





# 8W Ext. Ku-Band Block Up Converter

## TECHNICAL SPECIFICATIONS

<b>RF frequency</b>	<b>L.O. 13.05 GHz</b> <b>L.O. 12.80 GHz</b>	14.00 to 14.50 GHz 13.75 to 14.50 GHz
<b>Local oscillator</b> - electronically and manually switchable		13.05 GHz and 12.80 GHz
<b>IF frequency</b>		950 to 1,700 MHz
<b>Output power @ P1dB min over temp.</b>		8W (+39 dBm min)
<b>IF connector</b>		N-type or F-type (field-exchangeable)
<b>Power supply - auto-ranging</b>		+18~+75 VDC via IF cable, 82 W max
<b>Internal 10MHz high stability reference</b>		10 <sup>-8</sup>
<b>Output interface</b>		WR-75 G
<b>Gain</b>		60 dB min., 66 dB max
<b>IMD3</b> (3dB back off P1dB)		-25 dBc max
<b>L.O. leakage</b>		-33 dBm max
<b>Spurious</b>		-50 dBc max
<b>Spectral regrowth</b> (QPSK at 1.5x and OQPSK at 1.0x symbol rate offset with 2dB back-off from rated output power)		-30dBc
<b>Gain variation</b> <b>over 40 MHz</b> <b>over 500 MHz</b> <b>Over operating temperature</b>		± 0.8 dB max ± 1.8 dB max ± 1.5 dB max @ fixed frequency
<b>Requirement for external reference</b> frequency input power		via IF cable 10 MHz (sine-wave) -5 to +5 dBm @ input port
<b>Phase noise</b> (Exceeds Intelsat's standard IESS308/309)		-53 dBc/Hz max. @ 10 Hz -63 dBc/Hz max. @ 100 Hz -73 dBc/Hz max. @ 1 KHz -83 dBc/Hz max. @ 10 KHz -93 dBc/Hz max. @ 100 KHz -113 dBc/Hz max @ 1 MHz
<b>Noise power density</b>	<b>Transmit</b> <b>Receive</b>	-66 dBm/Hz (max) -157 dBm/Hz (max)
<b>Noise figure</b>		20 dB max
<b>Input V.S.W.R.</b>		2 : 1 max
<b>Output V.S.W.R.</b>		2 : 1 max.
<b>Mute</b>		Shut off the BUC in case of L.O. unlocked
<b>M&amp;C</b>		RS-232 and RS-485, Ethernet
<b>FSK</b>		Multiplexed on TX IFL, compatible with Comtech and Paradise
<b>Status LED</b>	<b>RED</b> <b>GREEN</b> <b>YELLOW</b> <b>YELLOW blinking</b>	Summary alarm All OK Standard L.O. 13.05 GHz Extended L.O. 12.80 GHz
<b>Temperature range (ambient)</b> operating storage		-40 deg C to +55 deg C -40 deg C to +75 deg C
<b>Vibration and shock</b>		Complies with MIL-STD-810E
<b>Dimensions &amp; housing</b>		120 (L) x 120 (W) x 77 (H) mm 4.72" (L) x 4.72" (W) x 3.28" (H)
<b>Weight</b>		1.4 kg (3.0 lbs) max