

L-band Up-converter UPC-70/L-0/24/48



The UPC-70/L up-converter is part of the successful and field-proven product line of up-and down-converters that together cover all Ku, C and L-Band frequency ranges. The UPC-70/L provides versatile up-conversion from 70 Mhz +/- 20 Mhz to L-Band with extremely high specifications. It features fully agile tuning in 1 kHz steps. It can be ordered to provide 10 Mhz and 24 or 48 Volts DC power to external block-up-converters. The dynamic range is exceptional. The UPC-70/L shares the same remote control protocol with all IGP up- and down-converters.

Since a local oscillator value of 12.8 or 13.05 Ghz can be added to the display read-out. Direct entry of the Ku TX frequency is possible at the front panel. IGP remote control software written for the UPC-70/L allows monitoring and control through the internet

The typenumbers vary per output options as follows:

- No DC and 10 Mhz on output: UPC-70/L/0
- 24 Volts DC 5 Amps + 10 Mhz on output: UPC-70/L/24
- 48 Volts DC 5 Amps + 10 Mhz on output: UPC-70/L/48

For 70 Ohms input impedance, -75 is added to the type number.

Specifications UPC-70/L

INPUT SPECIFICATION

Frequency range:	70 ± 20MHz	Options
Connector:	BNC	
Impedance:	50Ω	75Ω
Return loss:	≥15dB	

OUTPUT SPECIFICATION

Frequency range:	950 to 2,150MHz (check model table)
Connector:	N-type
Impedance:	50Ω
Return loss:	≥20dB
1dB compression point:	+10dBm
Third order intercept:	+20dBm

TRANSFER CHARACTERISTICS

Gain:	0 to 30dB, adjustable in 0.1dB steps
Gain ripple:	over ±20MHz: ≤1dB p.t.p.
	over input band: ≤3dB p.t.p
Group delay distortion:	over ±5MHz <2ns
	over ±20MHz <5ns
Gain stability, 0°C to 50°C:	±1dB
Frequency stability, 0°C to 50°C:	2 x 10 ⁻⁷
External reference:	10MHz, 0dBm
Synthesiser step size:	1kHz
Noise figure (full gain):	<15dB

SPURIOUS

Image rejection:	>75dB
In-band spuri (at 0dBm output):	<-60dBc

PHASE NOISE

10Hz:	<-60dBc/Hz
100Hz:	<-75dBc/Hz
1kHz:	<-80dBc/Hz
10kHz:	<-85dBc/Hz
100kHz:	<-95dBc/Hz
1MHz:	<-110dBc/Hz
Mains related:	<-60dBc

MISCELLANEOUS

Power supply:	115V/230V ±10% 50/60Hz ±10%, 30VA
Mechanical:	1U 19" frame, 400mm deep
Temperature:	Operating: 0° to 50°C
	Storage: -40° to 85°C
Relative humidity:	Operating: 0 to 90%
	Storage: 0 to 95%
Summary alarm:	NO and NC dry relay contacts via rear mounted connector
Summary alarm indication:	Front panel LED
Remote control:	RS232/RS485 serial interface