



*MMDS Integrated Dipole
Downconverters*

LOMA SCIENTIFIC INTERNATIONAL block-down-converters may be ordered to operate at standard or custom frequencies. For instance, a converter ordered for standard MMDS (2500-2686MHz) input frequencies is available from stock with an LO of 2278 or 1838MHz. We have supplied and welcome inquiries for custom converters with input frequencies from 2100 to 3600MHz or higher. Converters are available in two versions. Converters may be ordered with an integrated dipole (for mounting directly to an antenna reflector) or as a standalone unit for use with any type of antenna. Medium and high gain options facilitate maximum signal distribution at least possible cost.

All converters are designed for the linearity demands of both digital and analog service. Optional filters can be added, if necessary, to suppress unwanted interfering signals in the local marketplace. Please indicate any custom features, specifications and options desired at time of order.



Model 2278 - 030

**MMDS LOW NOISE DOWNCONVERTER
MODEL 2278 - 030**



RF SPECIFICATIONS

RF Frequency	2500 to 2686MHz *
IF Frequency	222 to 408MHz *
LO Frequency	2278MHz +/-15 KHz *
Noise Figure	1.7dB
Gain	30dB +/-3dB
Gain Flatness	+/-3dB, 0.5dB/6MHz
LO Leakage @ IF Port	-50dBm
@ RF Port	-70dBm
Phase Noise	-93dBc/Hz @ 10KHz
PCS Rejection (1930~1990MHz)	90dB (40dB is pre-LNA)
IF Rejection	-80dB
IMD (2 Tone Test)	-50dB
Third Order Intercept Point	+24dBm Minimum @ Output
RF Output Level, Maximum 31 Channel, Each	+35dBmV

MECHANICAL SPECIFICATIONS

Input Structure	Integrated Dipole
Output Connector	"F" Type Female, 75 Ohms
DC Supply Voltage	+16 to +24 VDC Through Output Connector
Current	235mA Max.
Operating Temperature	-40C to +65C
Finish	Chem Film Conversion MIL-C-5541, Class 3, Clear

* Other frequencies available on request.

Specifications subject to change without notice.

LOMA SCIENTIFIC INTERNATIONAL receive antenna reflectors have demonstrated exceptional performance in worldwide use for many decades. Several types of metallic finishes are available at time of order. In severe environments (coastal areas with high salt spray, extreme moisture, etc) the powder coat paint should be considered. This finish will perform faithfully in the most severe environments.

ANTENNA REFLECTORS FOR (ITFS-MMDS) 2500-2686 MHz



FEATURES

- ◆ Polarization - Horizontal or Vertical
- ◆ Lowest Wind Loading
- ◆ Electronically Welded, Pressure Tested Dipole
- ◆ An optional Passive Dipole Feed Assembly
Includes RG8 Cable with N Connector to
Attach a Standalone Type Block-down-converter
- ◆ Compatible with all Down-converters
or other Products such as Tranceivers
- ◆ Corrosion Protection: Powder Coat Paint, Gray

SPECIFICATIONS

Gain	21 +/- 1dBi *
Front to Back ratio	18 dB
Impedance	50 Ohms
Beam Width	12.5 +/- 1.5 degrees
Wind Load	7.2 lbs./sq. ft.

* Other gains are available upon request using low cost assemblies.

POWER SUPPLY WITH POWER INSERTER LSI-TESA

Input Voltage, Universal AC	100/240VAC
Input Frequency	50/60Hz
Output Voltage	+18VDC @ 350mA



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