



## 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 ± 2 dB
Gain Flatness .....	±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 ± 3 dB
Gain Flatness .....	< ±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 ± 5 KHz
LO Frequency Stability .....	±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.

**World Headquarters:** 460 Calle San Pablo, Camarillo, CA, USA 93012, Tel: 805/987-9000 Fax: 805/987-8359

**Latin America Sales:** California Amplifier do Brazil, Tel & Fax: 55/12-341-2264

**Europe, Middle East & Africa Sales:** Cai Amp sari Paris, Tel: 33/1 49 19 89 20 Fax: 33/1 48 64 52 55

**Asia and Pacific Sales:** California Amplifier Thailand, Tel: 662/231-8235 Fax: 662/231-8245

SPEC FORM: M520001-2

REV: D

DATE: 12/98