

THE SKY'S THE LIMIT

Anritsu introduces the Field Master Pro™ MS2090A. The world's highest performance handheld spectrum analyzer.



FieldMaster Pro™



Real-time analysis bandwidth
of 110 MHz



Ability to demodulate and
identify 5G signals

The Newest Addition to Anritsu's World-Leading Performance Handheld Spectrum Analyzers



Spectrum Master™ MS2760A



Spectrum Master™ MS2711E/12E/13E



Spectrum Master™ MS2720T



Field Master Pro™ MS2090A

The New Standard in Premium Handheld Spectrum Analysis





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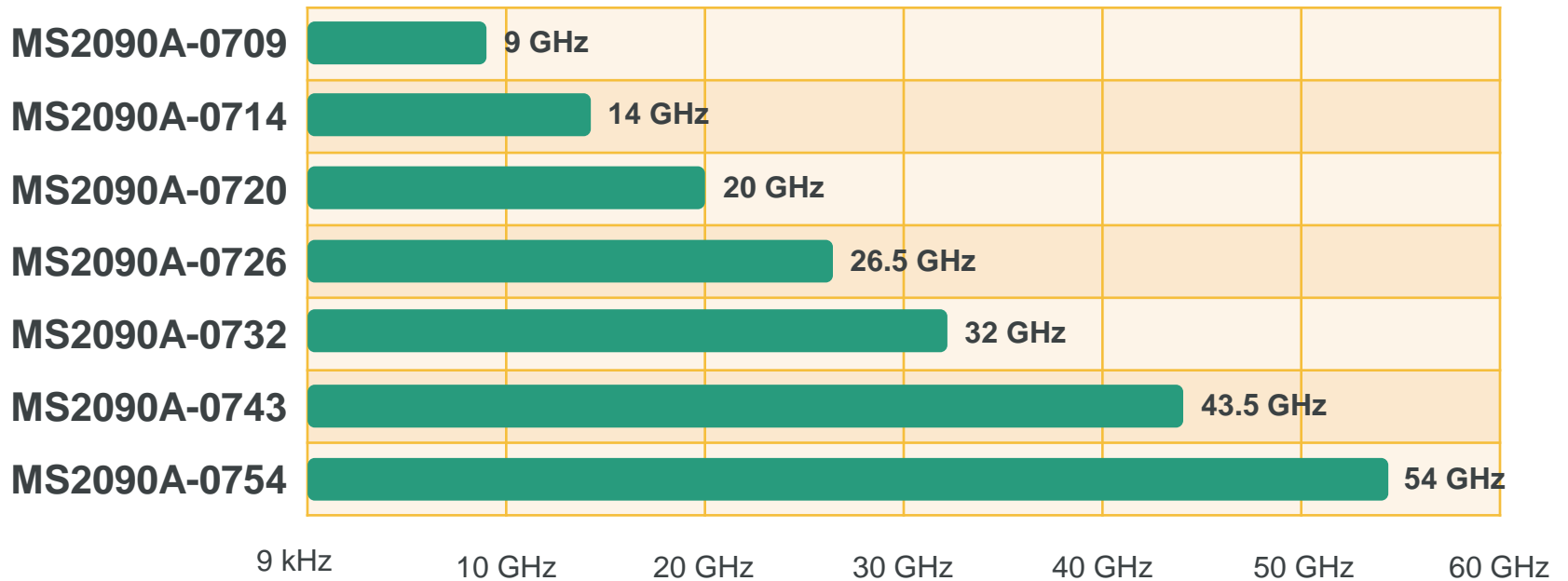


BEST-IN-CLASS



- Frequency range
- DANL
- TOI / 1 dB compression
- Amplitude accuracy

Frequency Options



NO GAPS. NO MISSES.

World's Highest Performance Handheld Spectrum Analyzer



Parameter	Specifications
TOI	+20 dBm
DANL (with pre amp)	-164 dBm
Meas range	DANL to +30 dBm
Phase noise @ 1GHz	-106 dBc/Hz max @ 100 kHz offset (-110 typ)
RBW/VBW	1 Hz to 10 MHz, with 0.1 Hz resolution
Input SWR	1.5
Amplitude accuracy	< 20 GHz ± 1.3 dB (± 0.5 dB typ)

