

Description

This downconverter is intended for use in professional applications in L band like satellite earth stations. US/BDC/L-70 includes high performance downconverter modules with low noise local oscillators, microprocessor based monitor & control circuitry. A front panel with control keys & status display & own AC / DC power supply. US/BDC/L-70 can be controlled from the front panel (manual control) & Ethernet (remote control).

Specifications

| L Band Down Converter | |
|--------------------------------|--|
| Input Frequency | 950 to 2000 MHz |
| Type of Conversion | Double Conversion without Inversion |
| Frequency Sense | No Inversion |
| Frequency selection step size | 1 KHz |
| Tunability | First LO in 1 KHz step |
| Input Level | + 10 dBm |
| Output Frequency | 70 MHz |
| 3-dB Bandwidth (for IF O/P) | ± 18 MHz |
| I/P or O/P Impedance | 50 ohms |
| O/P 1dB Compression Point (P1) | +10 dBm min. |
| 3rd Order Intercept Point | + 20 dBm min. |
| Gain | 30 dB |
| Gain Adjustment | within 25dB range in 0.5 dB steps |
| Gain Flatness | ± 1.0 dB max over full Band |
| Input Return Loss | 18 dB |
| Output Return Loss | 15 dB |
| Spurious Outputs | Signal Related: - 60 dBc Signal Independent: - 80 dBm max. |
| Phase Noise | 100 Hz away: -75 dBc / Hz 1 KHz away: -90 dBc / Hz 10 KHz away: -95 dBc / Hz as per IESS 308/309 |
| Internal Reference Stability | 1×10^{-7} over temperature range (0.1ppm) |
| 10MHz reference | ± 5 dBm |
| External Reference Input | 5 / 10 MHz, 3±3 dBm, 50 ohms Internal/ External auto selection |

| L Band Down Converter | |
|-------------------------------|--|
| Local & Remote Functions | Frequency selection & display 1st & 2nd LO monitor O/p LO lock indication Channel gain adjustment & display Reference Int./ext. Failures / Alarms Local / Remote |
| M & C Interface | TCP/IP-LAN (100 Mbps) at rear panel, RJ45 connector |
| RF / IF Connectors | SMA / N-type, Rear Panel |
| LO Monitor | SMA Front Panel |
| Input Power | 230 V , 50 Hz \pm 10% |
| Operating ambient temperature | 0 to 50 deg C |
| Humidity | Up to 95 % |
| Mechanical | 19" Rack Mountable (3U Unit) |
| Cooling | Forced Air |
| Color | Light Grey (RAL 7035) |
| MTBF | > 50,000 Hours |
| MTTR | < 1 hour |

Online Drawings

