

BANTAM INSTRUMENTS

SATELLITE UP/DOWN LINK SPECTRUM ANALYZER

MODEL 470A 500 kHz to 199 MHz

ALIGNMENT AND VERIFICATION OF SATELLITE SYSTEMS



- Covers both 70 MHz and 140 MHz IF Frequencies for ultimate versatility
- 10 kHz Frequency Resolution and 10 kHz Resolution Bandwidth for precise IF monitoring.
- Extremely small, lightweight, and battery powered, or external 12 VDC and 100-240 VAC operation
- -100 dBm sensitivity and 70 dB dynamic range exceeds receiver threshold and performance specifications
- Low cost affordability suits a variety of uses for uplink and downlink applications
- Internal memories store measurement setups and traces
- Serial Interface allows data transfer for remote monitoring applications
- Simple straight-forward operation, even if you have never used a spectrum analyzer before

The Model 470A Satellite Up/Down Link Spectrum Analyzer is specifically designed to meet the needs of the satellite communications industry. Whether monitoring in a network truck or being used by technicians installing or monitoring satellite link systems in the field, this spectrum analyzer offers unparalleled performance and ease of use, all at a very low cost.

With the Model 470A you can quickly monitor the entire IF spectrum, or zoom-in accurately to a specific area of interest. Store the measurement setup for repeated use in the field and store the measurement data as well. With greater than -100 dBm sensitivity, you can search for and identify interfering or potentially interfering signals. Align dish antennas easily, accurately, and quickly even in the presence of line of sight obstructions.

The 470A offers incredible ease of use. Frequency presets center the frequency at either 70 MHz or 140 MHz. A built-in serial interface allows transfer of data directly to a PC or for remote monitoring applications. PC Enhancement Software supplied with the 470A can download continuous measurement data to the screen of a Windows-based PC. The 470A Spectrum Analyzer can be placed at one location and the measurement can be viewed a distance away on the screen of a PC, making antenna alignment simple and straightforward.

MODEL 470A PERFORMANCE SPECIFICATIONS

FREQUENCY

Frequency Range:	500 kHz to 199 MHz
Freq. Resolution, Span>100 kHz:	100 kHz
Freq. Resolution, Span≤100 kHz:	10 kHz
Span:	0 MHz to Entire Band
Span Resolution:	100 kHz
Frequency Markers:	3
Marker Resolution (Frequency):	1% of span or 10 kHz
Marker Resolution (Amplitude):	0.1 dB
Marker Readout Accuracy:	1% of span ±5 ppm
Resolution Bandwidth, 3dB:	10 kHz, 120 kHz
Video Bandwidth:	300 Hz, 3 kHz

GENERAL

Display:	Monochrome LCD
Display Backlight (optional):	Electro-luminescent
Operating Temperature Range:	0°C to 40°C
Storage Temperature:	-10°C to 50°C
Line Power:	6VA
Power (12-14 VDC):	0.4A max.
Dimensions, mm:	193H x 102W x 33D
Dimensions, inches:	7.6H x 4.0W x 1.3D
Weight:	1.2 lbs (0.55 kg)
Safety and Electromagnetic Compatibility:	CE Mark Compliance

AMPLITUDE

Measurement Range:	-35 dBm to -105 dBm
Displayed Average Noise Level at 120 kHz Resolution B/W, typical:	-95 dBm, span<10 MHz -90 dBm, span>10 MHz
At 10 kHz Resolution B/W, typical:	-105 dBm, span<10 MHz -100 dBm, span>10 MHz
Maximum Safe Input Level:	+23 dBm, 50 VDC
Scale:	1, 2, 5, 10, 20 dB/div
Measurement Units:	dBm, dBμV
Intermods (3rds, -35dBm signals):	-75 dBc, typical
Harmonic Distortion (-35 dBm):	-75 dBc, typical
Amplitude Accuracy:	±2.5 dB, -40 to -75 dBm
Detection Modes:	Normal, Quasi-Peak, Peak Hold, and Averaging
Input Connector:	SMA Female

OTHER FEATURES

Save/Recall, Setups:	20
Save/Recall, Traces:	20
RS-232 Interface Speed:	9600, 57600 Baud
RS-232 Interface Connector:	DB-9 (Female)
Data Download Modes:	Screen display as bitmap or Excel compatible data

ORDERING INFORMATION

Model 470A Satellite Down Link Spectrum Analyzer\$2650

Includes: Battery Charger, 100-240 VAC, 50/60 Hz
SMA Male to BNC Female Adapter Cable
Serial Interface Cable
PC Enhancement Software
Soft Carrying Case
Operating Manual
One Year Warranty

Option 001, Warranty Extension to 3 years\$200

Option 002, Backlight, for use in low illumination.....\$150

OPTIONAL ACCESSORIES

9010-0002, Cigarette lighter 12 VDC adapter\$25

9011-0001, 10 dB SMA Attenuator\$30

9011-0002, 20 dB SMA Attenuator\$30

9011-0003, 30 dB SMA Attenuator\$30

9011-0004, 40 dB SMA Attenuator\$60

9050-0001, Transit Case for Model 470A..... \$80

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