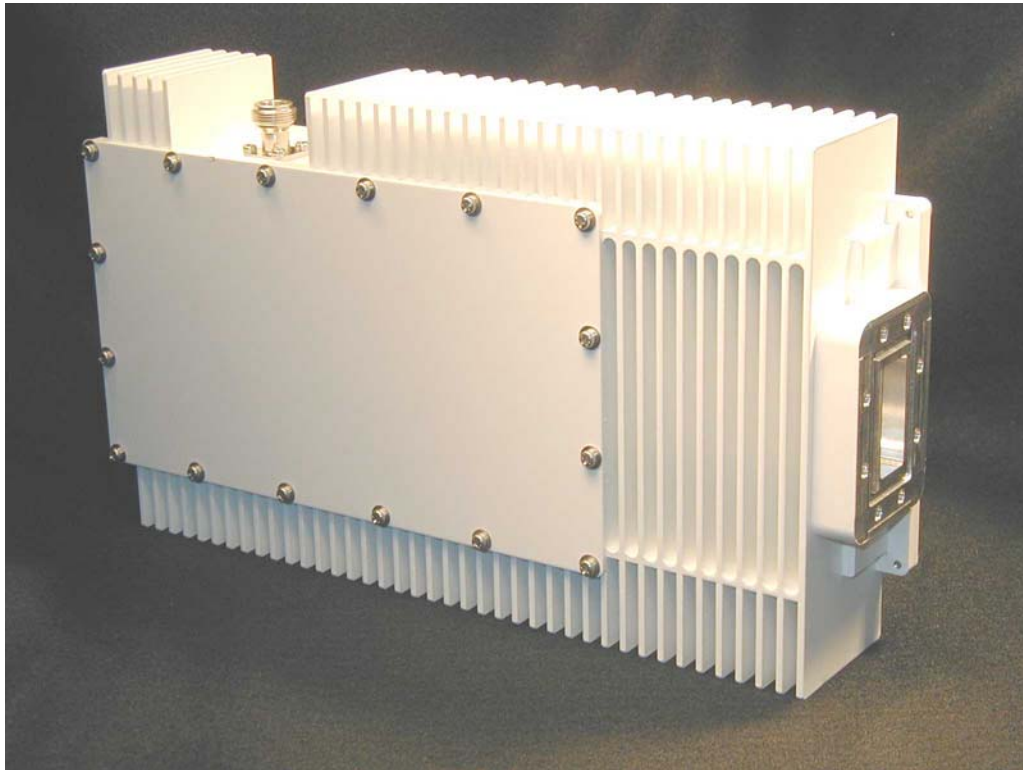


C-Band Block Up Converter



Model 30-0501-186A

C-Band 5Watt Transmitter

Electrical Specifications:

Output Frequency	5.85 to 6.425GHz
Input Frequency	950 to 1525MHz
Conversion type	Fixed L.O.
L.O. Frequency	7.375GHz
Frequency Sense	Negative
Output Power @ P1dB	+37dBm min.
Linear Gain	57dB to 67dB
Gain Flatness over Frequency @+25C	5dBp-p max. over 575MHz
Gain Variation vs. Temp @Fixed Freq	5dBp-p max.
IM3	-30dBc typ. -26dBc max 2Carriers, each carriers +29dBm
Requirement for External Reference	Frequency: 10MHz(sine-wave) Input Power: -5 to +5dBm @ input port Phase Noise: -135 dBc / Hz @ 100 Hz -140 dBc / Hz @ 1 KHz -143 dBc / Hz @ 10 KHz -143 dBc / Hz @ 100 KHz -143 dBc / Hz @ 1.0 MHz
L.O. Phase Noise	-60 dBc / Hz @ 100 Hz -70 dBc / Hz @ 1 KHz -80 dBc / Hz @ 10 KHz

	-90 dBc / Hz @ 100 KHz -100 dBc / Hz @ 1.0 MHz
Spurious	In Band @5.85 to 6.425GHz -50dBc max. (IF ON) @Pout=+37dBm -20dBm max. (IF OFF) In Receive Band @3.625 to 4.2GHz -70dBc max. (IF ON) @Pout=+37dBm -95dBm max(IF OFF) Out of Band -50dBc max. (IF ON) @Pout=+37dBm -20dBm max(IF OFF) L.O. -30dBm max
Harmonic	-50dBc max. @Pout=+37dBm
Group Delay	10nsec max. over any 10MHz
Receive Band Noise Power	-110dBm/50KHz max. @3.625 to 4.2GHz
Settling Time	200 μsec max.
AM/PM Distortion	4deg/dB max.
Input Impedance	50 ohms nom. / 75ohms nom. (optional)
Input VSWR	2:1 max @ 950 to 1525MHz, 10MHz
Output VSWR	2:1 max
Output Load VSWR for Non Damage	Infinite:1
DC Power Requirement VDC	+15 to +24 4.0A @ +15V
Mute Shut off the HPA in case of LO unlocked Carrier on/off suppression	60dBc min.

Mechanical Specifications:

Input Interface	N-type female (50 ohms) F-type female (75ohms) optional
Output Interface	Wave-guide CPR-137G (grooved) with flange
Housing Dimensions	150 × 300 × 58 mm
Weight	Approx. 3.2 Kg
Vibration	5G(3 axis, 50Hz to 2KHz) 1mm p-p (3 axis, 5 to 50Hz) Non Operation
Paint/Color	White

Environmental / Operational Specifications:

Temperature Range	(Operating) -40 to +55°C (Storage) -40 to +75°C
Humidity	0 to 100%
Weather Protection	The Transmitter shall comply with IP65 weatherproofing standard as defined in EN60529. Flood from feed horn to inside of waveguide will be excluded.
Altitude	Operating) From sea level to 10,000feet Non-Operating for transportation) From sea level to 40,000 feet

C-Band Transmitter Block Diagram:

