

OUTDOOR-MOUNTED BLOCK DOWNCONVERTER RECEIVE BAND TO L-BAND

This line of downconverters is designed to provide downconversion from the Satellite transponder to L-band.

With a design focus on simplicity these converters utilize image reject mixers to provide excellent image rejection.

A summary alarm is included as standard.

DC power and 10 MHz reference are located on the IF output connector.

Options are available for an internal reference oscillator and a fiber optic transmitter output.

Accessories include Bias-T's and reference diplexers.



Model Number	Frequency Input (GHz)	Frequency Output (GHz)	LO (Mhz)
DBM-3800-1350-INV	3.4-4.2	950-1750	5150
DBM-7500-1200	7.25-7.75	950-1450	6300
DBM-11200-1450	10.7-11.7	950-1950	9750
DBM-12250-1475	11.7-12.75	950-2000	10750
DBM-18200-1450	17.7-18.7	950-1950	16750
DBM-18700-1450	18.2-19.2	950-1950	17250
DBM-19700-1450	19.2-20.2	950-1950	18250
DBM-20700-1450	20.2-21.2	950-1950	19250
DBM-21700-1450	21.2-22.2	950-1950	20250

SPECIFICATIONS

Conversion Gain	35 dB minimum
Gain Flatness	±1 dB over the frequency range
Noise Figure	10 dB maximum
Gain Stability	±1 dB over the operational temperature range
Output 1 dB Compression	+3 dBm minimum
Output Third Order Intercept	+13 dBm
Image Rejection	20 dB minimum
Non-signal Related Spurious	-85 dBm
Signal Related Spurious	-65 dBc up to -15 dBm output
Input/Output VSWR, 50 Ohm	1.8:1
Power Requirement	15-18 VDC on IF output connector, 5.5W nominal
External Reference Input	10 MHz on IF output connector, +4 ±3 dBm
Single Side Band Phase Noise	-75 dBc at 1 kHz offset -85 dBc at 10 kHz offset -95 dBc at 100 kHz offset
Summary Alarm Output	Open collector

MECHANICAL REQUIREMENTS

Physical Dimensions	5.0" x 3.0" x 1.0" (127 x 76 x 25 mm) without options
Input/Output Connectors	Type N female (SMA compatible above 17 GHz)
Summary Alarm Connector	Binder Part Number 09-0415-00-05 (mating connector supplied)
Weight	15 ounces (500 grams)

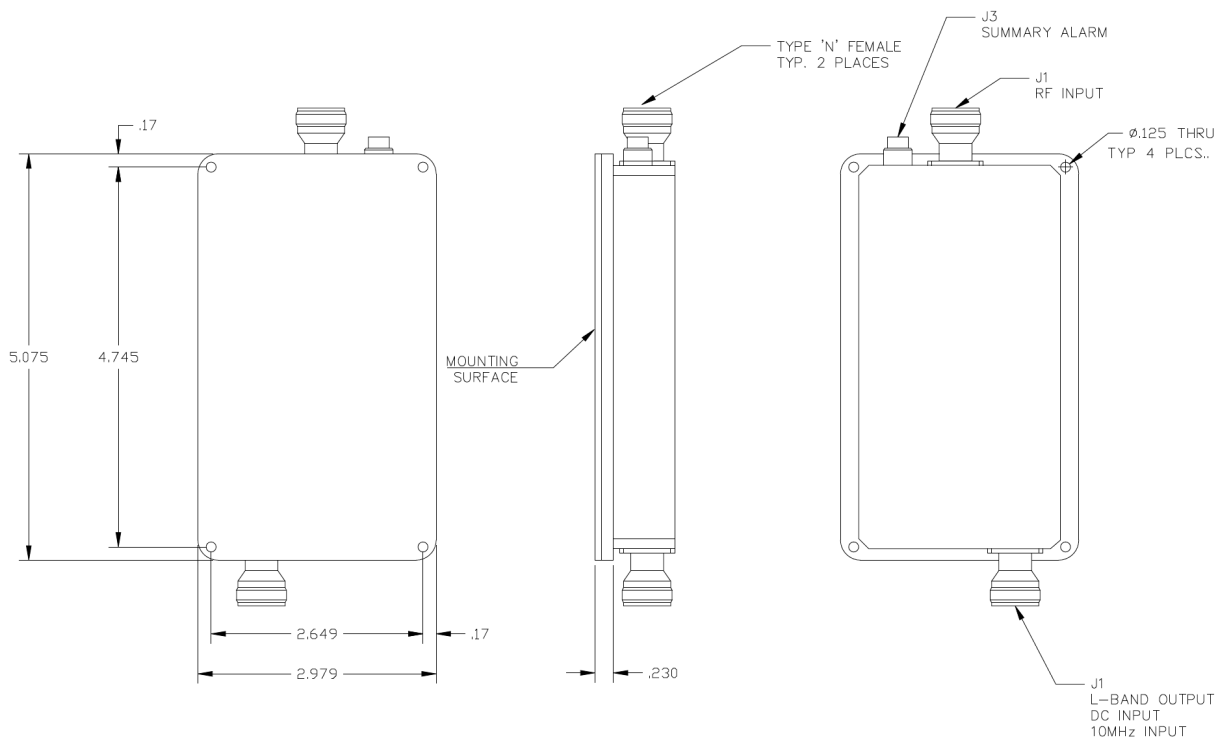
BLOCK DOWNCONVERTER ENVIRONMENTAL REQUIREMENTS

Operational Ambient Temperature	-40 to 60°C
Elevation	Operation to 15,000 feet
Shock and Vibration	Normal commercial shipping



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OUTLINE DRAWING Shown with no options



OPTIONS

27-1. Input Filter

27-2. Internal reference crystal

27-3. Fiber optic transmitter

27-4. DC Voltage Connector

Image rejection 70 dBc minimum

± 2.5 ppm over -40 to 60°C

1550 nm with indoor receiver module

DC bias on J3 Summary Alarm Connector only

