31 Ch. Integrated Antenna Downconverter

With PCS Bandpass Preselector Filter High Gain Option

2010_030

Part number:	**2010_030**
Downconverter specifications:	
RF Input Frequency	2500 to 2686 MHz
IF Output Frequency	222 to 408 MHz
LO Frequency	2278 MHz ±15 KHz
LO Frequency Stability	±30 KHz (-40°C to 65°C); ±50 KHz Max.
Gain (Converter)	30 dB ± 3 dB
Gain Flatness	± 3.0 dB, ± 0.5 dB/6 MHz
Noise Figure	1.7 dB
Phase Noise	-93 dBc/Hz @ 10 KHz
PCS Rejection (1930-1990 MHz)	90 dB (40 dB is pre-LNA)
RF to IF Filtering:	
@ 2450 MHz	35 dB
@ 2750 MHz	25 dB
@ 2800 MHz	45 dB
I.F. Rejection	-80 dBc
I. M. D.*	-50 dBc
In Band Spurious/Harmonics	-80 dBm
3rd Order Intercept Point	24 dBm
Maximum Output Level:	
with 31 channels each	35 dBmV
Group Delay	±10 ns over any 6 MHz
Dynamic Recovery Time	5 µsec. (after input overload of +20 dBm @ 1 µsec. pulse width)
Output Connector	"F" Type Female, 75 Ohms
Lightning Protection	Transient Suppressor
Supply Voltage	+16 to +24 VDC (through output connector)
Current	235 mA
Operating Temperature	-40°C to +65°C
Weatherproof Housing	100% Leak Test per CAI TP-00002
Finish	Chem. Film Conversion; MIL-C-5541, Class 3, Clear
Physical Dimensions:	
Size	3.0 x 4.0 x 11.6 in. (76 x 102 x 300 mm)
Weight	9.5 oz. (260 grams)

Antenna specifications:	**21 dBi Reflector (130093)**	**24 dBi Reflector (130094)**
Gain	21 dBi	24 dBi
Front to Back Ratio (over back hemisphere)	18 dB Min.; 27 dB Min. @ 180°	21 dBMin.; 28 dBMin. @ 180°
Side Lobe Level	-19 dB ± 3 dB	20 dB ± 3 dB
3-dB Beamwidth	12.5°	9.75°
Cross Polarization Rejection	28 dB	28 dB

** Two equal tones @ -1 dBm each at the output.*
All specifications are typical at 25°C unless otherwise specified.

Spec.01_0305

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