



# Q Band LNB

## LNB-Q-3840

### Q Band Low Noise Block Converter for satellite communications

#### TECHNICAL SPECIFICATIONS

##### ELECTRICAL

Input frequency	38-40 GHz (38-39 GHz, 39-40 GHz)
Output frequency	950-1950 MHz
Input VSWR	< 1.5:1
Output VSWR	< 2.0:1
Gain	> 60 dB
Gain flatness over whole band	± 2.0 dB
Gain variation over temperature	± 2.0 dB over whole range
Gain stability over 24 hours	< ± 0.1 dB
Image Rejection	20 dB
Local Oscillator	37.05 GHz / (switchable) 38.05 GHz
Output Spectrum	No inverted
Attenuation adjustment	30 dB with 0.25 dB steps
Noise Figure	< 2.4 dB (typ), max 2.8 dB
Phase Noise	IESS 308/309
P1dB	≥ 10 dBm
OIP3	≥ 20 dBm
Spurious (@Pout=0 dBm)	≤ -60 dBc
DC input voltage (Through output cable preferable)	12-24 VDC
SSB Phase Noise	≤ -62 dBc/Hz @100 Hz, ≤ -72 dBc/Hz @1 KHz, ≤ -82 dBc/Hz @10 Hz, ≤ -92 dBc/Hz @100KHz, ≤ -102 dBc/Hz @1 MHz
External Reference	10 MHz / 0 dBm ±3 dB
Power Supply Voltage	12 to 24 VDC (supplied through IF Output Connector)
Power consumption	350 mA @12 VDC, 175mA @24 VDC

##### INTERFACES & PHYSICAL

Rx input interface	WR-22 (UG-383/U)
RX output interface	N (f)
Size	145 x 70 x 40 mm (6.8" x 2.7" x 1.5")
Weight	500g

##### ENVIRONMENTAL CHARACTERISTICS

Operating temperature	-20C to +55C
Storage temperature	-40°C to 85°C
Humidity	100% Condensing



#### Key Features

- Low noise figure
- High reliability
- Superior performance

The Q-band dual band LNB (switchable) Series are the Low Noise Blocks which converts the satellite signal from Q band to L band.

The equipment has a minimum gain of 60 dB, and a noise figure typical of 2.4 dB. It provides a combination of superior performance, reliability and cost effectiveness.