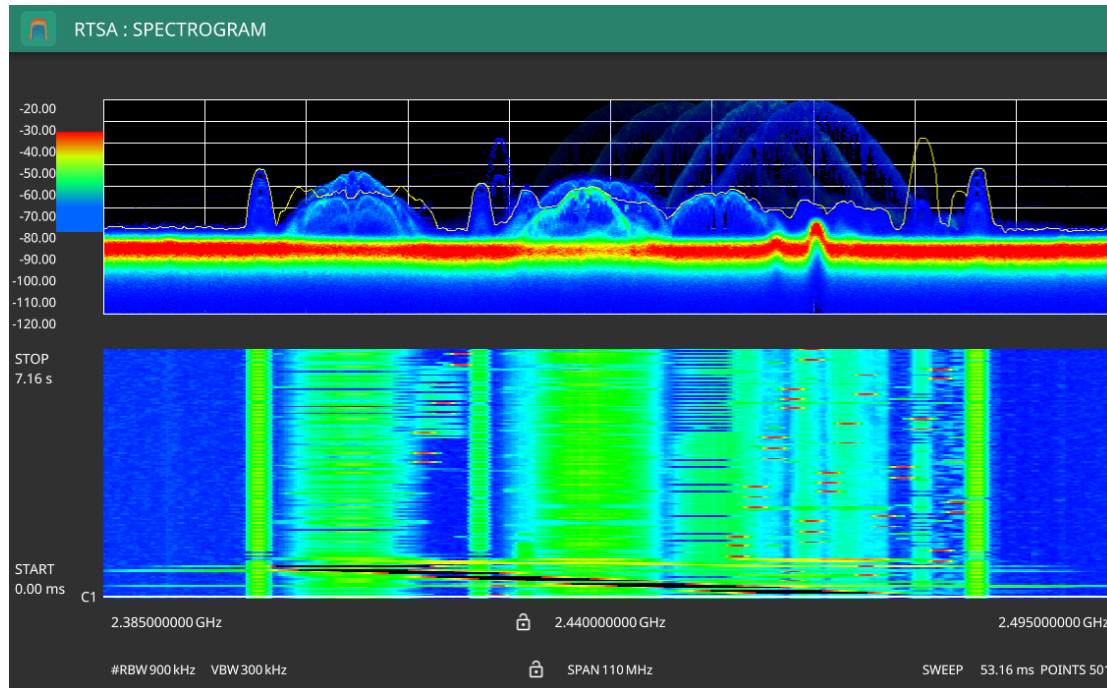
Fully Featured Spectrum Analyzer

Parameter	Specifications
Frequency range	9 kHz to 54 GHz
Traces	6
Detectors	Avg/RMS, peak, negative
Markers	12, fully featured with table
Limit lines	Complex limit lines with Pass/Fail
RTSA	110 MHz
Mode switch	< 5 seconds
Connectivity	802.11 and Bluetooth
GNSS	GPS & Glonass
Interfaces	USB 3.0, Ethernet
Battery life	> 2 hours (function dependent)



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REAL-TIME SPECTRUM ANALYZER

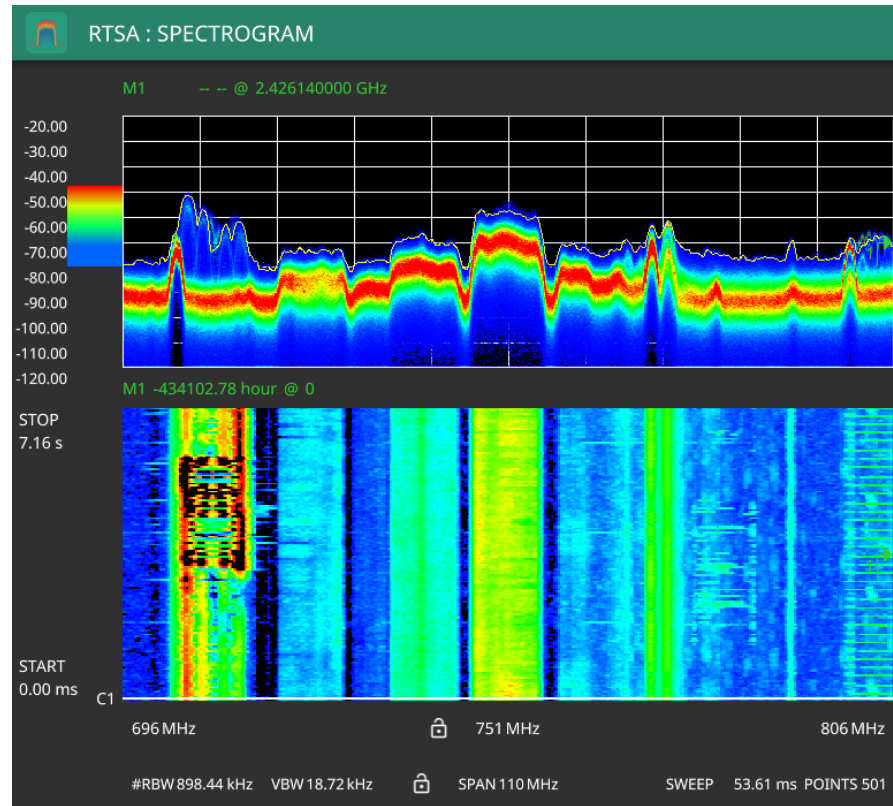


Real-Time Spectrum Analyzer



Real-time analysis bandwidth
of 110 MHz

- 2.055 μ s POI¹
- 5 ns minimum detectable signal
- Density and spectrogram displays to identify and track intermittent or pulsed signals

