

# testforce



THE

# SIGNAL

PMR Edition



Top Trending Products in  
Professional Mobile Radio

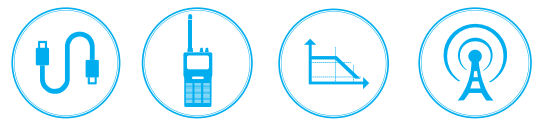
## VI.AVI

### 3920B

Motorola  
Approved

#### Industry Standard Analog and Radio Test Set

- Automated test and alignment procedures for the most popular manufacturers such as Motorola (APX and APX "B") and Kenwood NXDN
- Frequency Range: 10 MHz to 2.7 GHz
- P25, P25 Phase II, DMR (MOTOTRBO), NXDN, TETRA
- Low phase noise RF signal generator for performing critical receiver testing
- Digital Modulation Plots: distribution, constellation and eye diagram
- Easy-to-read meters with Pass/Fail color coding for instant Go/No-Go testing
- P25 AES encryption option, KVL Keyloader direct entry using a KVL-3000+
- Transmit and receive live audio using the vocoder



## VI.AVI

### 8800SX

#### Portable Digital Radio Test Set Service Monitor

- Automated test and alignment procedures for the most popular manufacturers such as Motorola (APX and APX "B") and Kenwood NXDN
- Full support for mobiles, repeaters and infrastructure testing
- 10 MHz external reference
- Battery or AC powered, portable, ruggedized for field or bench use
- Digital Modulation Plots: distribution, constellation and eye diagram
- Tracking Generator: VSWR, return loss, DTF, and tuning duplexers
- P25, P25 Phase II, DMR (MOTOTRBO), NXDN, TETRA, dPMR, ARIB T98, PTC supported
- Optional internal in-line watt meter



## VI.AVI

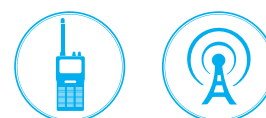
### Autotest

#### OEM Approved Automated Alignment Software

- Designed in collaboration with all major equipment manufacturers to work on 3920B and 8800SX Series radio test sets
- Constantly updated by the OEMs to ensure full compliance with their test procedures
- Reduce test times by up to 300% over manual testing/tuning
- OEMs supported: Motorola, Kenwood, EF Johnson, Harris, KNG, Hytera, Tait, ICOM, and more
- Most recent series supported: Motorola APX, Kenwood 5x20, EF Johnson ES Series, Harris P7300, KNG Realm, Hytera DMR, Tait TP, ICOM P25 Series



Cuts  
Alignment  
Time by  
60%





**VI.AVI**

**3550R**

**Handheld Radio Test Set**

- Super light magnesium alloy – 8.3 lbs, ideal for field test environments
- Internal battery provides 4.5 hours of true portability on one charge
- Complete Analog Test System: The 3550R includes the capability to perform direct connect type testing on a radio
- Indoor Signal Coverage Testing using TRX Systems NEON® Signal Mapper Application
- Support for AM/FM, P25, DMR (MOTOTRBO), NXDN, TETRA, dPMR, positive train control
- Complete RF Transmitter Testing: With integrated RF power, RSSI, frequency error and modulation meters
- Tracking Generator: VSWR, return loss, DTF, and tuning duplexers



**VI.AVI**

**NEON® Signal Mapper**

**In-Building Coverage and Mapping Application**

- Works with 3550R and 8800 Series radio test sets
- Record and analyze two-way radio signals inside building and outdoors
- Automate the geo-referencing cloud storage, and 3D visualization of LMR test data
- Automatically calculate the indoor location and correlate with radio signal data
- Coverage heat maps can be visualized in two and three dimensions
- Combination of multiple paths enable the user to create a single 3D view of a mapped building

