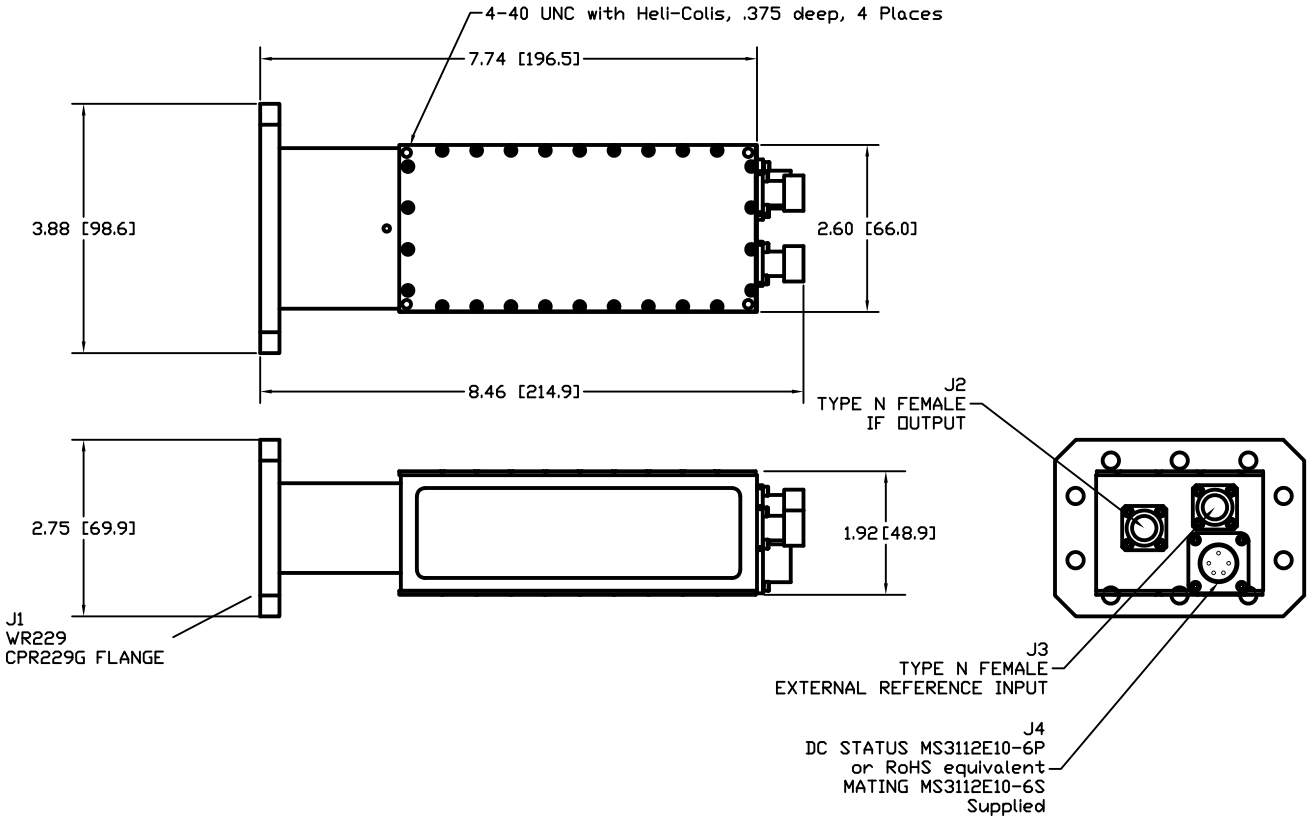
HIGH PERFORMANCE C-BAND DUAL CONVERSION LOW NOISE BLOCK DOWNCONVERTER

Featuring high performance in a small, package size this C-Band Low Noise Block Downconverter is designed to be mounted outdoors. The converters provide down conversion from the Satellite transponder frequency band to L-band without frequency inversion.

Features

- DC connector
- 10 MHz Reference on seperate connector
- External 10 MHz reference with auto switch-over to internal 2.5 ppm reference oscillator
- Input filtering (60 dB image rejection)
- Form C Summary alarm for fault

Model Number	Frequency Input (GHz)	Frequency Output (GHz)	LO (GHz)
DBL-340420-10-35	3.4-4.2	0.95-1.75	6/9.55



BLOCK DOWNCONVERTER SPECIFICATIONS

Conversion gain	50 ±3 dB at 23°C
Gain flatness	±1 dB over the frequency range
	±0.25 dB over any 80 MHz
Noise temperature at 23°C	32K typical, 35K maximum
Gain stability	±1 dB over operational temperature range/24 hours
Output 1 dB compression	10 dBm minimum
Input Third Order Intercept	-40 dBc maximum with two output signals each at 0 dBm.
Image rejection	60 dBc minimum
Spurious, inband signal related	-60 dBc maximum at -5 dBm output.
Input/output VSWR	1.5:1 maximum
Reference configuration	10 MHz at +4 ±3 dBm, If external reference is below 5 dBm nominal, module switches to internal reference.
Internal frequency accuracy	±30 ppb
Group delay	1 ns peak to peak over any 100 MHz
DC power	425 mA typical at 24VDC, 10 to 30 VDC

MAXIMUM SSB PHASE NOISE -

	Offset (Hz)						
	10	100	1K	10K	100K	1M	10M
Converter	-35	-65	-75	-85	-95	-105	-115
Ext. 10 MHz	-130	-135	-140	-140	-140	-140	-

MECHANICAL REQUIREMENTS

RF Input Connector	CPRG-229
RF Output & Reference Connector	Type N female
Power/Summary Alarm Connector	MS3112E10-6P type (mate supplied)
Weight	1.3 lbs nominal

ENVIRONMENTAL REQUIREMENTS

Operational Ambient Temperature	-40° to 60°C
Non-Operational Ambient Temperature	-40° to 70°C
Elevation	Operation to 15,000 feet
Shock and Vibration	Normal commercial shipping

ALARMS

Summary Alarm	Contact closure/open for DC voltage and Local Oscillators