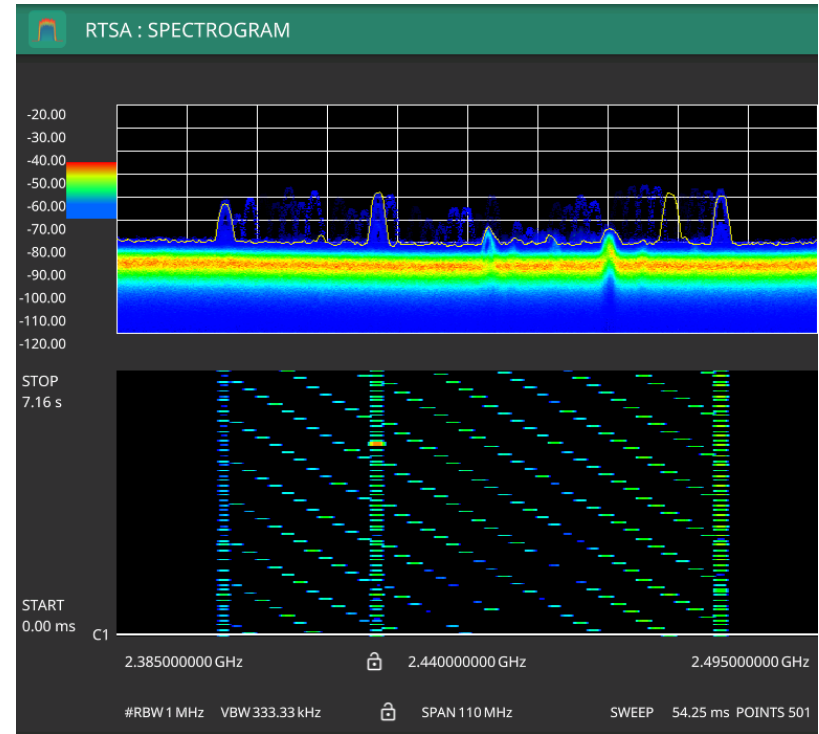
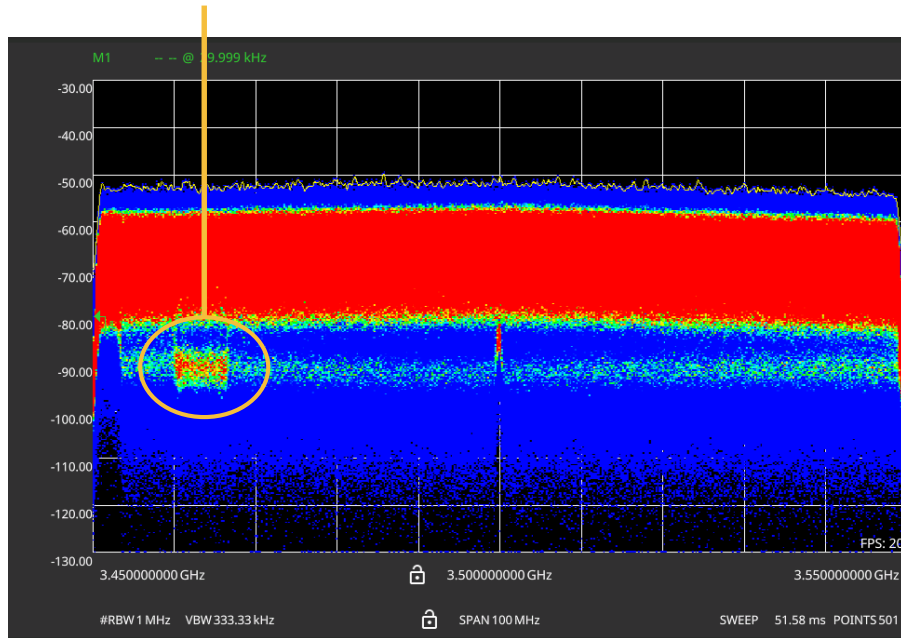


1 min detectable signal at full amplitude with 100% probability

Real-Time Spectrum Analyzer

- Spectrogram to track frequency hopping signals
- Density display settings to differentiate time divided signals

Locate SSB in a 5G carrier



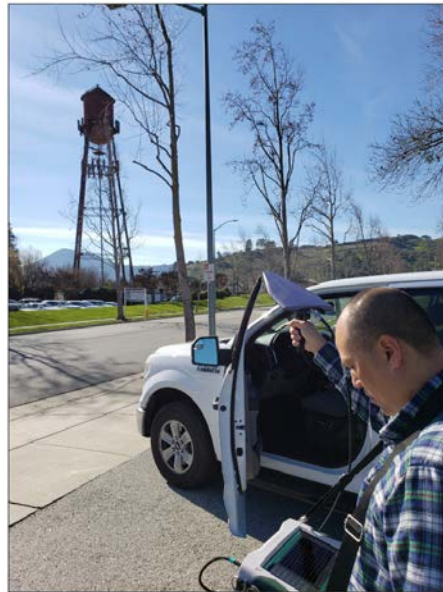
See Bluetooth carriers hopping around the three anchor signals



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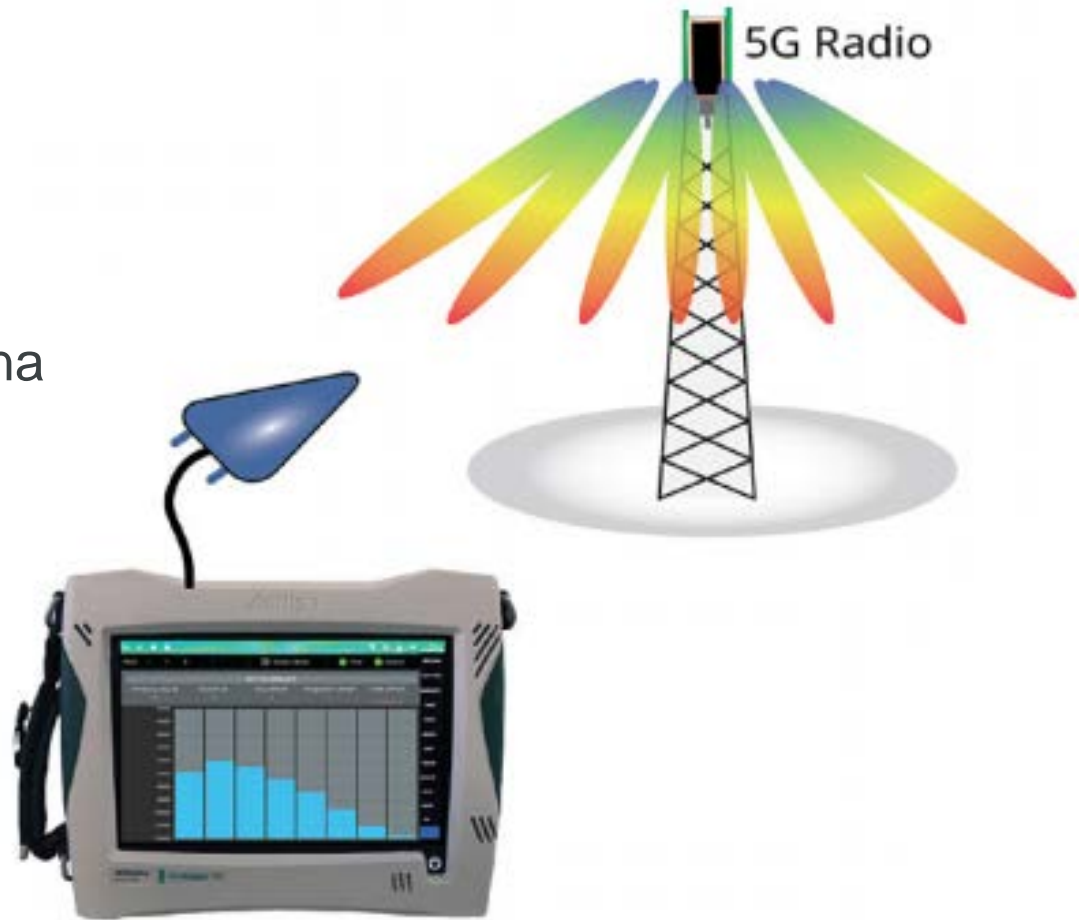
5G ANALYZER





