

# Time and Frequency

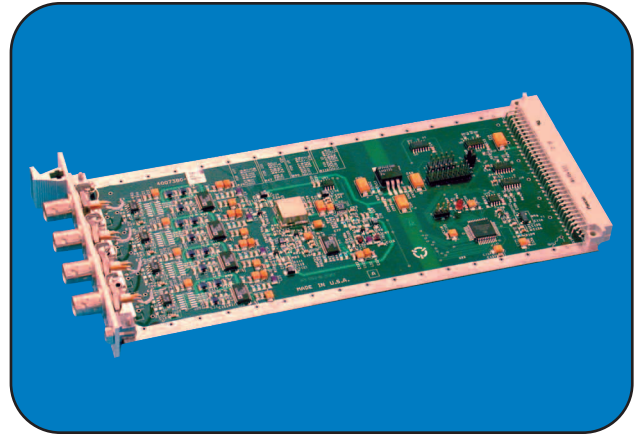
## Digital Frequency Synthesizer Module (9000 & 9000S)

### Model: 9021



Application - Defense (Military) ■ SatCom ■ Wireless

- Range Timing
- Communications Networks
- Satellite Ground Stations
- Test and Measurement Systems



## General Description

The Model 9021 Digital Frequency Synthesizer features four Direct Digital Synthesizers each frequency programmable from the front panel keypad or from the RS-232 port over the range of 1 PPS to 50 MPPS for TTL outputs and 1 PPS to 26 MPPS for differential output in 1 Hz steps. Two output driver types are offered and configurations are listed below. Available with single ended and differential drivers.

## Specifications:

**Tuning:** Front panel key select or RS-232 port over the range of 1 PPS - 50 MPPS, 1 Hz step size. Each of the four DDS individually programmable.

**Accuracy:** Equal to the Model 9000 internal OCXO.

**Jitter:** <200 ps rms

**Levels, TTL:** "0", 0.2 V,  $\pm 0.2$  V  
**Into 50 $\Omega$ :** "1", 4.0 V,  $\pm 0.5$  V

**Levels, Diff.:** >1.5 V  
**Into 100 $\Omega$ :** >1.5 V

**Panel Space:** One High

## Output Options:

**9021-1:** Synthesizer with TTL level outputs into 50 $\Omega$ , BNC connectors.

**9021-2:** Synthesizer with high-speed differential outputs into 120 $\Omega$ , Trompeter BJ-77 type connector

Specifications subject to change without notice.