

# RF MONITORING

A cost-effective way to monitor the RF environment

Verifying the RF environment in test chambers is an important requirement for quality test operations. Leakage and unwanted signals can compromise testing integrity and having easy-to-use tools to identify specific sources in chambers is mandatory.

## Identify leakage and unwanted signals using LAMTA

RF Monitoring is an optional product feature available on the LAMTA software platform and offers users the ability to scan the RF environment in the lab and quickly see the results using LAMTA's GUI interface. The LAMTA RF monitoring solution includes LSR-0360 scanning receiver hardware and LAMTA software module.



Fig.1: LSR-0360 Scanner hardware

## Features

The LSR-0360 supports multiple radio access technologies between **300 MHz and 6 GHz** and is fully integrated with the LAMTA software platform. LAMTA can control multiple LSR-0360 units and display the scan results.

### Supports 5GNR and LTE scanning functions to help identify signals

- Shows PCI, RSSI, MNC, MCC, RSRP, RSRQ, SINR (requires initial setup of scanning profiles)
- Set global thresholds to filter the signals for each parameter

### Wi-Fi scanning (2.4/5.8) including SSID and RSSI

**Spectrum analyzer sweep function.** Shows RF energy sources (without signal decode)

**Configurable IP Address.** For easier installation on corporate and/or internal networks

**Observe signals in RF chambers, the lab space, or in the field.** Available as a LAMTA product feature or as an independent, standalone solution.

## Benefits

**LAMTA user interface supports multiple scanners simultaneously, and allows multiple testers to access all scanners.** Anyone can use the spectrum analyzer function to quickly scan for spurious and unwanted signals within the test environment.

### Resolve complications quickly

Use the spectrum analyzer function to quickly scan for unwanted signals and leakage within the test environment

### Improve operational quality

Verify that the RF environment inside test chambers matches the desired state.

### Save time and cost

Find leakage and interference in seconds via direct local or remote access.

# DATASHEET

## LAMTA RF Monitor (LSR-0360)

Item	Specifications
Measurement Modes	5G NR: (P-SS/S-SS) & PBCH FDD/TD-LTE: P-SCH/S-SCH, RS, and RB High speed multi-technology measurements with zero degradation in performance
Data Modes	5G NR: PCI, PSS_RP, SSS_RP, PSS_RQ, SSS_RQ, SS_CINR, RSPBCH_RP, RSPBCH_RQ, RSPBCH_CINR, SSB_RP, SSB_RQ, SSB_CINR, SSB_Index NB-IoT: RSSI, RS, RQ, CINR, Timing, Cell ID, Cyclic Prefix, CFO, Delay Spread FDD/TD-LTE: RSSI, RS, RQ, CINR, Timing, Cell ID, Cyclic Prefix, CFO, Delay Spread
Frequency bands	300MHz ~ 6GHz
Measurement Rate (typical)	5G NR: 20 updates/sec @ single channel FDD/TD-LTE: 40 updates/sec
Min. detection level	5G NR: RSRP -128 dBm SCS@15kHz FDD/TD-LTE: RSRP -130 dBm @20MHz BW
Dynamic range	5G NR: -10 ~ +35 dB @ PSS/SSS CINR, -8 to +35 dB @ PBCH DMRS CINR FDD/TD-LTE: -20 ~ +35 dB @20MHz P-SCH/S-SCH, -23 ~ +35 @ 20MHz RS
Sub Carrier Spacing	5G NR: 15 / 30kHz
Channel Bandwidth	FDD/TD-LTE: 1.4 / 3 / 5 / 10 /15 / 20MHz
Internally generated spurious response	-110 dBm
RF operating range	-15 dBm max.
Safe RF inut range	≤ 10 dBm
Frequency accuracy	±0.05 ppm (GPS Locked); ±0.1 ppm (GPS Unlocked)
Max. power (+8 to +16VDC)	24W
Weight/Size	1.8kg / 265 * 135 * 65 mm
Temperature range	Operating: 0 °C to +50 °C, storage: -40 °C to +85 °C
Data communication port	LAN
RF / GPS input port	SMA Female (50 Ω)

