

QUAD POLAR LNB

4 Fully Switched Output CP/LP LNB

SIMULTANEOUS RECEPTION of LINEAR & CIRCULAR POLARIZATION



This LNB is for the simultaneous reception of Circular & Linear Satellites at the same orbital position.
 2 outputs Linear polarized (V & H) switched
 2 outputs Circular polarized (LHC & RHC) switched

QPH-031

1	Input Frequency	
	FSS Band (Linear polarization)	11.7 - 12.2 GHz
	FSS Band (Linear polarization)	12.2 - 12.7 GHz
	BSS Band (Circular Polarization)	12.2 - 12.7 GHz
2	Output Frequency	
	FSS Band	950 - 1450 MHz
	BSS Band	950 - 1450 MHz
3	Noise Figure	
	QPH-031	0.3 dB typ
	QPF-031	0.3 dB typ
4	Gain	50 - 60 dB
5	Gain Ripple	
	26 MHz bandwidth	<+/- 0.5 dB
	CP Band	<5 dB typ
	LP Band	<5 dB typ
6	Local Oscillator Frequency	
	Low	10.75 GHz
	High	11.25 GHz
7	Local Oscillator Phase Noise (typ)	
	1kHz	-65 dBc/Hz
	10kHz	-95 dBc/Hz
	100kHz	-110 dBc/Hz
8	Local Oscillator stability	+/-1 MHz typ
9	Current Consumption	
	One Receiver	Less than 100mA typ
	Each Additional Receiver	5mA typ
10	Image Rejection	>40 dB

QPF-031

11	Isolation	
	LP Cross Polar isolation	> 30 dB
	CP Cross Polar Isolation	> 23 dB
12	Two Tone 3rd Order intercept point (output)	>10 dBm
13	Output Connector	4 x female F-Type
	Impedance	75 Ohm
	Return Loss	>10 dB
14	Operating Temperature Range	-40°C to +70°C
	Storage Temp Range	-40°C to +70°C
15	Band Polarization Selection	
	Signals applied to F-type connector	
	Ports 1 & 3 Linear polarization	
	Vertical	11.5V to 14V
	Horizontal	15.5V to 19V
	Ports 2 & 4 Circular polarization	
	Right hand CP	11.5V to 14V
	Left hand CP	15.5V to 19V
16	Spurious	
	Primarily 1000MHz & 500MHz	<-65 dBm
18	Output Gain Difference	
	(between the outputs in 26MHz Bandwidth)	<6 dB
18	QPF-031 Interface	18.5mm Ø Waveguide, C120 Flange
	QPH-031	Off-set Parabola Matched, F/D 0.65 Frequency Compensated Feed Horn, 40mm Dish Clamp.