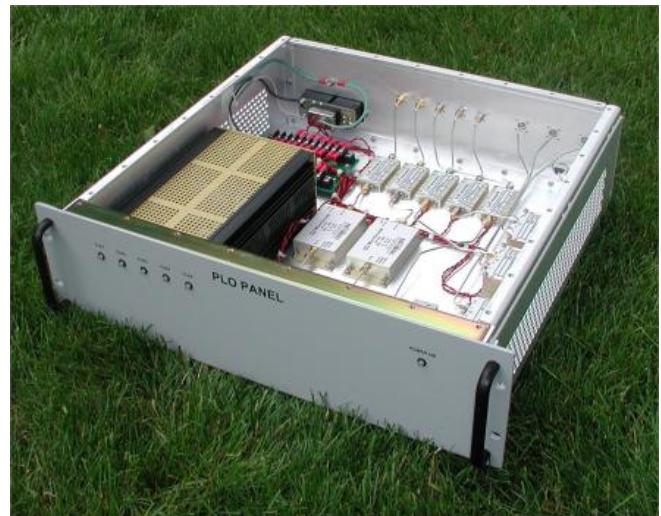


Custom Integrated Multi-Frequency Sources

Luff Research is pleased to present our multi-frequency source capabilities.

We are specialists at integrating multiple frequency sources in one assembly. We have developed sources that are highly integrated for system level applications and multiple sources for drawer level applications as well.

We have a quick turn-around capability for custom designs. Our products offer excellent performance at low cost and have a proven quality and reliability.



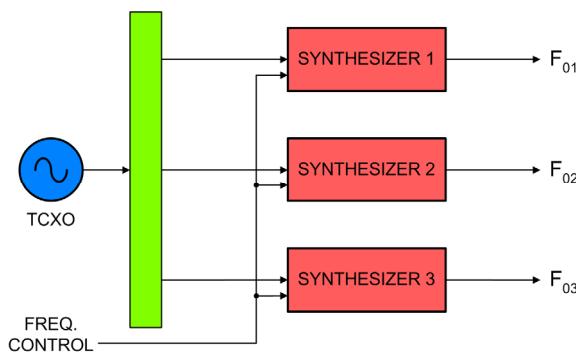
Custom Assemblies

• Features

- 3 independent miniature synthesizers operating in bands up to 12 GHz
- Low phase noise
- Low spurious
- Internal reference TCXO ($\pm 0.5\text{PPM}$)
- Small size
- Low cost



• Block Diagram



● **Description**

This small integrated assembly consists of 3 independent (SLSM4) X-Band synthesizers. There is an internal TCXO frequency reference providing $\pm 1\text{PPM}$ accuracy and stability to the output signals. The synthesizer is controlled via a 3 wire bus. This is a rugged miniature EMI packaged assembly that provides diverse functions at a low cost.

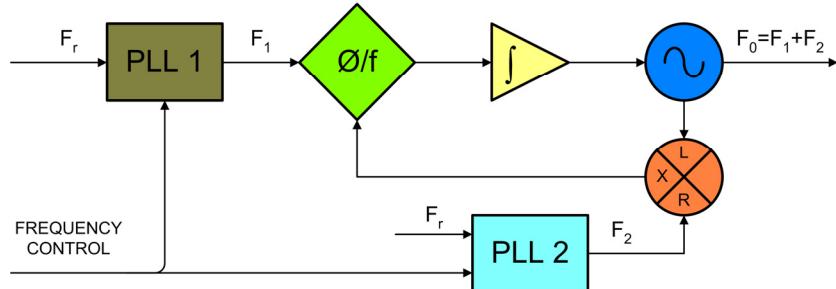
Custom Configurations

● **Features:**

- Fundamental operation in bands up to 20 GHz
- 100 kHz step resolution (typical)
- Excellent phase noise
- Power output to 23 dBm
- Excellent spectral purity
- Serial frequency control
- Internal (to $\pm 1\text{PPM}$) or external frequency reference
- Small size
- Low cost



● **Block Diagram**



● **Description**

Fundamental units are available to 8 GHz. These units have a typical resolution of 100 kHz and offer high spectral quality. In addition, these units are serially programmable via an RS485 bus. The configuration can support up to 20 synthesizers on one bus. The units are EMI isolated and exhibit minimal RF radiation.