



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.

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 a three-hour battery, 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.

## FEATURES

- Programmable attenuators
- Intuitive touch screen interface
- External reference capability
- External reference tuning port
- 3-hour battery operation
- USB remote control port
- One year warranty

Briefcase SATSIM  
USS-101-002A



## HIGHLIGHTS

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.

## SYSTEM INTEROPERATBILTY

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

AFSATCOM	LEASAT
Intelsat 22	UFO
(IS-22)	MUOS
Skynet 5	

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

## 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
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Power	15 W Max.
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## BATTERY SPECIFICATIONS

Type	10-Cell, 12 V, NiMH
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Operation	up to 3 hours
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## TEMPERATURE SPECIFICATIONS

Storage	-20°C to 30°C
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Operating	0°C to +40°C
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## PERFORMANCE CHARACTERISTICS

Signal Control Range  
Maximum input -10 dBm  
>80 dBm 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  
Programmable to user profile  
Rate of change to 100 Hz/sec

Time Delay  
0 to 300 msec  
Programmable to users' parameters