5G Analyzer – Single-Cell Analysis

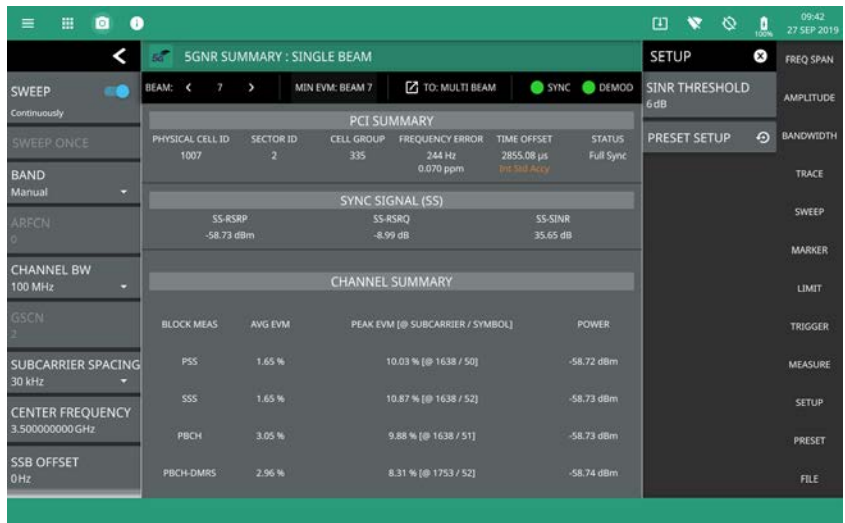
- Connected
- or –
- Directional antenna





5G Analyzer – Single-Cell Analysis

- Auto detect SSB from GSCN raster
- Multi-beam view to see power in all active beams
 - FR1 – 4 or 8 beams
 - FR2 – up to 64 beams
 - Physical Cell ID (PCI)
 - Sector ID
 - Cell Group
 - Frequency Error
 - Time Offset
 - SS-RSRP
 - SS-RSRQ
 - SS-SINR
- Tap any beam to also see EVM and power
 - PSS
 - SSS
 - PBCH
 - PBCH-DMRS





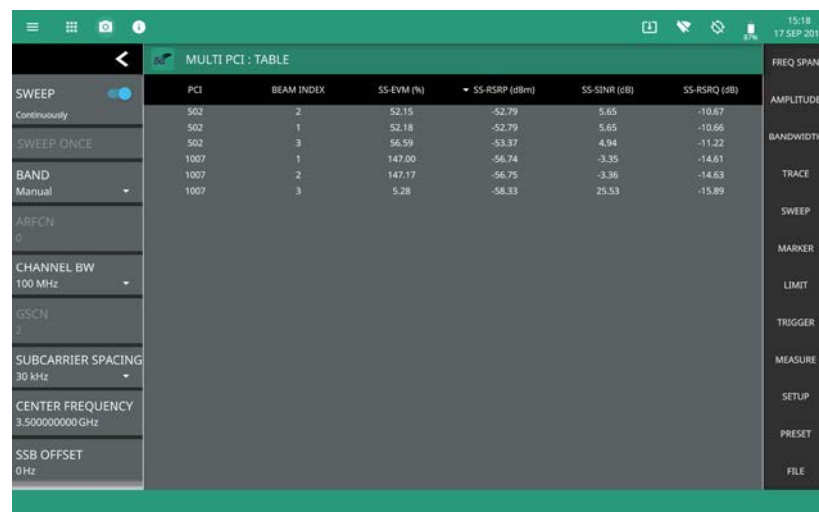
5G Analyzer – Single-Cell Analysis

- Precise RF tests for 3GPP TS 38.104 V15 compliance
 - Gated Sweep
 - Channel Power
 - Occupied Bandwidth
 - Spectral Emission Mask
 - Spurious Emissions



