

Model ASC 501LE DUAL 70MHz to L-Band Up Converters



Quality Products @ Reasonable Prices

Functional Description:

The Model ASC501LE Dual Up Converter is two ASC501LE modules setting side by side as a single rack mount unit. Each **ASC501LE Up Converter** is a high performance unit that is designed to up convert a 70 MHz (52 to 88 MHz) base band input signal to the output frequency band of 950 to 1750 MHz. The output signal then may be interfaced to the final power stage of a satellite RF transmitter (SSPA or BUC). The system performance makes the **ASC501LE** ideal for low data rate applications. The LE Series half-rack width permits mounting either two of the same units or a combination of our **ASC501LE Up Converter** and our **ASC401LE Down Converter (Model ASC902LE)** side by side in one rack mount unit.

Systems Specifications:

Output Frequency 950 to 1750 MHz
 Spectrum Non-inverted
 Output Bandwidth 36 MHz
 Output Level -15 dBm Max @ -25dBm Input
 Output Mute < - 50 dBc on frequency change
 Input Frequency 52 to 88 MHz
 Input Level -15 to - 35 dBm, -25 dBm, Typical
 Frequency Tuning 125 kHz Steps
 Frequency Adjust Front Panel or Remotely
 Input Impedance 50 Ohm
 Input Connector BNC, Female
 Output Impedance 50 Ohm
 System Level Gain 10 dB Max, Typical
 Output Connector Type-N, Female
 System Level Attenuation 0 to 25 dB, 1 dB Steps
 Frequency Stability ± 0.5 ppm
 Input & Output Return Loss 15 db
 Spurious Response - 55dBc modulated
 (carrier related)
 65 dBm un-modulated (non carrier)
 Signal Phase Noise $\leq - 80$ dBc/Hz, 1 kHz from Carrier
 (Meets IESS308/309)
 Alarms Unit Lock, BUC Lock (**Options A&B**)
 Alarm Relay Form-A
 Front Panel Display LCD with backlight
 M&C RS-232 or RS-422/485
 Switchable on rear panel
 M&C Connector DB-9, Female

Physical Characteristics:

Size 1.75"H X 16.00"D X 8.50"W
 Weight 8 lb. (1.82 kg)
 Primary Power x2 85 - 264 VAC 50-60Hz, 2.7 A
 Auto-Sensing

Environmental Specifications:

Operating Temperature 0^oc to +50^o c
 Storage Temperature -40^oc to +70^o c
 Humidity 95% RH@ 40^o c

Options: Per module but can be mixed and matched

- A. External Freq. Ref. (Multiplexed on Output Center Conductor)
 Frequency 10 MHz
 Level +4 dBm, Typical
 Phase Noise 10 Hz, -90dBc/Hz
 Stability ± 0.28 ppm
- B. **BUC Power** (Multiplexed Output Center Conductor)
 Voltage + 24 VDC
 Power 65 W, max
- C. **10 MHz Ref. Input**
 Input Level +10 to -10 dBm
 Input connector BNC, 50 Ohm Female
 Auto Switched Internal/External
 External Stability ± 100 Hz (± 10 ppm)

The 10 MHz reference is auto switched to internal when no external reference is available or less than -10 dBm.

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