



MMDS-MDS TRANSCEIVER 2

PART NUMBER

520001-2

Downconverter Specifications: (Rx)

R.F. Input Frequency	2500 - 2686 MHz
IF Output Frequency	222 - 408 MHz
Gain	34 $\pm$ 2 dB
Gain Flatness	$\pm$ 1.5 dB with 0.26 dB/6MHz
Noise Figure (no degradation with Tx on or off)	2.5 dB Typical
Output 3rd Order Intercept (no degradation with Tx on or off)	> 20 dBm
PCS Rejection	> 80 dB
WCS Rejection	40 dB Min.
Image Rejection	50 dB, Min.
Local oscillator Break through at RF port	-50 dBm, Max.
Local oscillator Breakthrough at IF port	-55 dBm, Max.
IF Rejection	-75 dBc, Min.
In-Band Spurious	-35 dBc, Min.

Upconverter Specifications: (Tx)

IF Input Frequency	14.375 - 26.375 MHz
R.F. Output Frequency	2150 - 2162 MHz
Linear Gain	20 $\pm$ 3 dB
Gain Flatness	< $\pm$ 1.5 dB
Output 1-dB Compression Point	> 20 dBm
Output Transmit Noise in Tx Band	-120 dBm/Hz, Max.
Output Transmit Noise in Rx Band	-160 dBm/Hz, Max.
Transmit Spurious	40 dBc from licensed average power.

General Specifications:

LO Frequency Set	2278 MHz $\pm$ 5 KHz
LO Frequency Stability	$\pm$ 10 KHz (-30°C to +70°C)
Phase Noise	-65 dBc @ 100 Hz
.....	-85 dBc/Hz @ 1 KHz
.....	-90 dBc @ 10 KHz
.....	-105 dBc @100 KHz,
.....	-120 dBc @ 1MHz
IF Impedances	75 Ohm, F-connectors(2 ea)
R.F. Impedances	50 Ohm, N-connectors(2 ea)
IF Input/Output and R.F. Output VSWR	2.0:1
R.F. Input VSWR	3.0:1 Typical
DC Supply	16 to 24 volts d.c. @ 700 mA
Operating Environment	-30°C to +70°C
Weatherproof Housing	100% Leak Test per CAI TP-00002
Finish	Polyester Powder Coat Paint, White
Physical Dimension:	
Size	7.4 x 3.2 x 1.5 in., (178 x 81 x 38 mm)
Weight	13.5 oz., (383 grams)

Warranty 2 Years

All specifications are typical @ 25°C unless otherwise specified.

Above specifications subject to change without notice.

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REV: D

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