



**4W KA-Band Block Converter**  
**MODEL # CNB29305836**

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

<b>Parameter</b>	<b>Min</b>	<b>Typ</b>	<b>Max</b>	<b>Unit</b>
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	58			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 4 W)			60	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 @				dBc/Hz
1 kHz		-150		
10 kHz		-155		
100 kHz		-160		

## 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	

