MINI SATELLITE SIMULATOR

FEATURES:
- SIMULATES C, X, or Ku BAND. CALL FACTORY FOR Ka BAND. PERMITS EARTH STATION SET UP WITHOUT ACTUAL SATELLITES AVAILABLE.
- COMPACT WITH SELF CONTAINED ANTENNAS
- LIGHT WEIGHT <5 lbs
- TYPICAL OPERATION RANGE IS 50-1000 FT. (ACTUAL RANGE IS DETERMINED BY ANTENNA SIZE AND POWER)/ FACTORY SET ATTENUATION
- 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:

POWER REQUIREMENTS: 12 VDC OR BATTERY PACK OPTION

RF INPUT SIGNALS:
- C BAND: 5.85 TO 6.425 GHz @ NOMINAL –25 TO +0 dBm
- X BAND: 7.9 TO 8.4 GHz @ NOMINAL –25 TO +0 dBm
- Ku BAND: 14.0 TO 14.5 GHz @ NOMINAL –25 TO +0 dBm
- Ka BAND: 30.0 TO 31.00 GHz @ NOMINAL –25 TO +0 dBm

POWER LEVELS ARE DEPENDENT ON DISH SIZE, DISTANCE TO SIMULATOR, AND TRANSMITTER POWER.

RF OUTPUT SIGNALS:
- C BAND: 3.625 TO 4.20 GHz
- X BAND: 7.25-7.75 GHz
- Ku BAND: 10.95-11.7 GHz (Ku 1) OR 11.7-12.2 (Ku 2) GHz OR 12.25-12.75 GHz (Ku 3)

TRANSFER CHARACTERISTICS ALL BANDS:

PHASE NOISE: 10 dB (TYPICAL) BETTER THAN IESS 308/309

MIDBAND GAIN: -20 dB LOSS - ATTENUATION SETTING INCLUDING ANTENNA GAIN

GAIN RIPPLE FULL BAND: ±1.5 dB MAX.

GAIN RIPPLE PER 80 MHz: ±0.75 dB MAX.

TRANSFER CHARACTERISTICS (CONT’D):

PHASE LINEARITY PER 5 MHz: ±10 DEG MAX.

FREQUENCY TRANSLATION ACCURACY: ±1 ppm

INBAND SIGNAL RELATED SPURIOUS: -45 dBc

LEAKAGE SIGNALS: -45 dBm MAX.

IMAGE REJECTION: >30 dB
1 dB COMPRESSION POINT: 0 dBm AT 0 dB ATTENUATION
INPUT AND OUTPUT ANTENNAS: LINEAR POLARIZED (NOMINAL 5 dBi GAIN)

INPUT IP3: >+20 dBm MIN

GROUP DELAY: ±0.5 NS/40 MHz

PHYSICAL:

MECHANICAL DIMENSIONS: APPROXIMATE SIZE 6” X 3.5” X 1.5”
W/O BATTERY OPTION, FOR C, X, AND Ku BANDS, CALL FACTORY FOR Ka BAND

WEIGHT: <5 lbs

CONTINUED >
SPECIFICATIONS (CONT)

ENVIRONMENTAL:

OPERATING TEMPERATURE: 0° TO 50° C

MODEL NUMBERS

C BAND- MSS-2225
X BAND- MSS-725
Ku BAND 1- MSS-3050, Ku BAND 2-MSS-2300, Ku BAND 3-MSS-1750
Ka BAND CALL FACTORY