5G™ 5G Analyzer – Over-the-Air Multi-Cell

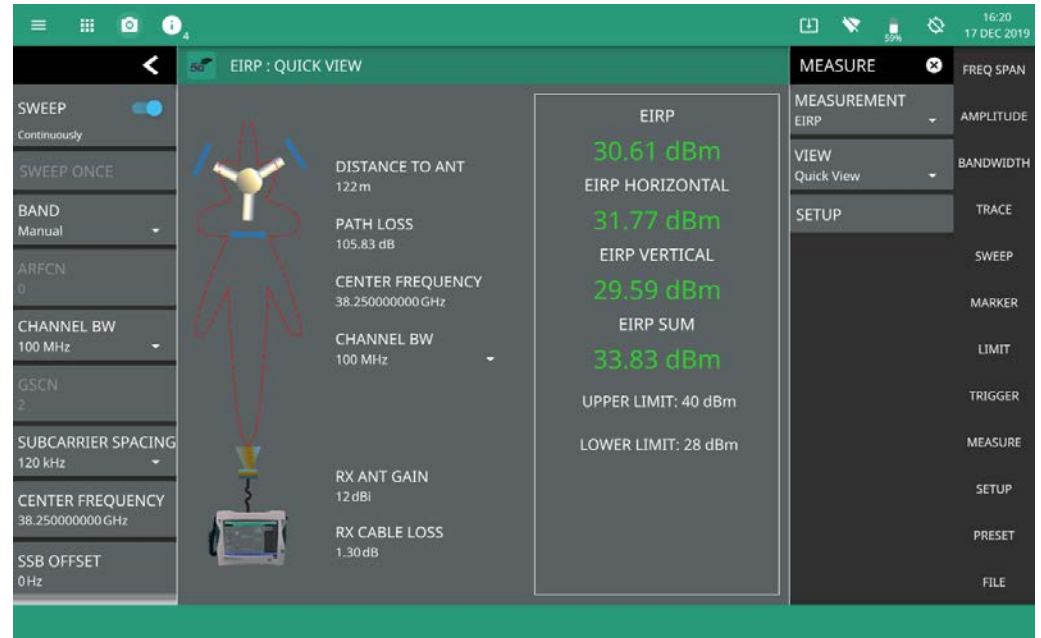
- For crowded networks an over-the-air omnidirectional testing
- Detect all beams present from any PCI
- Two views:
 - Multi-beam scanner
 - Table
- Sort results by:
 - PCI
 - SS-RSRP
 - SS-SINR





Total Radiated Power – EIRP

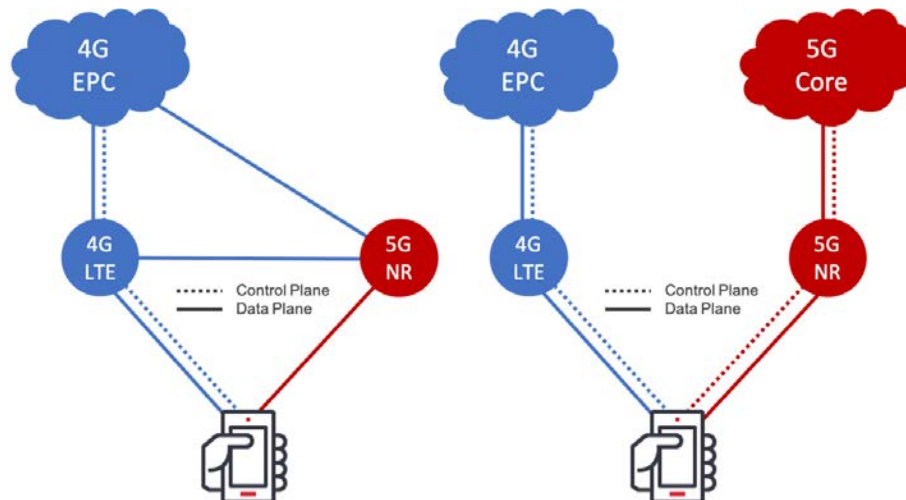
- Total radiated power is tested with EIRP for beam forming transmissions
- Test EIRP per Section 6 of 3GPP TS 38.141-2
- Utilize a dual pole antenna to measure horizontal and vertical EIRP and the Field Master Pro MS2090A will add them to give a total EIRP





Testing The LTE Anchor

- Wireless communications will continue to rely on LTE for many years
- Most initial rollouts use LTE networks as the anchor (non-standalone)
- Field Master Pro MS2090A supports the following FDD measurements:
 - Cell ID, Sector ID, Cell Group
 - Frequency error
 - Time offset
 - RS, SS, PBCH power
 - MIMO detection
 - Data EVM





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COVERAGE MAPPING AND INTERFERENCE HUNTING

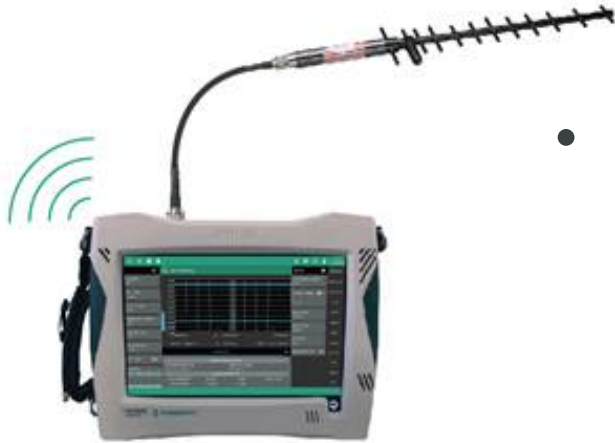


Coverage Mapping

- Compatible with Anritsu's Neon Signal Mapper MA8100A
- Indoor / outdoor 3D coverage mapping
- Beam coverage
- Cloud-based analysis
- LTE, Wi-Fi, and more in one package