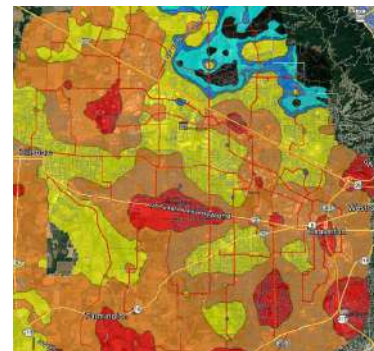


**VI.AVI**

**STI Field Test 7**

**Geographic Signal Coverage**

- Captures DMR or P25 phase 1 or 2 signal analytics
- Analog communications systems test for audio quality
- Optional drive test functionality and complete measurement automation, data reduction and reporting capabilities
- Includes a USB drive, GPS receiver antenna, manual and street data
- Optional STI Field Test 7 software creates an MS Access compatible database of tile statistics for creating compliance test reports



## ROHDE & SCHWARZ ZPH Cable Rider Series

### Rugged, Portable, Handheld 4 GHz, 2-Port VNA and Spectrum Analyzers

- Frequency range: 2 MHz to 3/4 GHz
- One port model features  $S_{11}$  DTF, VSWR, cable loss measurements
- 2 port model adds  $S_{21}$  measurements, spectrum and interference analysis
- Ideal for field use: 9-hour battery life, 5.5 lbs
- Large color touchscreen
- Power meter option
- Easy operation with user-configurable test wizard



31 GHz



## ROHDE & SCHWARZ Spectrum Rider Series

### Rugged, Portable, Handheld 31 GHz Spectrum Analyzers

- Frequency range: 5 kHz to 2/3/4/6/8/13.6/20/26.5/31 GHz
- Ideal for field use: 8-hour battery life, 5.5 lbs, backlight keypad, fast boot time, non-reflective display, small footprint, and ruggedized housing
- Large color display with touch and gesture operation
- Measurement wizard that supports measurement campaigns speeds up measurements and avoids errors

## ROHDE & SCHWARZ FSH Series

### Industry Leading, Portable Handheld 20 GHz Spectrum Analyzers

- Frequency range: 9 kHz to 4/8/13.6/20 GHz
- OTA analysis, demodulation and decode for LTE, NB-IoT, WCDMA, GSM, etc.
- Channel power and spurious emission measurements
- Full 2-port VNA capabilities
- Cable loss measurements, distance to fault, filter tuning
- Interference analysis





## NRT-Z Series

### Directional Power Sensors

- Frequency range: 2 MHz to 4 GHz
- Measurement of average power, average burst power, peak power, crest factor, CCDF, and mismatch
- Can be used with an NRT2 power meter, PC (via NRT-Z5 cable), or VIAVI 8800SX
- Measure up to 120 W (continuous) or 300 W (peak)
- Low insertion loss, very good matching, excellent intermodulation characteristics

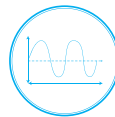


## HMP4000 Series



### 4 CH Bench DC Power Supplies

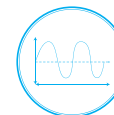
- 3 or 4 CH with max 384 W total power
- Maximum output current of 10 A per channel
- Maximum output power of 160 W per channel
- Perfect for powering mobiles and battery elimination for handhelds
- Parallel or Series operation
- All channels have short circuit and over voltage protection
- See voltage and current of each channel on the large LCD display



## RTH Scope Rider Series

### 10 Bit Resolution Handheld Digital Oscilloscopes

- Lab performance in a rugged and portable design
- Frequency range: 60 MHz to 500 MHz, 2 and 4 CH models
- Up to 5 GS/s and 500 K points of memory per channel
- 5 instruments in 1: oscilloscope, logic analyzer, protocol analyzer, data logger and multimeter
- CAT IV 600 V/ CAT III 10000 V galvanically isolated inputs
- Modern 7" touchscreen, 4-hour battery life and an IP51 military rating





## Tektronix® RSA306B

### Portable 6 GHz Real-Time Spectrum Analyzer

- Frequency range: 9 kHz to 6.2 GHz
- 40 MHz capture bandwidth with -160 dBm to +20 dBm dynamic range
- DPX real-time engine technology sees signals that conventional spectrum analyzers miss
- 27  $\mu$ s signal duration for 100% probability of intercept
- Powerful SignalVu vector analysis software
- P25 measurement suite
- Analysis and power through USB 3.0 interface



