

SPECIFICATIONS

Output Frequency

Tuning range:	14 - 18 GHz	
Frequency step size:	200 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(100 Hz)	-68
	L(1 kHz)	-80
	L(10 kHz)	-85
	L(100 kHz)	-85
	L(1 MHz)	-115
Spurious:	-60 dBc	
Harmonics & Subharmonics (typ.):	-60 dBc	
Power out (min.):	10 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

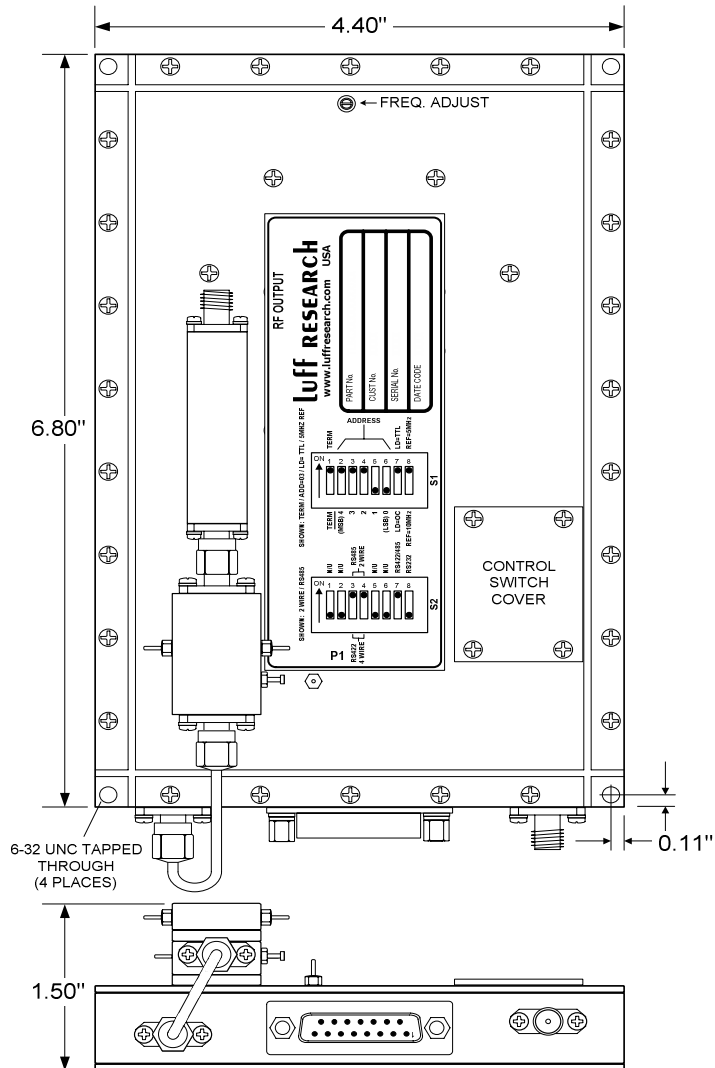
+5.2VDC (min) +7.0VDC (max)	900 mA
+15.0VDC (min) +17.0VDC (max)	150 mA

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:	-90 dBc



Notes:

1. This is an EMI gasketed package with a filtered DB15 connector (1000pF per pin).
2. Use Rev. M (04-16-09) of the Interface Definition for this unit.

luff RESEARCH, inc.		
FLORAL PARK, NY		
PHONE: (516) 358-2880 FAX: (516) 358-2757		
PRODUCT DATA SHEET		
TLSD FREQUENCY SYNTHESIZER		
Model: TLSD1400018000/200K		03/07/08