

## F1202R






### Fixed Frequency, Remote Mounted, IF to L-Band UpConverter



The **F1202R** is a remote mounted version of the popular Peak F1202 fixed frequency, fixed gain L-Band UpConverter which provides a low-cost solution for systems requiring conversion between IF 70MHz  $\pm$ 20MHz (or 140MHz  $\pm$ 40MHz) and L-Band. The unit is popular for interfacing L-Band modems with 70/140MHz transceivers or 70/140MHz modems to L-band transceivers.

The standard **F1202R** L-band frequency is fixed at 1200MHz, for different frequencies please contact the factory.

#### Peak Features

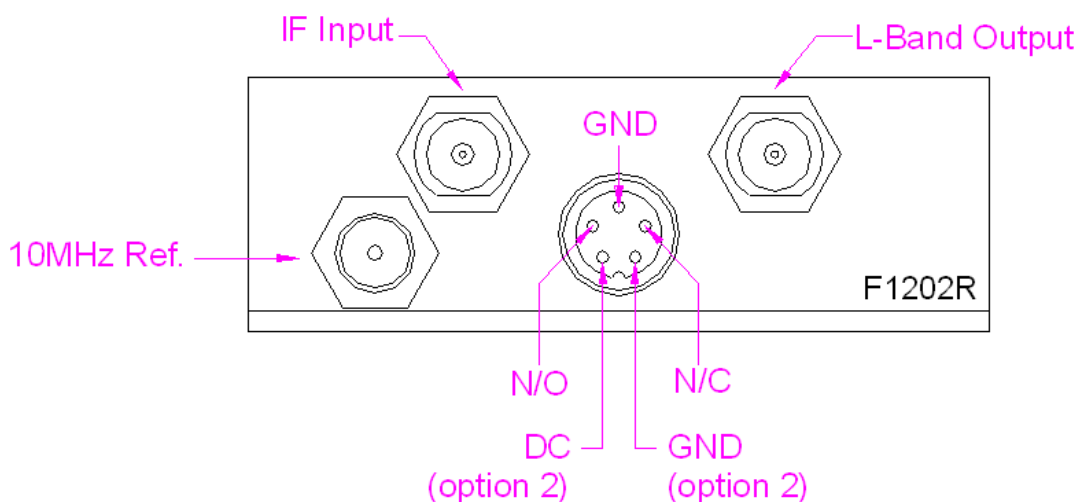
-  Compliant with IESS306 and IESS309 requirements.
-  Used for 8PSK and 16QAM modulations in excess of 50Mbits/sec.
-  Available in 1+1 and 2+1 redundancy configurations
-  Aux DC and 10MHz reference outputs for Block Converters
-  Compact, rugged, weatherproof design



## F1202R – Typical Specification

<b>IF Input</b>	
Frequency	70 ±18MHz (Option 1a; 140 ±36MHz)
Connection	50Ω, N-Type (f) (Option 3a; 75Ω)
<b>L-Band Output</b>	
Frequency	1200MHz ±18MHz fixed (Option 1a; ±36MHz). For other frequencies please contact the factory.
Connection	50Ω, N-Type (f)
<b>Transfer Characteristics</b>	
Conversion gain	Zero
1 dB GCP	0dBm
Gain flatness	±0.5dB across 40MHz
<b>RF Performance</b>	
Phase noise	-80dBc/Hz at 100Hz -90dBc/Hz at 1kHz -95dBc/Hz at 10kHz -100dBc/Hz at 100kHz -120dBc/Hz at 1MHz
Spurious	<-60dBm (in band, non-carrier related) <-60dBc (in band, carrier related)
Group delay	Linear 0.025nS Ripple 1nS p-p Parabolic 0.015nS/MHz <sup>2</sup>
<b>External Reference Input</b>	
Frequency	Factory selectable 5 or 10MHz
Connector	50Ω, TNC
Level	0dBm ±3dB
<b>Internal Reference</b>	
Frequency	10MHz
<b>Stability</b>	
Stability	<5 x 10 <sup>-10</sup> over 1s, <5 x 10 <sup>-9</sup> per day
Ageing	<5 x 10 <sup>-7</sup> per year
Temp. stability	<5 x 10 <sup>-8</sup> over 0 to 50°C
<b>Mechanical</b>	
Width	123mm (4.85")
Height	172mm (6.8"), plus connections & mounting flanges
Depth	56mm (2.2")
Construction	Diecast Aluminium, IP66 rated
Weight	1.5kgs (9lbs) approx.
<b>Environmental</b>	
Operating temp.	-10°C to +50°C (less Solar gain)
EMC	EN55022 part B & EN50082-1
Safety	EN60950
<b>Power supply</b>	
Voltage	36VDC
Power	35 Watts max.
Connection	5-pin circular weatherproof (mating part supplied)
<b>Control System</b>	
Alarms	Summary failure relay (form C)
<b>Options</b>	
1a) 140MHz IF Output.	
3a) 75Ω IF Output.	
Notes; Other 'F1200 series' options do not apply to these products. The addition of Options can modify the typical specification, for details please consult the factory.	

### Connector Panel View



Peak Communications reserves the right to alter the specifications of this equipment without prior notice. F1202R-230511.

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