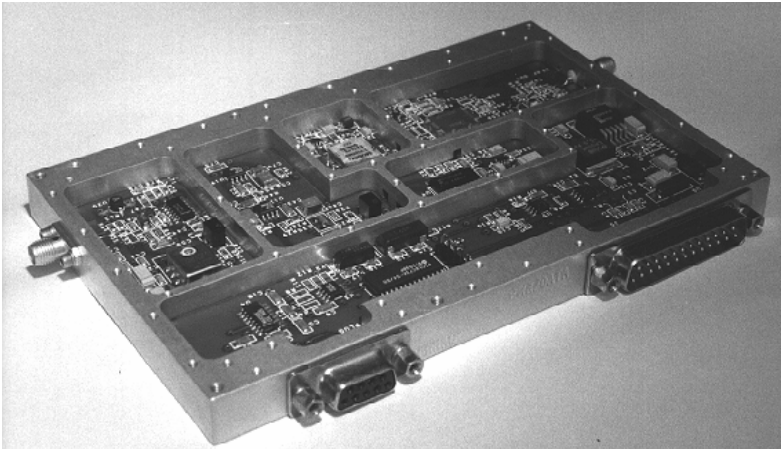


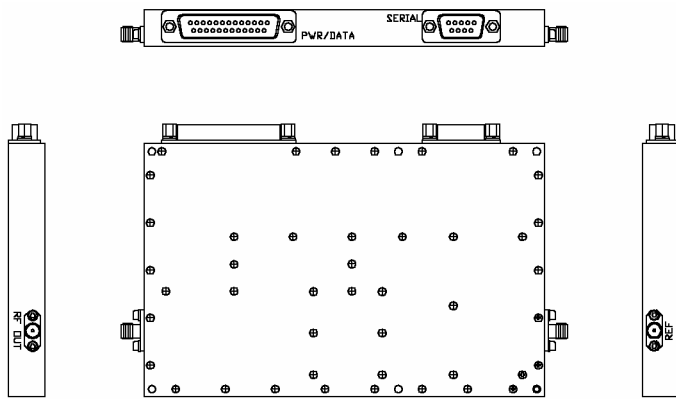
# DCS-PCS SYNTHESIZER 1710 - 1990 MHz



## features

- Low phase noise
- Low spurious (-60 dBc max)
- Computer Controlled (RS-232C)
- -10 °C to 60°C operating range
- Shielded design
- Internal frequency reference

## dimensions and connections



6.25" W x 3.94" L x 0.57" H  
 J4 - 9-pin D-sub Jack  
 J5-25-pin D-sub Plug

### PIN CONNECTIONS

RF OUT	J2 (SMA Jack)
REF OSC (IN / OUT)	J3 (SMA Jack)
RS-232 Data Out	J4(2)
RS-232 Data In	J4(3)
RS-232 GND	J4(5)
+12 VDC	J5(1)
+12 V RTN	J5(2)
- 8 V RTN	J5(3)
-8 VDC	J5(4)
LOCK DETECT	J5(5)
BAND SELECT	J5(12)
Digital GND	J5(15)

## description

This programmable signal source is completely self-contained with an internal TCXO reference. The synthesizer can be either serially loaded through the RS-232C control port or set up to power on at a pre-determined frequency. This source is suitable for use in dedicated test setups or as a component of a production system.

## typical specifications

RF Out Freq (MHz)	1710 - 1990
Ref Osc (MHz)	INTERNAL 14.4 MHz
Freq Step Size (kHz)	100
Pout (dBm over freq)	1.0 +/- 2.0
Spurious (dBc)	-66
Frequency Stability (ppm)	+/- 2.5
SSB Phase Noise (dBc/Hz)	
1 kHz offset	55
10 kHz offset	75
100 kHz offset	95

**DC Power:** +12.0 V @ 250 mA maximum  
 -8.0 V @ 10 mA maximum

## absolute maximum ratings

Temp, Case Operating: -10 to 70°C  
 Temp, Storage: -55 to 150°C  
 DC Volts: +15.0V, -15.0V

