PORTABLE BRIEFCASE SATELLITE SIMULATOR

SmartSAT’s family of satellite simulators set the standard for UHF SATCOM test equipment. Rugged, reliable, and easy to use, SATSIM accurately simulates satellite channel and propagation characteristics, enabling users to test radio performance, troubleshoot communication systems and train personnel. It is an essential component of every well-equipped SATCOM testing and training facility. The Briefcase SATSIM provides the same simulation capability of a standard one-channel SATSIM with the addition of several features to facilitate mobile operation. These additional features include battery operation, external calibration, external reference control via the removable touch screen interface, and a ruggedized case. All other functions of the Briefcase SATSIM are configured in the same way as any standard rack-mount SATSIM model. Lightweight, portable, and AC or battery powered, the Briefcase SATSIM is truly the perfect option for field, flight line, and other mobile applications.

Briefcase SATSIM
USS-101-002A

Features:
Programmable attenuators
Intuitive touch screen interface
External calibration
Battery operation
USB remote control port
One year warranty

SPECIFICATIONS

Mechanical Specifications:
Weight: <25 lbs
Size: 15” L x 12.13” W x 6.88” D

Electrical Specifications:
Input Voltage: 100 - 240 VAC 47-66 Hz
Power: 15 W Max.

Battery:
Type: 10-Cell, 12 V, NiMH
Life: up to 3 hours

Environmental Specifications:
Storage Temps: -20°C to +45°C
Operating Temps: 0°C to +40°C

Accessories:
AC Cable: US 3 Prong Plug
Interface Cable: Standard USB
Battery Pack P/N: SS-BAT126500
Controller: Removable Touch-screen
Power Attenuator*: 100 W, 30 dB
RF Cable*: N to BNC

*1 ea per channel
PORTABLE BRIEFCASE
SATELLITE SIMULATOR

Performance Characteristics:

Signal Control Range
- Maximum input +50 dBm
- >80 dB range in 1.0 dB increments

Noise Source
- Internal white noise generator
- >62 dB range in 0.5 dB increments

Doppler Generator
- 0 to ±5 kHz
- Programmed to user profile
- Rate of change to 100 Hz/sec

Time Delay
- 0 to 300 msec
- Programmed to users’ parameters

System Interoperability:

SATSIM simulates the hard limiting narrowband filtering (5 and 25 kHz) characteristics of all UHF satellites, including:

- FLTSATCOM
- LEASAT
- AFSATCOM
- UFO

SATSIM is an excellent test aid for all common UHF SATCOM systems, such as:

- Integrated Waveform (CIB / IBS-1 / IBS-S)
- DAMA
- Secure Narrowband Voice

Applications:

SATSIM is the ideal device to deploy in test labs or in the field for evaluating and troubleshooting critical UHF SATCOM transceivers and receive-only terminals.

This versatile test set…

- allows the user to quickly determine if a radio or SATCOM system is operating to specification.
- includes built-in independent synthesizers enabling the selection of any up or downlink frequency.
- provides total control of receive signal level, noise power, and signal-to-noise ratio.
- allows the user to determine the impact of platform movement in a laboratory environment utilizing a built-in Doppler generator.
- provides a wide range of time delay selections for testing network timing.
- provides accurate simulation of UHF satellite channel characteristics.