One Terminal. A Family of Reflectors and Modems.

Tampa Microwave Quad-Band Satellite Simulator

TAMPA MICROWAVE
A THALES COMPANY



FEATURES:

- Simulates C, X, Ku and Ka-Bands Simultaneously
- Permits Earth Station Set Up Without Actual Satellites Available
- Compact With Self Contained Antennas
- Easy To Operate
- Ruggedized / Weatherproof Enclosure
- Light Weight: <35 lbs
- Field Tested
- Simulates Operations Over 300 Feet
- AC & DC Power

Tampa Microwave's satellite simulator provides a compact easy to use solution as a training and evaluation tool for satellite earth terminals.

Specifications:

Input Control and Power:
AC Power: 115 to 230 VAC @ 5 Watts Nominal
DC Power: 12 to 24 VDC

RF Input Signals:
C-Band: 5.85-6.425 GHz @ Nominal -15 dBm
X-Band: 7.9-8.4 GHz @ Nominal -15 dBm
Ku-Band: 14.0-14.5 GHz @ Nominal -15 dBm
Ka-Band: 30.0-31.0 GHz @ Nominal -15 dBm
*Input levels are dependent on dish size, distance to the simulator and transmitter power.

RF Output Signals: Band Selection Per External Controller Command
C-Band: 3.625-4.20 GHz @ Input Level -30 dB Attenuation Setting
X-Band: 7.25-7.75 GHz @ Input Level -30 dB Attenuation Setting
Ku-Band: 10.95-11.2 GHz, 11.45-11.7 GHz, 11.7-12.2 GHz 12.25-12.75 GHz @ Input Level -30 dB Attenuation Setting
Ka-Band: 20.2-21.2 GHz @ Input Level -30 dB Attenuation Setting

Environmental:
Operating Temperature: 0° to +50° C

Physical:
Mechanical Dimensions: 6"(H) x 14"(D) x 12"(W)
Weight: <35 lbs
Front Panel Controls: 30 dB Attenuation

Transfer Characteristics All Bands:

Phase Noise: 10dB (Typical) Better Than IESS 308/309

Midband Gain: 30 dB Loss + Attenuation Setting (Measured @ Input/Output Antenna Interfaces)

Gain Adjustment: 35 dB Continuously Variable

Gain Ripple Full Band: +/- 1.5 dB MAX

Gain Ripple Per 80 MHz: +/- 0.75 dB MAX

Phase Linearity Per 5 MHz: +/- 10° MAX

Frequency Translation Accuracy: +/- 5 kHz Nominal, +/- 10 kHz For Ka-Band

Inband Signal Related Spurious: -50 dBc Nominal

LO Leakage: -90 dBm MAX

Image Rejection: >50 dB

VSWR In and Out: 2.0:1

Input and Output Antennas: With Nominal Gains of 6 dB

1 dB Compression Point: 0 dBm @ 0 dB Attenuation

Group Delay: +/- 5 ns/40 MHz

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