Interference Hunting



- Option 24 – Interference Finder
 - Fast audio tone
 - Adjustable range

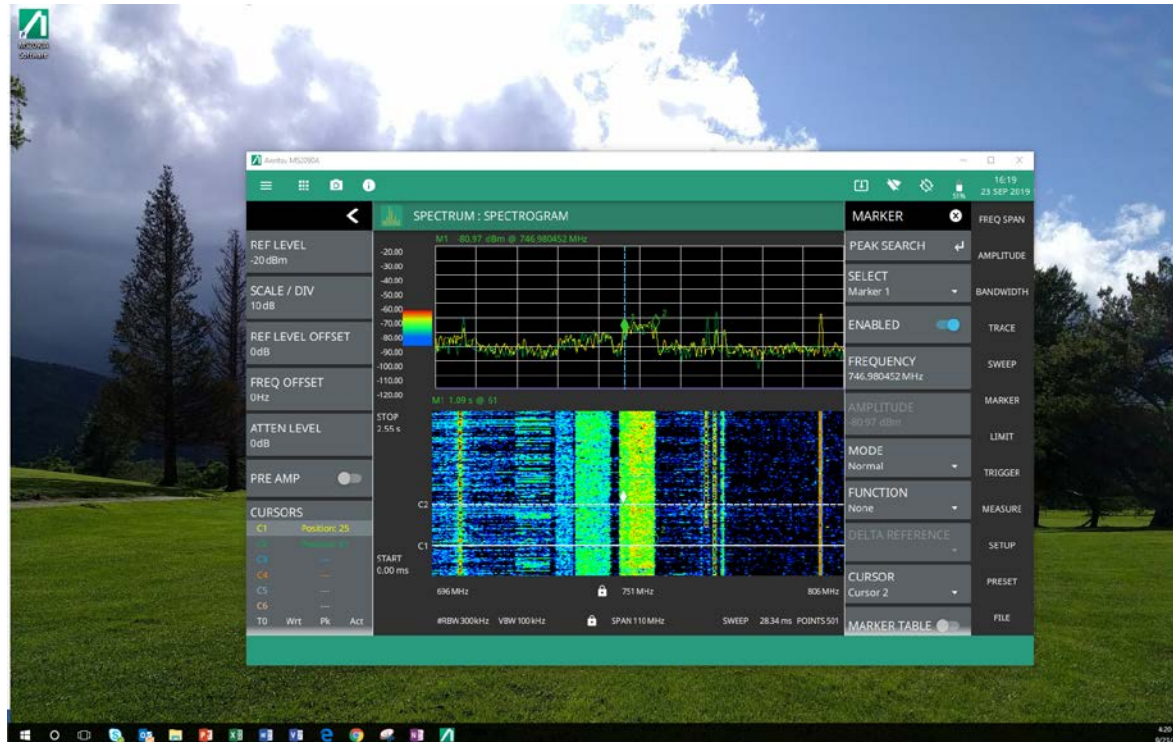
- Compatible with Anritsu's Mobile Interference Hunting System MX280007A
- Power Flux Density measurements for boarder traffic monitoring



