

# UNIVERSAL QUAD LNB

## 4 Fully Switched Output Universal LNB



### QDH-031

<b>1</b>	<b>Input Frequency</b> Low Band High Band	10.7 - 11.7 GHz 11.7 - 12.75 GHz
<b>2</b>	<b>Output Frequency</b> Low Band High Band	950 - 2150 MHz 950 - 2150 MHz
<b>3</b>	<b>Noise Figure</b> QDF-031, QDH-031	0.3 dB typ
<b>4</b>	<b>Gain</b>	50 - 60 dB
<b>5</b>	<b>Gain Ripple</b> 26 MHz bandwidth Low Band High Band	<+/- 0.5 dB <5 dB typ <5 dB typ
<b>6</b>	<b>Local Oscillator Frequency</b> Low High	9.75 GHz 10.6 GHz
<b>7</b>	<b>Local Oscillator Phase Noise (typ)</b> 1kHz 10kHz 100kHz	-65 dBc/Hz -95 dBc/Hz -110 dBc/Hz
<b>8</b>	<b>Local Oscillator stability</b> (including Setting, aging and temperature drift)	+/-1 MHz typ +/-3 MHz max
<b>9</b>	<b>Current Consumption</b> One Receiver Each Additional Receiver (When connected to more than one receiver the overall current will be shared between all Receivers)	200mA typ 30mA typ
<b>10</b>	<b>Image Rejection</b>	>40 dB

### QDF-031

<b>11</b>	<b>Isolation</b> Cross Polar Isolation High to Low Band Isolation	> 30 dB typ > 30 dB typ
<b>12</b>	<b>Two Tone 3rd Order intercept point (output)</b>	>15 dBm
<b>13</b>	<b>Output Connector Impedance</b> Return Loss	4x female F-Type 75 Ohm >10 dB
<b>14</b>	<b>Operating Temperature Range</b> Storage Temp Range	-40°C to +70°C -40°C to +70°C
<b>15</b>	<b>Band Polarization Selection</b> Signals applied to F-type connector  Vertical Polarization Selection Horizontal Polarization Selection  High Band Selection (22kHz tone) Frequency ( square wave with controlled rise/fall transition time) Level Transition time Duty Cycle Load Impedance at 22kHz  Low Band Selection	  11.5V to 14V 15.5V to 19V  18 kHz to 26 kHz 0.4 Vpp to 0.8 Vpp 5µS to 15µs 40% to 60% >70 Ohm  No tone
<b>16</b>	<b>In Band Spurious (primarily 1700MHz)</b>	<-65 dBm
<b>17</b>	<b>Out of Band Spurious (primarily 850MHz)</b>	<-45 dBm
<b>18</b>	<b>Output Gain Difference</b> ( between the outputs in 26MHz Bandwidth )	<6 dB
<b>18</b>	<b>QDF-031 Interface</b> QDH-031,QDH-051	18.5mm Ø Waveguide, C120 Flange Off-set Parabola Matched, Frequency Compensated Feed Horn, 40mm Dish Clamp.

Patent Pending