



# TRIPLEX UP CONVERTER ASSEMBLY

6-18 GHz block upconverter unit selectable  
across 4 GHz sub-bands

## TECHNICAL SPECIFICATIONS

Input Frequency Range	2-6 GHz
Output Frequency Range	6-18 GHz
Sub-band Filters:	
Band A:	6-10 GHz
Band B:	10-14 GHz
Band C:	14-18 GHz
Transmission Gain:	
In/Out Gain J1 to J3	10 dB $\pm$ 3 dB
Gain Flatness J1 to J3	$\pm$ 1.5 dB (per each 4 GHz sub-band)
Gain Flatness	$\pm$ 2.5 dB (full 12 GHz bandwidth)
Minimum Output Power	10 dBm @ 1 dB Gain Compression
Maximum Noise Figure	18 dB (J1 to J3)
Min Spurious Rejection	-28 dBc @ input power up to 1 dB gain compression
Input VSWR	2.0:1 maximum
Output VSWR	2.0:1 maximum
LO Input VSWR	2.0:1 maximum
Power Supply:	
+ 5 V $\pm$ 5%	250 mA max
- 12 V $\pm$ 5	50 mA max
+12 V $\pm$ 5%	50 mA max
Operating & Storage Temperature	-54°C to +95°C base plate
Humidity	95% condensing
Vibration	17.5 g RMS 10-2000 Hz random
Shock	30 g, 11 milliseconds, half-sine pulse
Dimensions	70 mm W x 112 mm L x 10 mm D (excluding connectors)
Weight	220 g maximum



## KEY FEATURES

- > Full 6-18 GHz coverage in three sub-bands
- > High level of integration
- > A single, compact painted (grey) package with nickel plated mounting surface
- > State-of-the-art MMIC amplifier and SSS filter technology

## APPLICATIONS

- > Block up converter
- > EW, ELINT and ECM systems

The Triplex Up Converter accepts an input in the 2 to 6 GHz band which is up converted by a triple balanced mixer using an LO at either 12 GHz or 16 GHz to the frequency range of 6 to 18 GHz.

The compact lightweight package is low powered and ruggedized for use in harsh environments over extended temperature ranges and high shock/vibration.

#### Triplex Up Converter Assembly

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L3Harris reserves the right to amend specifications in the light of continuing development.

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