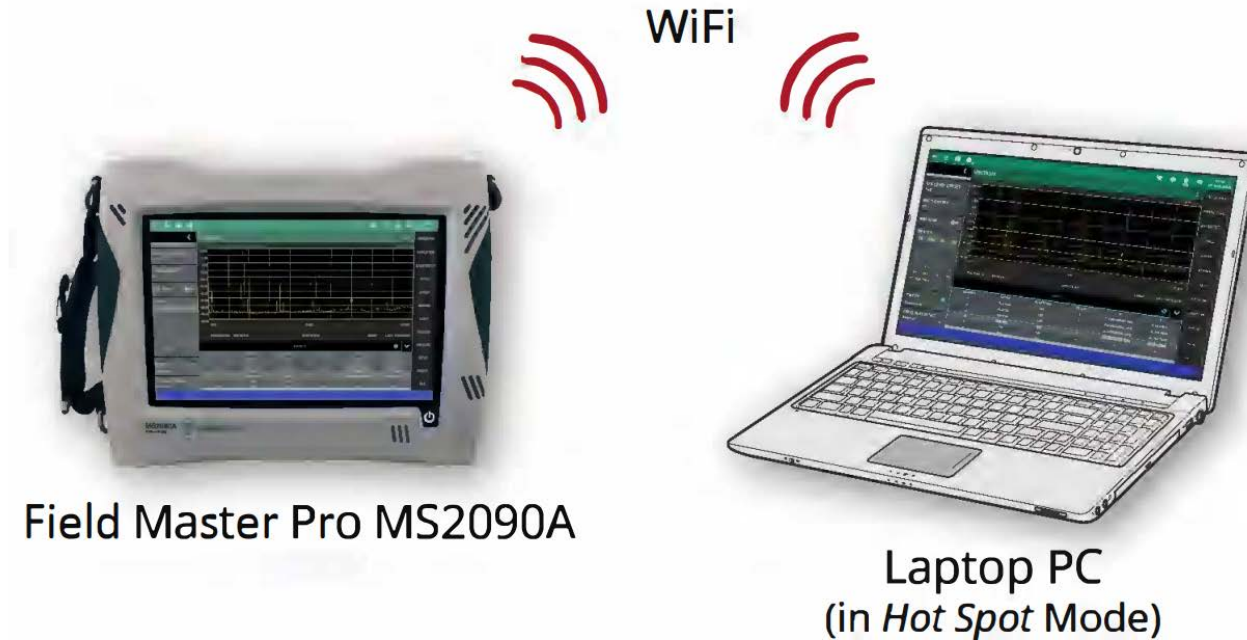


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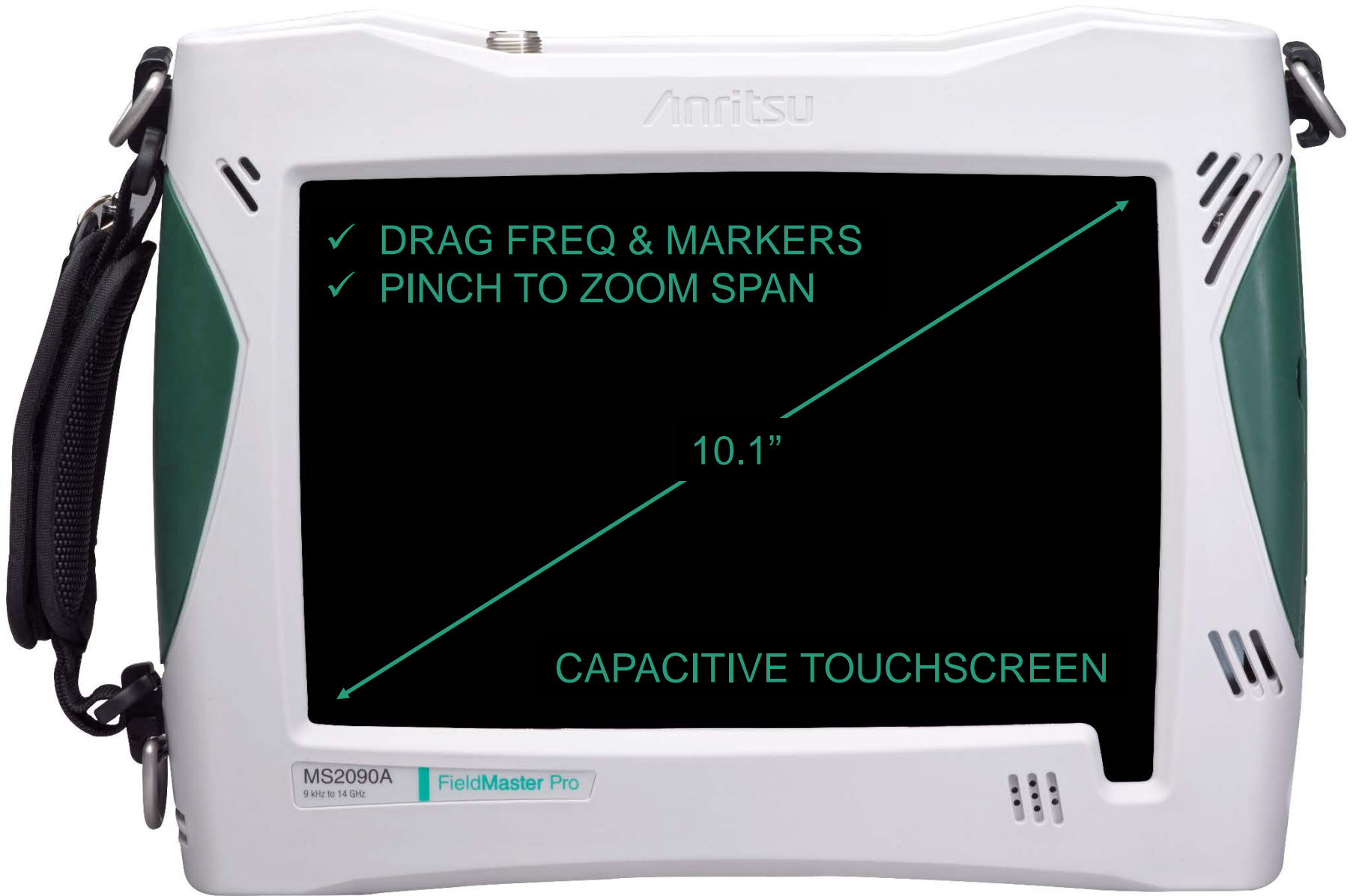
REMOTE USER INTERFACE



Field Master Pro MS2090 Remote Control



- Remotely connect to any Field Master Pro MS2090A on the network
- Free software download, no license, or additional purchase required
- Connect via Ethernet or wirelessly over Wi-Fi



MS2090A | FieldMaster Pro
9 kHz to 14 GHz

Ruggedized Industrial Design To Protect Your Investment



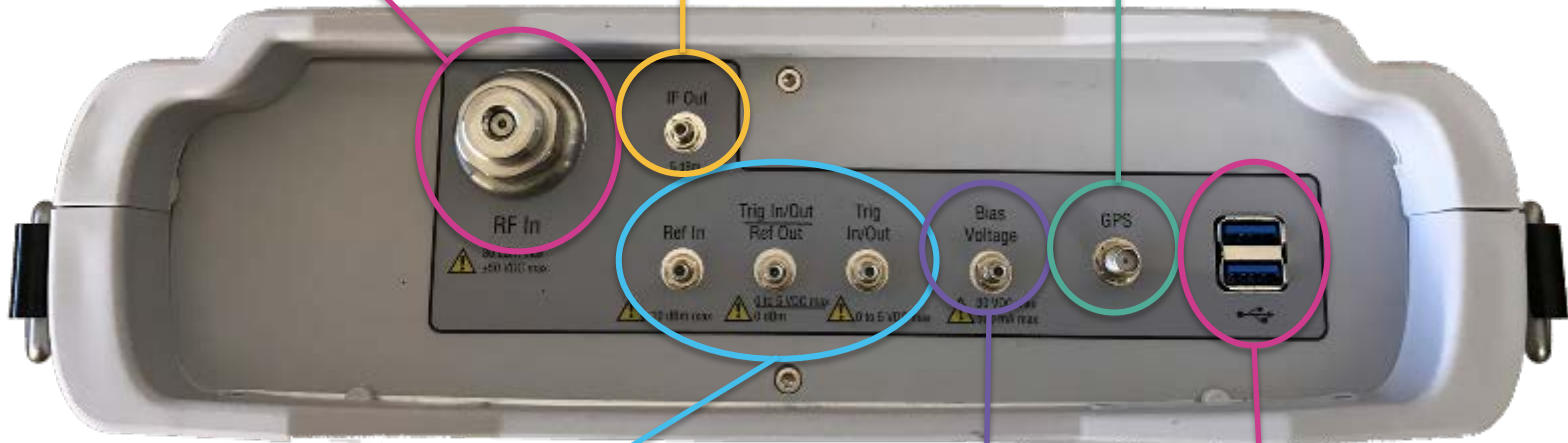
- Ruggedized connectors
- Rubber over-mold housing
- Reinforced cold-rolled steel frame
- Touchscreen with chemically strengthened / tempered Soda Lime glass with anti-reflective coating
- Exceeds IK08 impact protection standards
- 1 meter drop test from 26 different angles

