# 31 Ch. Integrated Antenna Downconverter

## With PCS Bandpass Preselector Filter, Ultra High Gain Option

2010_130

| **Part number:** | **2010_130** |
|---|---|
| **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) | 34 dB ± 3 dB |
| Gain Flatness | ± 2 dB; ± 0.25 dB/6 MHz |
| Noise Figure | 1.7 dB |
| Phase Noise | -85 dBc/Hz @ 10 KHz |
| PCS Rejection (1930-1990 MHz) | 90 dB (40 dB is pre-LNA) |
| I.F. Rejection | -80 dBc |
| RF to IF Filtering: | |
| @ 2450 MHz | 35 dB |
| @ 2750 MHz | 25 dB |
| @ 2800 MHz | 45 dB |
| I. M. D* | -50 dBc |
| Third Order Intercept Point | 22 dBm |
| Maximum Output Level: | |
| with 31 channels each | 30 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 ± 1 dB | 24 dBi ± 1 dB |
| 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 @ -3 dBm each at the output.*
*All specifications are typical at 25°C unless otherwise specified.*



Spec.02_0305

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