SPECIFICATIONS

Output Frequency

Tuning range:	17.48 - 19.00 GHz	
Frequency step size:	100 kHz	
Frequency stability and accuracy (Ext ref):	Same as input	
Frequency stability and accuracy (Int ref):	±1 PPM (over temp range)	
Aging (After 2 months):	±1 PPM max per year @ 25°C	
Adjustability (typ.):	10 years	
Phase noise in dBc/Hz (typ.):	L(10 Hz)	-45
	L(100 Hz)	-65
	L(1 kHz)	-80
	L(10 kHz)	-80
	L(100 kHz)	-85
	L(1 MHz)	-113
Spurious:	-60 dBc	
Harmonics & Subharmonics (typ.):	-50 dBc	
Power out (min.):	+11 dBm	
Output power variation (freq. & temp.):	3 dB	
Load VSWR:	1.5:1	

Input Frequency

Input reference frequency:	5 MHz, 10 MHz or Internal
Input ref. freq. level:	0 dBm ±3dB

Frequency Tuning / Alarm

Frequency control:	Serial RS-232 / RS-422 / RS-485
Acquisition time:	100 msec
Phase-lock indicator:	High = lock
	(Open collector or CMOS / TTL)

DC Power

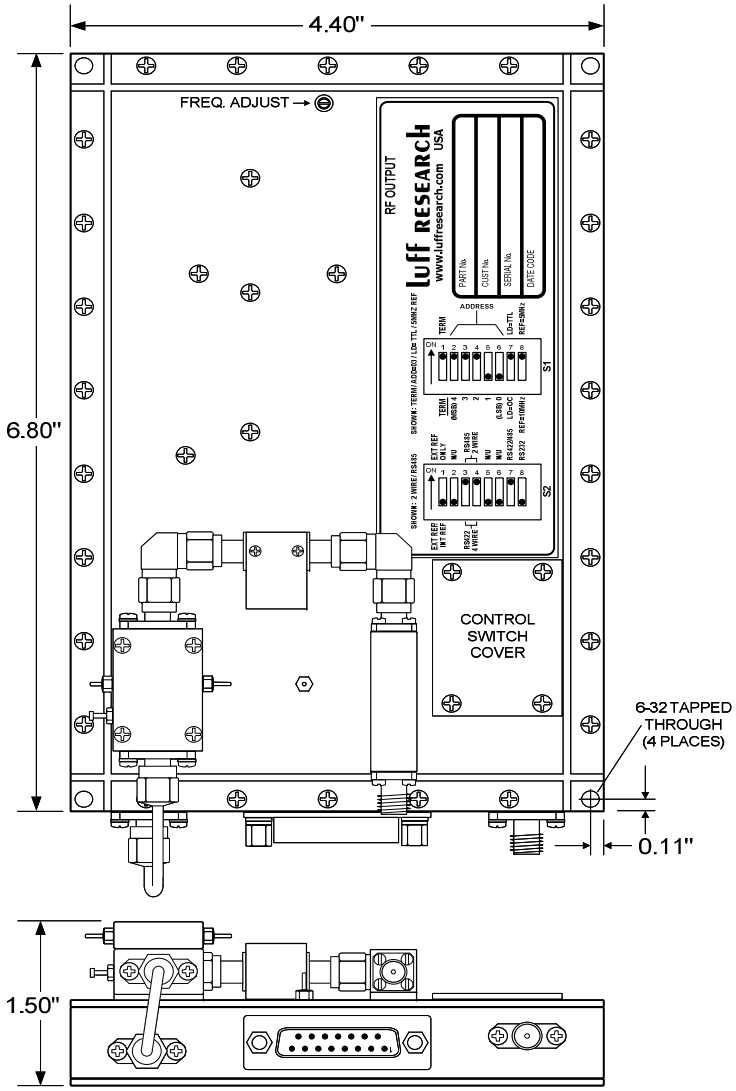
+5.2 Vdc (min) +5.5 Vdc (max)	900 mA
+15.0 Vdc (min) +17.0 Vdc (max)	150 mA

Mechanical

RF connectors:	SMA (F)
Digital & DC connection:	DB15 (M)

Environment

Operating temperature range (surface):	-10°C to 70°C
Storage temperature range:	-40°C to 85°C
Relative humidity (non-condensing):	90%RH @ 40°
Shock:	30 G / 10msec
Vibration:	4 G / 20 Hz - 20 kHz
EMI leakage (typ):	-85 dBc



Notes:

1. This is an EMI gasketed package with a filtered DB15 connector (1000pF per pin).

luff RESEARCH, INC.

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PRODUCT DATA SHEET

TLSD FREQUENCY SYNTHESIZER

Model:TLSD1748019000/100K		09/01/11