

## SPECIFICATIONS

### Output Frequency

Tuning range:	8 - 12 GHz										
Frequency step size:	100 kHz										
Frequency stability and accuracy (Ext ref):	Same as input										
Frequency stability and accuracy (Int ref):	±0.5 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.):	<table> <tr><td>L(100 Hz)</td><td>-75</td></tr> <tr><td>L(1 kHz)</td><td>-85</td></tr> <tr><td>L(10 kHz)</td><td>-85</td></tr> <tr><td>L(100 kHz)</td><td>-90</td></tr> <tr><td>L(1 MHz)</td><td>-115</td></tr> </table>	L(100 Hz)	-75	L(1 kHz)	-85	L(10 kHz)	-85	L(100 kHz)	-90	L(1 MHz)	-115
L(100 Hz)	-75										
L(1 kHz)	-85										
L(10 kHz)	-85										
L(100 kHz)	-90										
L(1 MHz)	-115										
Spurious:	-60 dBc										
Harmonics (typ.):	-20 dBc										
Power out (min.):	13 dBm										
Output power variation (freq. & temp.):	3 dB										
Load VSWR:	2:1										

### Input Frequency

Input reference frequency:	10 MHz
Input ref. freq. level:	0 dBm ±3dB

### Frequency Tuning / Alarm

Frequency control: <i>(please specify required interface)</i>	Parallel BCD Coded CMOS Input or Serial RS-485
Acquisition time:	100 msec
Phase-lock indicator:	High = lock (open collector)

### DC Power

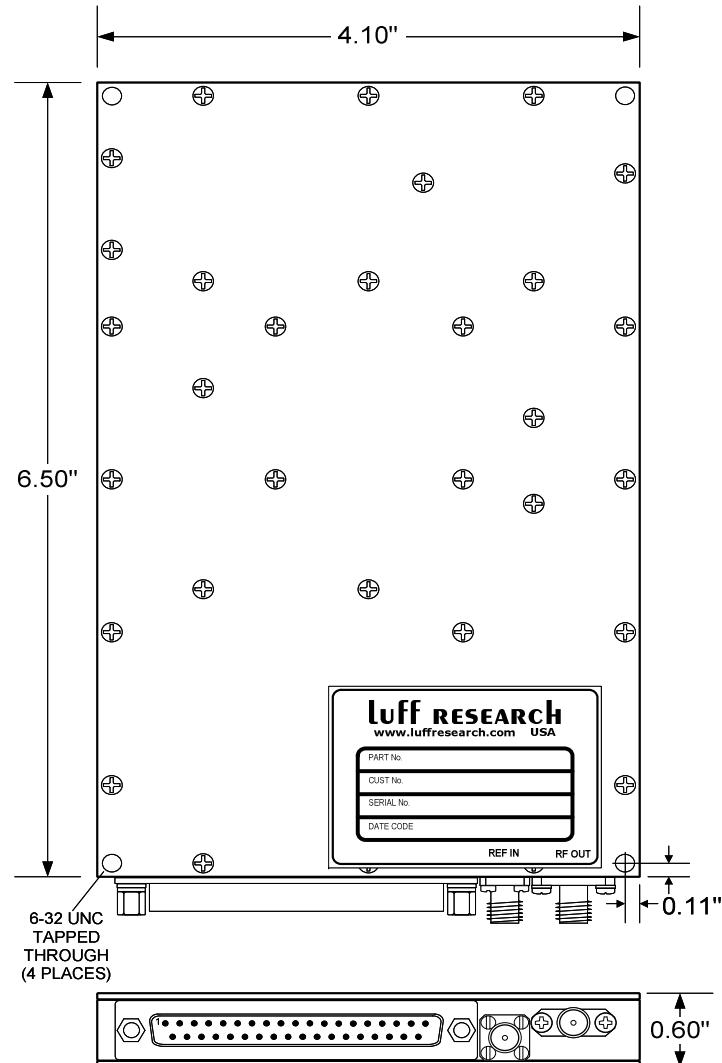
+5.2 Vdc (min) +7.0 Vdc (max)	850 mA
+15.0 Vdc (min) +17.0 Vdc (max)	150 mA

### Mechanical

RF connectors:	SMA (F)
Digital & DC connection:	DB37 (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



### Notes:

- These units are available with an internal TCXO. (Model No. TLS800012000/100K/INT)
- Units come standard with a serial interface. For Parallel units order Model No. TLS800012000/100K/P

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PRODUCT DATA SHEET  
TLS FREQUENCY SYNTHESIZER  
Model: TLS800012000/100K 06/01/08