

# PORTABLE BRIEFCASE SATELLITE SIMULATOR

# DATA SHEET

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. 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
- 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: 50 Watts 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: U.S. 3 Prong Plug  
Interface Cable: Standard USB  
Spare Battery P/N: SS-BAT126500  
Power Attenuator\*: 100 Watt, 30 dB  
RF Cable\*: N to BNC

\*1 ea per channel

## 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  $\pm 5$  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.