

LT-3600 Technical Specifications

General Specifications		Transfer Characteristics	Upconverter	Downconverter				
Primary Power		Frequency Sense	Positive	Positive				
Voltage Range:	115/230 VAC ±15%		Inverting Optional	Inverting Selectable				
Frequency:	47 to 63 Hz	Gain Adjust (0.5 dB Steps)	10 to 30 dB	25 to 45 dB				
Power (Int. Elect.):	25 Watts Max.	Gain Linearity (over 10 dB)	± 1.0 dB	± 1.0 dB				
Connector:	ICE-320	Gain Linearity (over 20 dB)	± 1.5 dB	± 1.5 dB				
Summary Alarm	Form C Contract Closure on DB-9M	Gain Slope Adj. Range (over 500 MHz)	0 to +5 dB	0 to +5 dB				
		Gain Stability (0 to +50°C)	± 0.75 dB	± 1.0 dB				
Environmental		Output at 1dB compression	+ 10 dBm min.	+10 dBm min.				
Temperature Range:	<u>Operating</u> <u>Non-Oper.</u> 0 to 50°C -50° to 70°C	Intermodulation distortion (third order)	40 dBc min with two carr. each at 0 dBm	40 dBc min with two carr. each at 0 dBm				
Humidity:	5% to 95%, Non Cond.	Amplitude Response						
Altitude:	Up to 10,000 ft.	Over any 36 MHz	± 1.0 dB (Typical)	± 1.0 dB (Typical)				
Shock/Vibration:	As in commercial shipping.	Over Full Band	± 1.5 dB (Max)	± 1.5 dB (Max)				
Physical	<u>Alone</u> <u>Shipping</u>	Group Delay						
Weight (Lbs.):	10 max. 15 max.	Fc ±5 MHz	2 nS	2 nS				
Dimensions (in LWH):	19x18x1.75 24x22x8	Fc ±10 MHz	3 nS	3 nS				
		Fc ±18 MHz	6 nS	6 nS				
RF Characteristics		Noise Power Density	-125 dBm/Hz @25 dB Gain					
Frequency:	950 to 1525 MHz Standard 950 to 1950 MHz Optional	Noise Figure		15 dB				
Impedance:	50 Ohm	Image Rejection		60 dBc				
Return Loss:	16 dB	Spurious, non-carrier related	-60 dBm max. @25 dB Gain	-55 dBm max. @30 dB Gain				
L-Band Connectors:	N-Type Female/SMA	Spurious, carrier related	-55 dBc max. @0 dBm Output	-50 dBc max. @0 dBm Output				
Frequency Selection:	125 kHz Step Size	DC Power on L-Band Cables	+22V @ 2.0 Amps	+22V @ 0.5 Amps				
Frequency Stability Std.	±1 PPM (0 to 50°C)	**Optional	+15V @ 1.0 Amps					
High Stability Option 4	±2 x 10 ⁻⁸ (0 to 50°C) ±1 x 10 ⁻⁹ / day ±1.5 x 10 ⁻⁷ / day	References on L-Band Cables						
External Reference:	10 MHz, 0 to +13dBm	10 MHz	-2 dBm ±2 dB	-2 dBm ±2 dB				
Connector:	BNC, Female	**DC Power on L-Band Cables is not available in combination with Redundant configurations.						
IF Characteristics		Part Number Information 201667-□□□□□□□ (all available standard options shown below) (see digits below)						
Frequency Range:	70±18 MHz Std. 140±36 MHz Opt.	Digit 1 (Frequency)	Digit 2 (L-Band Range)	Digit 3 (Bias VDC, L-Band)	Digit 4 (10 MHz Ref. Osc.)	Digit 5 (L-Band Ports)	Digit 6 (10 MHz Ref. Out)	Digit 7 STARswitch Ready
Impedance:	50 Ohms	1 70 MHz	1 950-1525 MHz (Standard)	0 None	0 Standard	0 SMA	0 No	0 No
Return Loss:	18 dB	2 140 MHz	2 950-1950 MHz (Extended)	1 D/C-22V U/C-22V	1 High Accuracy	1 N-Type	1 U/C & D/C	1 Yes
Connector:	BNC, Female			2 D/C-22V U/C-15V			2 U/C Only	3 D/C Only
Phase Noise Offset	dBc / Hz Max.							
at 100 Hz	-66							
at 1 kHz	-76							
at 10 kHz	-86							
at 100 kHz	-96							
at 1 MHz	-106							

Shown to the right is the rear panel of the LT-3600:



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