

California Amplifier

MMDS LOW NOISE DOWNCONVERTER / YAGI ANTENNA "LNBY"

Part Number 31545	-12	-15	-18
Integrated Gain (Typical)	44 dB	47 dB	50 dB (± 3 dB)

Downconverter Specifications:

RF Input Frequency.....	2500 to 2686 MHz
RF Output Frequency.....	222 to 408 MHz
LO Frequency Stability.....	2278 MHz ± 25 KHz
Noise Figure.....	1.7 dB Typical
Gain Flatness.....	± 1.5 dB, 0.25 dB/ MHz
Gain Variation.....	± 1.5 dB Max., (-40° to + 60° C)
LO Leakage	
@ IF Port.....	-45 dBm
@ RF Port.....	-45 dBm
Phase Noise.....	> 75 dBc/Hz @ 10 KHz
Noise Rejection.....	45 dB Min.
In band output spurious/harmonics.....	-65 dBc
I.F. Rejection.....	90 dB Min.
I.M.D. (2 tone test)*.....	-50 dBc
P-out 1-dB Compression Point.....	+ 16 dMn Min. (single carrier)
Third Order Intercept Point.....	+ 27 dBm
RF Input Level (Max.)	
with single channel.....	-21 dBm
with 31 channels each.....	-50 dBm
RF Output Level (Max.)	
with single channel.....	+59 DbmV
with 31 channels each.....	+30 dBmV
Output Connector.....	"F" Type Female, 75 Ohms
-20 dB Test Port Connector.....	"F" Type Female
Supply Voltage.....	+16 to +24 VDC (through output connector)
Current.....	240 mA Max.
Operating Temperature **.....	-40° to + 60° C
Lightning Suppression.....	Yes, Transient
Weatherproof Housing.....	Yes
Finish.....	Polyurethane Powder Coat Paint
Dimensions (Converter.....	6.1 X 3.25 X 1.9 In.; 15.5 X 8.25 Y 20.2 cm
Weight.....	26 ounces (735 grams) Max.
Unconditionally Stable.....	Yes
Special O Ring Water Seal.....	Yes
Warranty.....	2 years
*2 Equal Tones at -30 dBm at Input	
**Extended Operating Temperature Range to +80° C with Minimal Performance Degradation	

Antenna Specifications (Typical)

Front to Back Ratio.....	23 dB
Side Lobe Level.....	-13 dB
3-dB Beamwidth.....	28 Degrees
Cross Polarization.....	25 dB