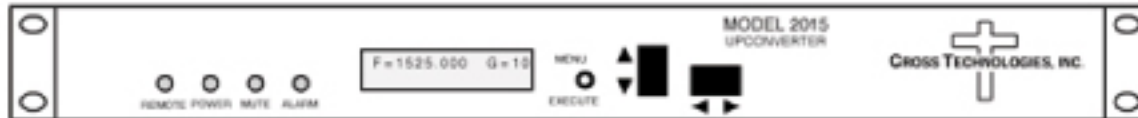


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2015-125 Agile L-Band Upconverter

2015-125 Upconverter, 2000 to 2500 MHz - The 2015-125 Upconverter converts 70 ± 18 MHz to 2000 to 2500 MHz in 1kHz, 10kHz, or 125kHz steps (user selectable) with low group delay and flat frequency response. Synthesized local oscillators (LO) provide very low phase noise and ± 0.01 ppm stability frequency selection. Multi-function push button switches select the RF frequency, gain, and other parameters. Front panel LEDs provide indication of DC power (green), PLL alarm (red), remote operation (yellow) or the TX carrier is muted (red). Variable attenuators for the IF input and output provide a gain range of -10 to +30 dB as adjusted by the front panel multi-function push-button switches. Remote operation allows selection of frequency and gain. Parameter selection and frequency and gain settings appear on the LCD display. Connectors are BNC female for IF Input, RF output and the optional external reference input and output. The External 10 MHz option includes a 10 MHz output connector, along with the ability to send either the internal or external 10 MHz reference signal out the RF and/or Output connector. The unit is powered by a 90-260 VAC power supply, and housed in a 1 3/4" X 19" X 16" rack mount chassis.

2015-125 Agile L-Band Upconverter Front Panel



Equipment Specifications*

Input Characteristics

Impedance/RL 50 ohms/18dB
 Frequency 70 ± 18 MHz
 Level, max -40 to -10 dBm

Output Characteristics

Impedance/RL 50 ohms/10dB
 Frequency (see models) 2000 to 2500 MHz
 Level 0 to -20 dBm
 Output 1dB +5 dBm

Channel Characteristics

Gain range (adjustable) -10 dB to +30 dB
 Spurious Response < -50 dBC
 Frequency Response ± 1.5 dB, 2025 to 2500 MHz; ± 0.5 dB, 36 MHz BW
 Group Delay, max 3 ns, 30 MHz; 5 ns, 36 MHz BW
 Frequency Sense Non-inverting

Synthesizer Characteristics

Frequency Accuracy ± 0.01 ppm internal ref; external ref input
 Frequency Step 1 kHz, 10 kHz, or 125 kHz (user selectable)
 Phase Noise Hz 100 Hz 1.0 kHz 10 kHz 100 kHz 1.0 MHz
 (dBC/Hz) < -75 < -90 < -97 < -107 < -117
 10 MHz Level (In or Out) 0 dBm, ± 3 dB, 75 ohms (option -E)

Controls/Indicators

Frequency Selection Direct readout LCD; push button switches or remote selection
 Gain Selection Direct readout LCD; push button switches or remote selection
 Alarm Red LED
 DC Power Green LED
 Remote Yellow LED; RS232C, 9600 baud (RS485 option -Q)
 Mute Red LED

Other

RF / IF Connector(s) BNC (female), 50 Ω / BNC (female)
 10 MHz Connectors BNC (female) (option -E)
 Connector, Alarm, Remote DB9 - NO or NC contact closure on Alarm
 Size 19 inch 1RU standard chassis, 1.75"H X 16.0"D
 Power 90-260 VAC, 47-63 Hz, 45W max

Options

- E External 10MHz input and output w/ RF insertion
- Q RS485/RS422 Remote Interface
- Z Attenuator 0.1 dB steps



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*+10 to +40 degrees C; Specifications subject to change without notice



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