



## TFN T300F Series Handheld Antenna and Cable Tester

Professional vector analysis for clear fault location



### Product Overview

The T300F series is a high-precision handheld vector network analyzer designed for on-site maintenance of broadcast television, radio stations, and base station antenna and feeder systems. It integrates VSWR and return loss measurements with precise fault location, making it an ideal tool for engineers performing system installation, commissioning, and rapid troubleshooting.

### Core functions of the product

- Comprehensive vector network analysis  
One-click measurements of VSWR, return loss, cable loss, impedance, and phase provide comprehensive evaluation of antenna and feeder system performance.
- Precise fault location (DTP)  
Using advanced time domain reflectometry (TDR) technology, the fault point (such as short circuit, open circuit, impedance mutation) in the antenna feeder can be accurately located, greatly shortening the troubleshooting time.
- Automatic qualified line judgment  
The measurement results are automatically displayed in "Pass/Fail" colors (such as green/red) with preset thresholds. This allows you to quickly determine the health of the line without professional experience and eliminate misjudgment.
- Transmission measurements with dual channel support  
Supports transmission measurement function to meet more complex system testing requirements.

### Solve your core pain points

1. Say goodbye to blind troubleshooting: The precise fault location function eliminates the need to check the line section by section, quickly finding the root cause of the problem and greatly improving maintenance efficiency.
2. Reduce reliance on personnel experience: Automatic qualification line judgment enables novices to make quick and accurate judgments like experts, reducing training costs and human errors.



3. Born for the scene: Rugged and portable, with ultra-long battery life (typically >6 hours), it adapts to a variety of harsh outdoor working environments, from broadcast towers to base station rooftops.
4. Uncompromising functionality and professionalism: Inspired by the technology of high-end vector network analyzers, it provides laboratory-grade measurement accuracy and stability in a handheld device.

#### Key product parameters

Project	Specification
Frequency range	300 kHz ~ 1600 MHz (optionally extended to 3GHz)
Frequency accuracy	±2 ppm (0~50°C)
Output level range	0 dBm
Scan Points	101, 201, 401, 801, 1601
Dynamic Range	80 dB
Measurement trajectory	4
impedance	50 Ω
Battery life	Typical value > 6 hours
weight	< 2.2 kg
show	High-brightness screen, suitable for various lighting environments

#### Application scenarios

1. Daily maintenance and troubleshooting of antenna and feeder systems for medium wave and FM broadcast transmitters .
2. Installation and commissioning of radio and television transmission systems .
3. mobile communication base station antenna feeder lines.
4. Fault location of antenna feeder paths in wireless network optimization .

#### Why choose T300F series?

Drawing on over a decade of experience in vector network analyzer development, TFN has created the T300F series specifically for field engineers. Through its innovative , low-power, highly integrated design, it condenses the functionality of complex laboratory instruments into a handheld device, perfectly meeting your practical field application needs and helping you efficiently complete every task.