

# PDL 070D

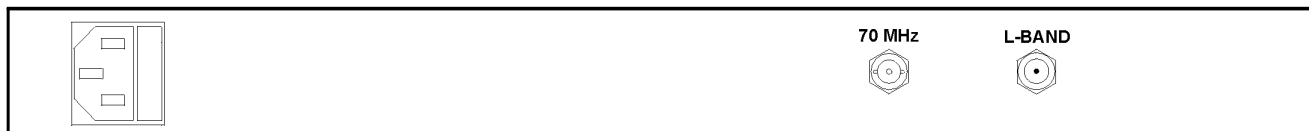
## L-Band to 70 MHz Data Grade Downconverter (950-1450 MHz)

### General Description:

The **PDL 070D** is an ultra-stable frequency converter based on Quintech's popular PDX/PUX fixed channel converters. It features highly improved phase noise and stability performance that exceeds the IESS 308/309 standard, and is suitable for all current high-speed data transmission rates and advanced digital modulation schemes. It is capable of translating any L-Band channel to digital 70 MHz IF signals.

### Specifications:

<b>Input Frequency:</b>	Any customer-specified L-Band channel (950-1450 MHz), inverting or non-inverting														
<b>Output Bandwidth (-3 dB):</b>	36 MHz (24 MHz, 40 MHz optional)														
<b>Input Power Level:</b>	-50 to -20 dBm														
<b>Overall Gain (Loss):</b>	+10 dB or -30 dB $\pm$ 2 dB														
<b>Output Frequency:</b>	70 MHz IF														
<b>L.O. Stability:</b>	$\pm$ 1 ppm (1300 Hz @ 1.3 GHz)														
<b>Input Return Loss:</b>	13 dB														
<b>Output Return Loss:</b>	14 dB														
<b>Spurious:</b>	-50 dBc														
<b>Phase Noise:</b>	<table><thead><tr><th>Offset (Hz)</th><th>(dBc/Hz)</th></tr></thead><tbody><tr><td>10</td><td>-64</td></tr><tr><td>100</td><td>-76</td></tr><tr><td>1,000</td><td>-81</td></tr><tr><td>10,000</td><td>-88</td></tr><tr><td>100,000</td><td>-99</td></tr><tr><td>1,000,000</td><td>-106</td></tr></tbody></table>	Offset (Hz)	(dBc/Hz)	10	-64	100	-76	1,000	-81	10,000	-88	100,000	-99	1,000,000	-106
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<b>Output Connector:</b>	BNC, 75 $\Omega$														
<b>Input Connector:</b>	Type "F", 75 $\Omega$														
<b>Power Requirements:</b>	100-240 VAC, 60/50 Hz														
<b>Operating Temperature:</b>	+10 $^{\circ}$ to +60 $^{\circ}$ C														
<b>Mechanical:</b>	1 RU (1.75" H x 19" W x 12.5" D)														



**Special Instructions:**

To utilize the PDL 070D, connect a 70 MHz line to the “70 MHz” connector on the rear panel of the unit. The customer-specified L-band channel will be present at the L-BAND connector, also on the rear panel. Primary power required is 100-240 VAC, 2 Amp via the IEC AC connector.

NOTE: The PDL 070D has been designed for indoor use only. Opening the unit will immediately void the warranty.

