

## SPECIFICATIONS

### Output Frequency

|   |                            |      |
|---|----------------------------|------|
| Tuning range:                               | 8 - 12.5 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.):               | L(100 Hz)                  | -73  |
|   | L(1 kHz)                   | -83  |
|   | L(10 kHz)                  | -83  |
|   | L(100 kHz)                 | -90  |
|   | L(1 MHz)                   | -115 |
| Spurious (max.):                            | -60 dBc                    |      |
| Harmonics (typ.):                           | -20 dBc                    |      |
| Power out (min.):                           | 12 dBm                     |      |
| Output power variation (freq. & temp.):     | 3 dB                       |      |
| Load VSWR:                                  | 2:1                        |      |

### 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

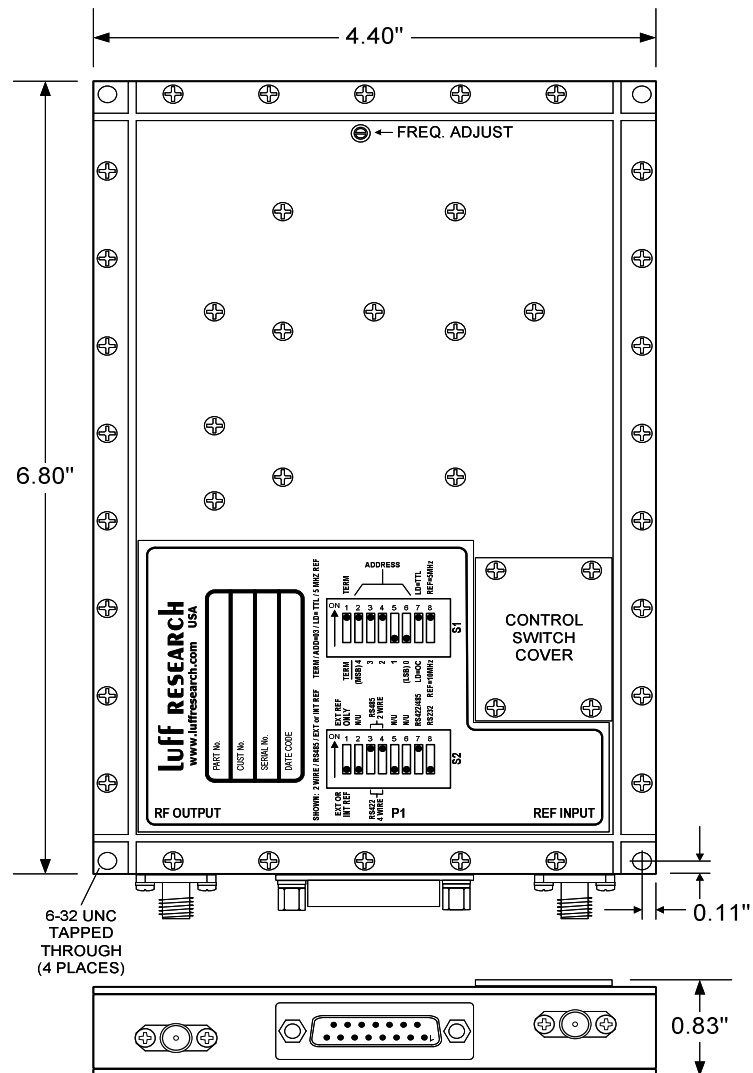
|                               |        |
|-------------------------------|--------|
| +5.2VDC (min) +7.0VDC (max)   | 800 mA |
| +15.0VDC (min) +17.0VDC (max) | 150 mA |

### 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.
2. Use Rev.M (04-16-09) of the Interface Definition for this unit.

|   |          |
|---|----------|
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| PHONE: (516) 358-2880 FAX: (516) 358-2757 |          |
| PRODUCT DATA SHEET                        |          |
| TLSD FREQUENCY SYNTHESIZER                |          |
| Model: TLSD800012500/100K                 | 09/01/11 |