

Multiple Frequency Comb Generator Instrument

Bench Top Instrument Case 3U High
RF Input Port: SMA Female
RF Output Port: SMA Female
Amplitude Modulation Control: BNC Female
AC Power Input, IEC & Fuse 240V, 50Hz
Controls: Power On/Off with Indicator
Frequency Select Switch
Lockable control knob for phase shift control
Additional phase shifter for use @ 2GHz

This is a bespoke example of a Multiple Frequency Generator used in up to the minute particle physics and materials science research.



Input Signal: 499.653644MHz
Input Signal Power: 0dBm min, +3dBm max

The input signal is amplified to provide power to a comb generator.
Frequencies are selected by a switched filter bank.
Signal control for AM modulation is provided by way of a voltage variable attenuator and phase shift control through a line stretcher.
The signal is then amplified to provide an output at one of the following 6 frequencies.

Output Frequencies:
#1: 1998.614576MHz
#2: 3997.229152MHz
#3: 4996.536440MHz
#4: 5995.843728MHz
#5: 7994.458304MHz
#6: 9993.072880MHz

Output Power: +27dBm (at each frequency)
AM: Attenuation Control >70dBc Modulation Speed 500ns
Output Phase Control: 360 deg.
An additional mechanical phase shifter will be supplied for use externally when 2GHz output frequency is selected.

We reserve the right to change standard product specifications without notice but will be pleased to consider control drawings for quotation.