

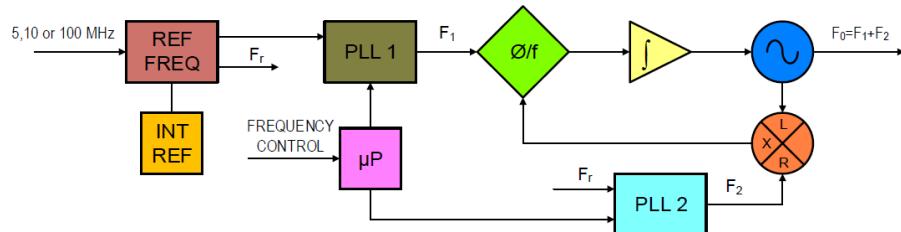
Model TLSD/E: Multi-Loop Frequency Synthesizer Rev. D/E

Features

- Output Frequencies up to 34 GHz
- Step sizes as low as 1 Hz
- Frequency Control via RS-232/422/485:
 - Multi-Drop Bus Configuration
 - USB w/ Optional Adapter
- Input Reference Frequency:
 - External Source
 - Internal TCXO/OCXO
- Low Phase Noise and Spurious
- Excellent Spectral Quality
- EMI Enclosure
- +5.0 VDC Operation/Low Power Design



Block Diagram



Description

The TLSD and TLSE models are high performance frequency synthesizers ideal for many SATCOM, military, and communication applications. For coherent operation, these units require an input frequency of 5, 10, or 100 MHz and are configured to automatically clean-up the input signal. When there is no input frequency detected, these units will automatically switch to their internal TCXO/OCXO.

TLS D/E Key Specifications

Output Frequency (in bands):	1 – 34 GHz
Step Size (min.):	1 Hz (typ.)
Spurious:	> -60 dBc
Harmonics (typ.):	-20 dBc
Output Power (min.):	+13 dBm
Output Power Variation:	±2 dB
External Reference:	5/10/100 MHz
Internal Reference:	±0.5 PPM
Load VSWR (max.):	2:1
Acquisition Time (typ.):	20 ms
Alarm:	Open Collector/TTL
Temp. Range:	-5°C to +65°C

TLS D/E TYPICAL PHASE NOISE @ 8 GHz

