

SmartSAT's family of satellite simulators set the standard for UHF SATCOM test equipment. Rugged, reliable, and easy to use, SATSIM accurately simulates satellite characteristics, enabling users to test radio performance, troubleshoot communication systems and train personnel. Available in one-channel, two-channel, four-channel, and portable briefcase models it is an essential component of every well equipped SATCOM testing and training facility.

SATSIM USS-101-001



SPECIFICATIONS:

Mechanical Specifications:

Weight: <45 lbs
Size: 19" Rack mount 3U 24" Deep

Electrical Specifications:

Input Voltage: 100 - 240 VAC
47-66 Hz
Power: 50 Watts Max. per channel

Environmental Specifications:

Storage Temps: -20°C to +75°C
Operating Temps: -0°C to +55°C

Accessories:

AC Cable: U.S. 3 Prong Plug
Interface Cable: Standard USB
Power Attenuator*: 100 Watt, 30 dB
RF Cable*: N to BNC

*1 ea per channel

SATSIM2 USS-101-003



SATSIM4 USS-101-400



Features:

Auto selectable external or internal reference
Fully controllable signal and noise levels
Propagation time delay programmable to users' parameters
Intuitive touch screen interface
Internal white noise generator
USB remote control port

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.