# DCS-PCS SYNTHESIZER 1710 - 1990 MHz

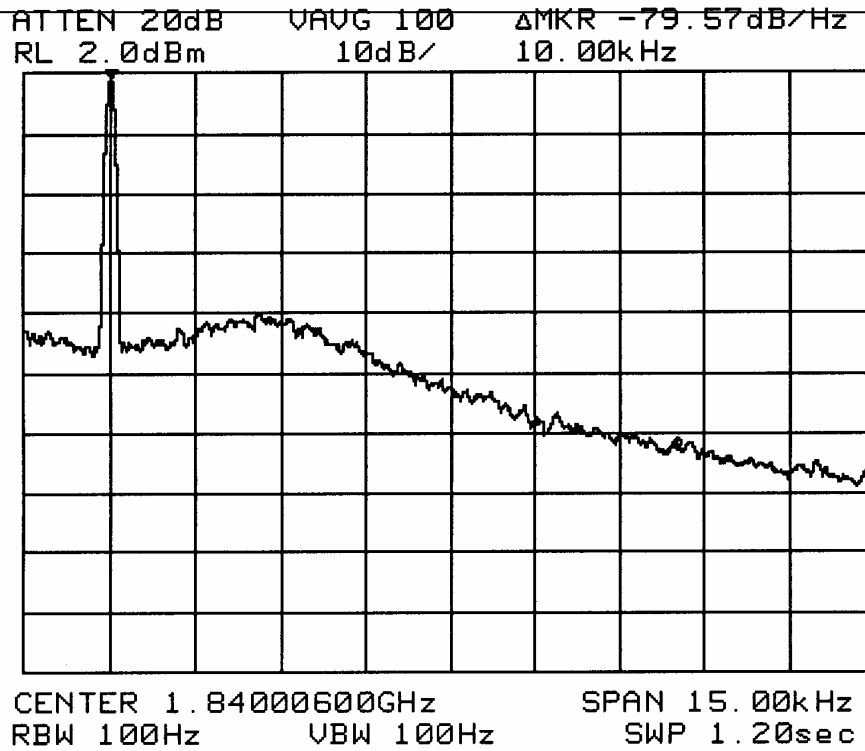


Figure 1 - Output Spectrum - Phase Noise

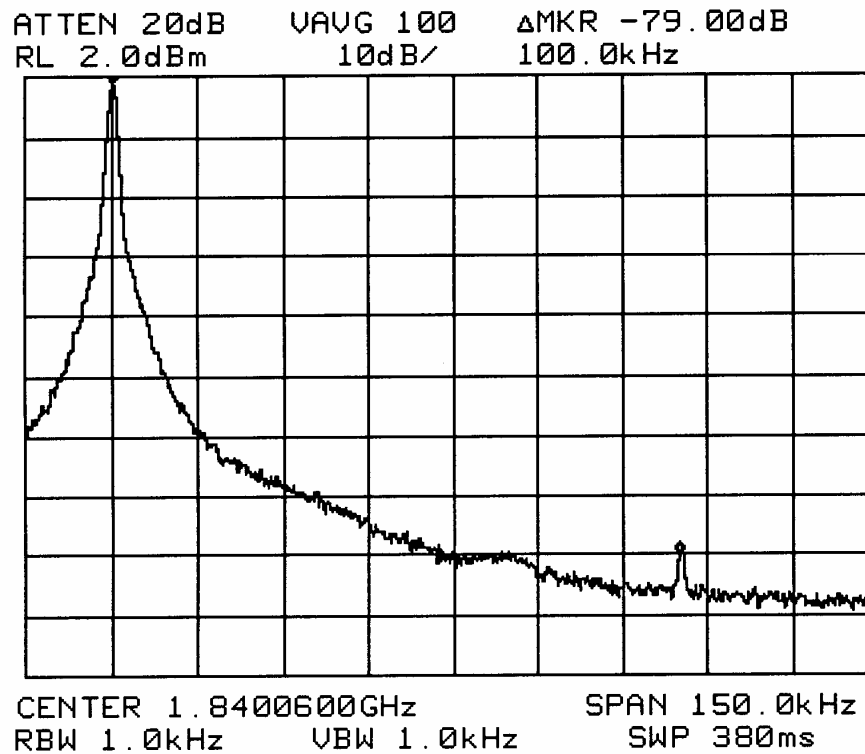


Figure 2 - Output Spectrum - Spurious