

Powerful. Portable.



The AT3000P is a compact, ruggedized, battery-operated Communications Test System for frontline diagnostics.

The AT3000P significantly reduces:

- ☑ **Unit Under Test diagnostic time**
- ☑ **Maintenance and calibration costs**
- ☑ **No Fault Found conditions**
- ☑ **Life cycle cost-of-ownership**

The AT3000P is designed using Astronics Test Systems' proven Synthetic Instrumentation architecture. Featuring 23 instruments, and both Automated and Standalone modes to test, record, and diagnose faults, the unit provides complete RF, Analog and Digital capabilities. The AT3000P also includes the sophisticated IF and baseband I/Q Digital Signal Processing required for modern radios. The field-upgradeable, software-defined architecture features easy-to-use graphical user interfaces and enables testing with minimal operator intervention. Test Program Sets are available for a full range of tactical radios, or you can create new TPSs easily using the included TestEZ® software suite.

#### DIMENSIONS WITH LAPTOP

- Size: 6"H x 12"W x 13.5"D (cm 15.2H x 30.5W x 34.3D)
- Weight: < 18 lbs. (< 8.2 kg)

#### DIMENSIONS WITHOUT LAPTOP

- Size: 4"H x 12"W x 13.5"D (cm 10.2H x 30.5W x 34.3D)
- Weight: < 13 lbs. (< 5.9 kg)

#### FEATURES

- Software defined, synthetic architecture
- 23+ meters and instruments
- Standalone/Automated test capabilities
- Field upgradeable
- Real-time, programmable IF bandwidth from 100Hz to 8 MHz
- Removable UUT interface module for future ATE communications
- IQ synthesis and analysis via IQEZ™

#### INSTRUMENTS

- RF Generator and Receiver
- 2 CH Arbitrary Function Generator
- Bit Error Rate
- Digital Data Generator
- Constellation
- 2 CH Digital Storage Oscilloscope
- Spectrum Analyzer
- Distance-to-Fault
- SINAD Meter
- Distortion Meter
- Audio Frequency Counter
- FM and AM Modulation Meters
- Phase Modulation Meter
- Digital Multimeter
- Peak Power Meter
- Error Vector Meter
- RF Power and Error Meters
- Received Signal Strength Indicator
- Single Side Band
- Over-the-Air

AT3000P

Our Products and Services:  
Instruments | Integration | Logistics | Engineering | Software

Our Brands:  
Racal Instruments™ test and measurement products  
Talon Instruments™ digital test products  
Trig-Tek™ vibration analysis and test products

Powerful. Portable.



## RF SIGNAL GENERATOR

### FREQUENCY

Range: 1.0 MHz to 2.7 GHz (Usable from 250 kHz and up to 3000 MHz)

Resolution: 1 Hz

## RF RECEIVE METERS

### FREQUENCY

Range: 1.0 MHz to 2.7 GHz (Usable from 250 kHz and up to 3000 MHz)

## RF POWER METER (Broadband)

### FREQUENCY

Range: 1.0 MHz to 2.7 GHz (Usable from 250 kHz and up to 3000 MHz)

Accuracy: +/-10%

## AUDIO FUNCTION GENERATOR(S)

### CHANNELS

2 Front Panel Channels  
4 UUT Interface Module Channels

### WAVEFORM

Sine, Square, Triangle, Ramp, Pulse, & DC

### FREQUENCY

Range: Sine: 0 Hz to 100 kHz (usable to 250 kHz)

Resolution: 0.1 Hz

Accuracy: ± 0.2 Hz (Sine)

## AUDIO ANALYZER

### CHANNELS

2 Front Panel Channels  
Demodulated RF  
2 UUT Interface Module Channels  
Audio signal is automatically detected and measured

## RF SPECTRUM ANALYZER

### FREQUENCY

Range: 1.0 MHz to 2.7 GHz (usable from 250 kHz and up to 3000 MHz)

Resolution: 1 Hz

## OSCILLOSCOPE

### DISPLAY

Channels: 2

Trace Types: Live, captured

Measure: Freq., Vrms, Vmin, Vmax, Vpp, Vavg, pulse width (neg. and pos.), and Phase difference

## FREQUENCY STANDARD (Reference Oscillator)

### INTERNAL FREQUENCY STANDARD (OCXO)

Frequency: 10 MHz

Accuracy: (0 to 50 degrees C) ±0.3 ppm

## DIGITAL MULTIMETER

### AC / DC VOLTMETER

Range: 1mV to 300V (non-mains 600V)

Resolution: 5-1/2 digits

Accuracy Range - DC:

600V: ±1% reading ±0.0002 of full scale

100V: ±1% reading ±0.0002 of full scale

10V: ±1% reading ±0.0002 of full scale

1V: ±1% reading ±0.0002 of full scale

Accuracy Range - AC:

600V: ±2% reading ±0.0002 of full scale

100V: ±2% reading ±0.0012 of full scale

10V: ±2% reading ±0.0012 of full scale

1V: ±2% reading ±0.012 of full scale

0.1V: ±0.5% reading ±0.02 of full scale

AC Volts Frequency Range: 40 Hz to 20 kHz

## POWER REQUIREMENTS

### AC / DC

AC Voltage: 104 to 126 VAC 50/60 Hz

207 to 253 VAC 50/60 Hz

DC Voltage: 22 through 32 VDC

## ACCESSORIES

### STANDARD

Scope Probe Kit

DMM Probe Kit

AC Power Cord

Extra Fuses

Operator's Manual