## Tektronix® RSA500 Series

### Portable 18 GHz Real-Time Spectrum Analyzers

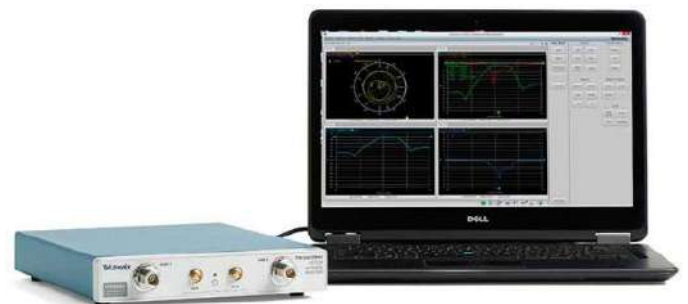
- Frequency range: 9 kHz to 3/7.5/13.6/18 GHz
- 40 MHz capture bandwidth with -160 dBm to +20 dBm dynamic range
- 15  $\mu$ s signal duration for 100% probability of intercept
- Powerful SignalVu vector analysis software with 26 add-on options
- P25 measurement suite
- Spectrum monitoring and interference hunting toolkit
- Optional Tracking generator enables DTF, VSWR and cable loss measurements



## Tektronix® TTR500 Series

### 2-Port, 2-Path Vector Network Analyzers

- Frequency range: 100 kHz to 3/6 GHz
- Trace Noise: Less than 0.012 dBrms
- Dynamic range: >110 dBm
- Output power range: -50 dBm to +7 dBm
- No screen and compact size reduces cost without sacrificing performance
- Ideally suited for tuning filters and antenna matching





Options and Accessories

Industry Specific Options for Complete Test Systems

- By working with multiple suppliers, Testforce provides complete solutions
- Accessories for portable and mobiles: Battery eliminators, programming cables, antenna adapters
- Accessories for RF test equipment: Cables, connectors, calibration kits, antennas, enclosures
- Accessories for general test equipment: Probes, test cables and harnesses, fixtures, and more
- Training is always included with purchase – We are successful when you are successful



Financing Options

Flexible Purchasing, Leasing, and Renting Options

- Fast, easy, price-competitive programs
- Control cash flow with customizable payment terms and buy out options
- Optimize budget via exclusive Government funded lease options
- Simple online application process with 2-hour approval turn around
- Support costs including calibration, training and extended warranties can be included in payment terms



Trade-In Offers

Trade-In and Trade-Up to the Newest Technology

- The PMR Industry is changing faster than ever before
- Analog radio monitors are no longer sufficient to maintain today's digital equipment
- Testforce understands that budget constraints do not always align with requirements
- Trade-in your old monitors and save
- All makes and models of monitors will be considered
- Contact your local Technical Account Manager for the latest promotions and trade-in opportunities





Testforce is the leading supplier of test and measurement products for a wide variety of PMR applications. Testforce specializes in helping determine the best solution to tackle your test challenges head-on. Our Technical Account Managers have worked in the PMR Industry, and understand the technical, business, and financial challenges which are unique to this industry. Testforce will work with your team to come up with a practical solution from the leading test and measurement OEMs around the world.

Whether tuning digital radios, sweeping cables, tuning filters or mapping signal strength for interference hunting, Testforce has exactly what you need with accurate and durable equipment providing consistent and reliable results. Our Technical Account Managers will also ensure that your instrument is functioning properly and has all the correct accessories and options such as cables, connectors, calibration kits, antennas and test fixtures.

Having the best equipment is only part of the solution. Knowing how to use the tools creates the most effective team. Testforce stands behind the products we sell by providing training to your team either through on-demand training and webinars, or on-site training.

**Full service and calibration labs.**  
**Factory trained technicians. Fast turn around times.**



**Cable Sweeping**



**Subscriber Gear Testing**



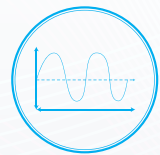
**OTA Testing**



**Filter Tuning**



**Infrastructure Testing**



**General Purpose**

**Additional resources available on the website:** | **White Papers** | **T&M Experts Guide** | **Power Experts Guide**

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