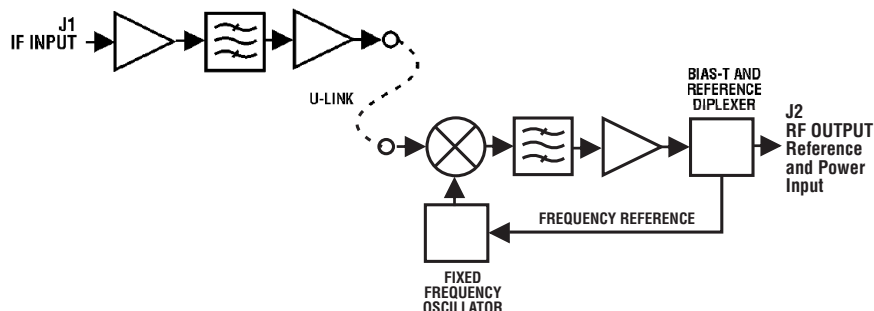


High Performance X-Band Low-Noise Block Downconverter with Interstage Filter



This series of X-band low noise block downconverters (LNB) are designed to be used in outdoor antenna mounted applications. Every consideration has been given to provide excellent RF characteristics with reliable performance.

An integrated interstage filter provides exceptional transmit desensitivity performance while providing a low noise temperature.

Features

- Low noise temperature
- Excellent input VSWR
- 10 Pole interstage filter
- Frequency reference and DC power on RF output center conductor

Options

- Higher gain
- Higher noise temperature

Gain (Min.-Max.)	Noise Temperature (Max.)	Transmit Desensitivity (Max.)	Model Number
50-56 dB	50K at 23°C	-20 dBm	DB-WS-725775-50/50
60-66 dB	50K at 23°C	-30 dBm	DB-WS-725775-60/50
50-56 dB	70K at 23°C	-20 dBm	DB-WS-725775-50/70
60-66 dB	70K at 23°C	-30 dBm	DB-WS-725775-60/70

High Performance X-Band Low-Noise Block Downconverter with Interstage Filter

Specifications

Input characteristics	
Frequency input	7.25–7.75 GHz
Output characteristics	
Frequency output	950–1450 MHz
Nondamage power input	+10 dBm maximum
Amplitude response	± 0.5 dB/ ± 40 MHz, ± 1.5 dB/500 MHz maximum
Output (1 dB compression point)	+10 dBm minimum
Intermodulation distortion (third order)	With two 0 dBm outputs, 40 dBc maximum
Spurious	
Signal related	-65 dBc maximum up to 0 dBm output
Signal independent	-60 dBm inband maximum
LO leakage at RF input	-80 dBm maximum
Image rejection	80 dB minimum
VSWR	
Input	1.25:1 maximum
Output	2:1 maximum

Power and frequency reference on output center conductor requirements

Voltage.....	12 to 20 VDC
Current consumption	550 mA typical, 700 mA maximum
Reference	
Frequency	10 MHz
Level	0 \pm 5 dBm

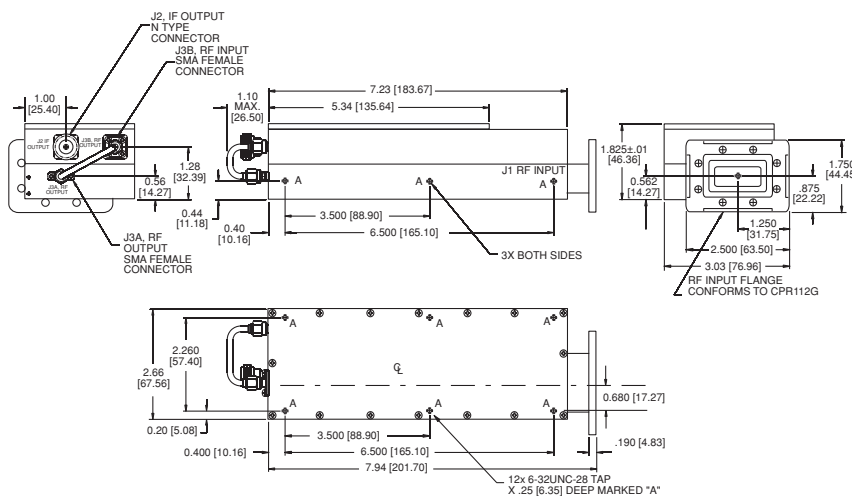
Environmental

Operating	
Ambient temperature	-40 to +60°C
Atmospheric pressure	Up to 10,000 feet
Nonoperating	
Ambient temperature	-50 to +70°C
Atmospheric pressure	Up to 40,000 feet
Shock and vibration	Normal handling by commercial carriers

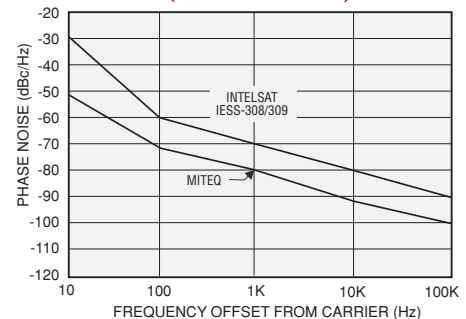
Physical

Weight	3 pounds (1.4 kg) typical
Waveguide pressurization	At 2 PSI, leak rate 10cm ³ /minute maximum

9800 Series Converter Rear View Panels



MAXIMUM PHASE NOISE CHARACTERISTICS (1.0 Hz BANDWIDTH)



NOTE: ALL DIMENSIONS SHOWN IN BRACKETS [] ARE IN MILLIMETERS.



100 Davids Drive, Hauppauge, NY 11788
TEL.: +1-631-436-7400 • FAX: +1-631-436-7431
www.miteq.com