

Anritsu envision:ensure

Anritsu LMR Master S412E

The premiere tool to install and maintain Positive Train Control (PTC) Radio and Base Stations (Beacons)



Comply with PTC Mandate

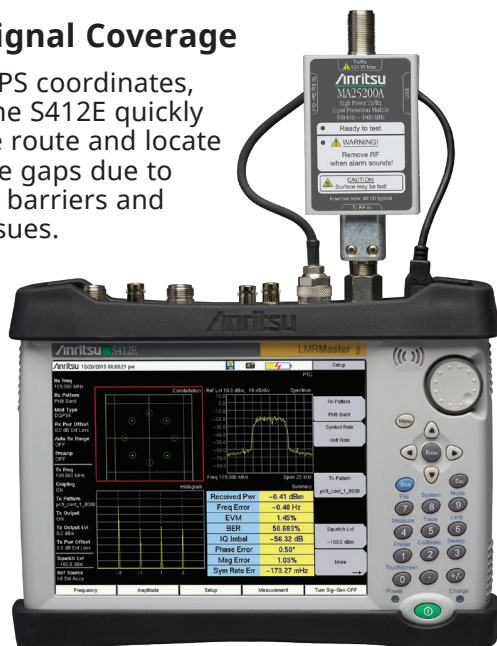
The LMR Master S412E is an industry leading handheld RF measurement system that can make the various measurements needed to verify and maintain the RF systems required for a PTC system (ITCR, ACSES).

Reduce RF Interference

The LMR MasterS412E has a number of robust interference hunting features that speed the time it takes to locate and abate interference.

Map Signal Coverage

Using GPS coordinates, watch the S412E quickly map the route and locate coverage gaps due to physical barriers and other issues.



Maintain maximum performance and reliability of PTC systems with the Anritsu LMR Master S412E. (Shown with Tx/Rx input protection module for high power portable and BTS test applications.)

Features

- I-EMTS, ITCR, ACSES
- Cable and Antenna Analyzer: 500 kHz – 1.6 GHz, optional to 6 GHz
- Return Loss, VSWR, Insertion Loss, S11 / S21, DTF
- Spectrum Analyzer: 9 kHz – 1.6 GHz, optional to 6 GHz
- NBFM Signal Analyzer with Coverage Mapping
- LMR Signal Analyzers with Coverage Mapping: PTC (ITCR, ACSES), P25, P25 Phase 2, NXDN, DMR, TETRA
- Broadband Signal Analyzers: LTE, WiMAX
- Interference Analyzer with Interference Mapping and support for MA2700A Handheld InterferenceHunter
- Internal Power Meter, optional External Power Sensor
- Quick transition from low power portable tester to high power base station and mobile transmitter tester
- Handheld, battery-operated design
- Weighs less than 7.6 lbs. (including battery)
- Rugged, proven design using Anritsu's 9th generation hardware platform
- Daylight viewable color touchscreen display
- Superior Immunity to RF interference

LMR Master S412E

Land Mobile Radio Modulation Analyzer

9 kHz to 1.6 GHz (can be extended to 6 GHz with options)

Rugged, Portable, Powerful

The LMR Master S412E is a compact handheld multi-function analyzer that has been specifically developed for technicians and engineers who install and maintain public safety, utility and private mobile communications systems. The LMR Master S412E combines our industry-standard cable & antenna analysis with the unmatched performance of our spectrum analyzers, then adds in powerful signal analysis and generation capabilities — including coverage mapping tools for both outdoor and indoor performance analysis — to create the ultimate battery powered LMR field service instrument for system commissioning, preventative maintenance, troubleshooting and compliance testing of mission critical systems.

Land Mobile Radio Analyzer Highlights

- Optional analyzers for PTC ITCR, PTC ACSES, P25 FDMA (TIA-102.CAAA-C) and P25 Phase 2 TDMA (TIA-102.CCAA), NXDN™, DMR2, MotoTRBO™, TETRA, FirstNet LTE, WiMAX 802.16d (fixed) and WiMAX 802.16e (mobile)
- ITCR and ACSES PTC Mode analyzes BER, EVM, Received Power, Frequency Error, Phase Error, Magnitude Error, IQ Imbalance, Symbol Error Rate
- NBFM Mode analyzes Carrier Frequency, Carrier Power, Deviation, CTCSS/DCS/DTMF, Occupied Bandwidth, SINAD and Quieting
- NBFM Auto Scan locates and locks on to transmitter carriers
- TIA-603-D compliant SINAD and 20 dB Quieting analysis modes
- Coverage Mapping (Outdoor and Indoor) for LMR standards
- Analysis of data and BER on P25/P25p2, NXDN, and DMR2 control channels
- Signal Generator: 500 kHz to 1.6 GHz, 0 dBm to -130 dBm
- P25/P25p2, NXDN, and DMR2 modes offer signal generation of standard BER test patterns including 1011 Hz, 1031 Hz, and O.153/V.52

Vector Network Analyzer Highlights

- 1-path, 2-port VNA w/ quad trace display
- Distance Domain option for Distance-to-Fault analysis
- Adjustable data points up to 4001
- IF Bandwidth selections of 10 Hz to 100 kHz
- 100 dB transmission dynamic range to 4 GHz
- 850 μ s/data point sweep speed
- Vector Voltmeter option for matching section and phasing harness construction

Spectrum Analyzer Highlights

- Dynamic Range: > 95 dB in 10 Hz RBW
- DANL: -152 dBm in 10 Hz RBW
- Phase Noise: -100 dBc/Hz max @ 10 kHz offset at 1 GHz
- Frequency Accuracy: 120 ppb, < 50 ppb with GPS locked
- Options: Interference Analyzer, Spectrogram, AM/FM/SSB Audio Demod

