

Powerful. Portable.



The AT3000A is a powerful benchtop Communications Test System that can replace numerous shop instruments.

The AT3000A significantly reduces:

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

The AT3000A 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 AT3000A 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

- Size: 7.5 in. H x 17.0 in. W x 20.5 in. D
(19.0 cm H x 43.2 cm W x 52.1 cm D)
- Weight: < 37 lbs. (< 16.8 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

AT3000A

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: 5-½ 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

Voltage: 100 to 120 VAC 50/60 Hz

220 to 240 VAC 50/60 Hz

ACCESSORIES

STANDARD

Scope Probe Kit

DMM Probe Kit

AC Power Cord

Extra Fuses

Operator's Manual

