireless communication principles

Why choose TFN RMT?

The RMT series offers the performance of a benchtop instrument with the portability of a handheld device. Its full frequency band coverage from 5kHz to 40GHz, 100MHz real-time bandwidth, and multi-standard signal analysis capabilities make it the ultimate solution for field testing. Whether it's 5G network optimization, interference troubleshooting, or military communications testing, the RMT provides professional-grade testing support.

Standard & Optional Configuration

Standard Configuration

1. Host

- 1.1 Spectrum analyzer 5KHz~4.5GHz (RMT714A)
- 1.2 Spectrum analyzer 5KHz~6.32GHz (RMT716A)
- 1.3 Spectrum analyzer 5KHz~7.5GHz (RMT717A)
- 1.4 Spectrum analyzer 5KHz~9GHz (RMT719A)
- 1.5 Spectrum analyzer 5KHz~20GHz (RMT720A)
- 1.6 Spectrum analyzer 5KHz~40GHz (RMT740A)

2. Battery charger (BC)

3. Omnidirectional antenna 600MHz~6GHz (OA660)

4. GPS antenna (GPSA)

5. Carrying bag (CB)

Optional Configuration

6. Tracking Generator

- 6.1 Tracking generator for RMT714A (TG714)
- 6.2 Tracking generator for RMT716A (TG716)
- 6.3 Tracking generator for RMT717A (TG717)
- 6.4 Tracking generator for RMT719A (TG719)

7. Color

- 7.1 Gray appearance spectrum analyzer 5KHz~6.32GHz (FAT750)
- 7.2 Gray appearance spectrum analyzer 5KHz~9GHz (FAT801)
- 7.3 Gray appearance spectrum analyzer 5KHz~20GHz (FAT811)
- 7.4 Gray appearance spectrum analyzer 5KHz~40GHz (FAT840)

8. Omnidirectional antenna 500MHz~7.5GHz (OA750)

9. Directional antenna



- 9.1 Directional antenna 9KHz-30MHz (TN315A)
- 9.2 Directional antenna 20MHz-200MHz (TN315B)
- 9.3 Directional antenna 200MHz-500MHz (TN315C)
- 9.4 Directional antenna 500MHz-8GHz (TN315D)
- 9.5 Directional antenna 6GHz-26.5GHz (TN315E)
- 9.6 Directional antenna handle (TN315F)
- 9.7 Directional antenna set 9KHz~26.5GHz (TM9265)
- 10. Directional horn antenna
 - 10.1 Directional horn antenna 1GHz~6GHz (CK16D)
 - 10.2 Directional horn antenna 6GHz~18GHz (CK618D)
 - 10.3 Directional horn antenna 18GHz~40GHz (CK1840D)

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