

MODULAR DIRECT SYNTHESIZER

TECHNICAL FEATURE

FEATURES

- Low Phase Noise
- Fast Switching Speed
- VITA 48.2 VPX Package and Backplane Configuration
- Internal Built-in Test Functions
- Highly Integrated Multilayer Microwave Circuits



PERFORMANCE

Output Frequency X and K-bands
 BITE FunctionPower Level Detectors
 Channel to Channel Isolation>72 dB
 Spurious < -72 dBc
 Residual Phase Noise .. -144 dBc/Hz(10KHz offset) K-Band
 RF Connection Interface..... SMPM Blind Mate
 Operating Temperature Range -40 to +85°C
 Package Size Vita 48.2, Type 1

DESCRIPTION

This Synthesizer incorporates advanced features providing exceptional unit performance and functional integration. Up to eight independent frequency outputs with dual phase matched outputs are contained within the VPX configuration package. Exceptional signal fidelity is achieved through the use of high performance low noise amplifiers and multipliers.

The unit contains advanced control features provided through the high-speed VPX backplane.

A very high level of integration was achieved using multi-layer microwave circuits realized by complex 3D simulations and Crane Electronics' proprietary process for multi-layer microwave substrate fabrication.

