



8W KA-Band Block Converter
MODEL # CNB29306239

ELECTRICAL SPECIFICATIONS @ T =25°C, 50• SYSTEM

Parameter	Min	Typ	Max	Unit
Transmit Frequency	29.0		30.0	GHz
IF Frequency	950		1950	MHz
LO frequency	28.05			GHz
Output Power @ P1dB		36		dBm
Small Signal Gain	62			dB
Gain Flatness (over Output freq. band)		+/-2.0		dB
Gain Variation (over the operating temp range)		+/-2.0		dB
Intermodulation (relative to combine power of 2 carriers at 3dB total power back-off from rated output power)		-25		dBc
LO Stability (in PPL)		+/-1.5		ppm
Phase Noise @ Offset				dBc/Hz
1 kHz		-70		
10 kHz		-80		
100 kHz		-90		
Input VSWR			1.5:1	
Output VSWR			2.0:1	
DC Power		18	50	Volt
Power Consumption (with 48 V DC input 8 W)			85	Watt
IF Input Interface		50		Ohms
N-Type F		75		Optional
Output Interface		WR28 Grooved		

CERNEX, Inc.

EXTERNAL REFERENCE

Parameter	Min	Typ	Max	Unit
Frequency		10		MHz
Power	-5		+5	dBm
Ext Ref Phase Noise Requirement Offset @ 1 kHz 10 kHz 100 kHz		-150 -155 -160		dBc/Hz

MONITOR AND CONTROL

Monitor	BUC Temperature LO Unlocked Alarm Status Alarm RF Output Power Detection LED Indicators
Control	RF Output Mute
Interface	RS-232/RS-485/Ethernet (SNMP & HTTP)
Tx Redundancy	Redundancy-Ready (with External RCU)

ENVIRONMENTAL CHARACTERISTICS

Parameter	Min	Typ	Max	Unit
Operating Temperature	-40		+60	°C
Relative Humidity			100	%

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions or Package	185.00mm (L) x 100.00mm (W) x 51.00mm (H)	mm	
Color	White Powder Coated		
Weight	1.5	kg	

