Dynamic Sciences International, Inc

CG1800

COMB GENERATOR

The DSI Model CG-1800 Comb Generator is an inexpensive narrowband calibration signal source, which is extremely useful for any application that requires precisely calibrated signal levels to 18 GHz.

The Comb Generator outputs a coherent comb from 0.1 GHz to 18 GHz, with a comb line spacing of 100 MHz and the frequency stability of a temperature-stabilized crystal oscillator.

The CG-1800 features an uncomplicated front panel with digital displays to indicate the actual output level in dBuV for any selected comb line. Panel controls allow selection of RF output amplitude in either a leveled or unleveled mode. All front panel functions are remotely readable and programmable via the IEEE-488 bus.

When used in DSI's automated measurement systems, the CG-1800 provides a source for automatic calibration checking at a fraction of the price of a comparable CW source.

FEATURES:

Inexpensive calibration source

Accurate calibration signals to 18 GHz

Useful frequency and amplitude calibration source

Two modes of operation:

1.) Enter a frequency and amplitude and get a calibrated output signal at desired frequency.

2.) Enter amplitude, push the "leveled" button, and obtain a fixed output level at any selected frequency.

SPECIFICATIONS	
Frequency Range:	0.1 to 18 GHz
Output Type:	Broadband comb
Comb Spacing:	0.1 GHz
Frequency Stability:	5 x 10-8 ohm 0 C to 50 C
Frequency Display:	3-digit LED showing 0.1 GHz resolution
Output Level Display:	3-digit LED showing 1 dB resolution
Maximum Output Level:	70 dBuV +/- 3 dB at 2 GHz, 60 dBuV +/- 3 dB at 12 GHz, 52 dBuV +/- 3 dB at 18 GHz
Output Attenuation Range:	81 dB in 1 dB steps
Auto Level Output Mode:	Constant output level at the indicated frequency, selectable over a 50 dB range
Maximum Broadband Output Power:	+/-15 dBm +/- 3 dB
Output Impedance:	50 Ohms nominal
Output Connector:	Precision type N (front panel standard: rear panel optional)
External Reference Input:	100 MHz +/- 5 MHz at 0 dBm (SMA)
Reference Output:	100 MHz + 6 dBm minimum (SMA)
Functional Indicators:	Leveling, RF frequency & Amplitude
Operating Temperature:	0 C to 50 C
Storage Temperature:	-40 C to 75o C
Interface:	IEEE-488
Power Requirements:	115/230 VAC +/-10%, 50 to 60 Hz, single phase