Top Connectors

RF Input (up to 54 GHz)

IF Out

GPS

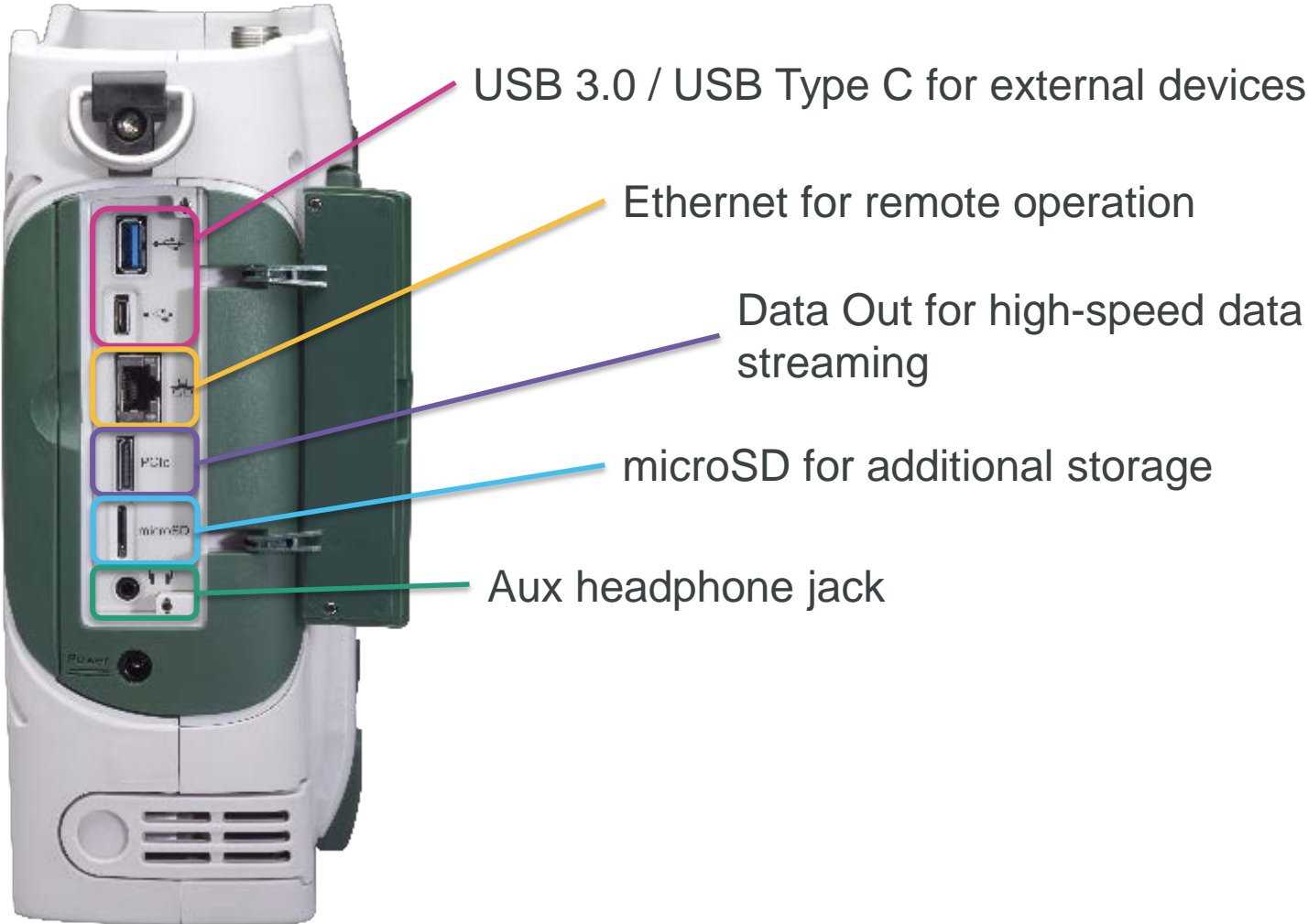


Configurable reference and trigger ports

Bias Voltage

2x USB 3.0

Side Connectors



FieldMaster Pro MS2090A



- The new standard in handheld spectrum analyzers
- Full frequency coverage up to 54 GHz
- 5G NR analysis suite
- 110 MHz RTSA
- 10.1" capacitive touchscreen and rugged industrial design

The world's highest performance handheld spectrum analyzer

Anritsu
envision : ensure