

# Programmable RF Signal Generator

## DPL-3.2GXF



※ with Control board FIX-3.2GX

### Features

- 0.1 degree step phase control
- 0.1dB step output level control
- The stable output level with ALC
- 0.001Hz frequency resolution
- Low harmonic
- Single power supply +5V
- Wide band (5MHz-3.2GHz)
- Low phase noise



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[https://www.dst.co.jp/en\\_index.html](https://www.dst.co.jp/en_index.html)

## ● Specification

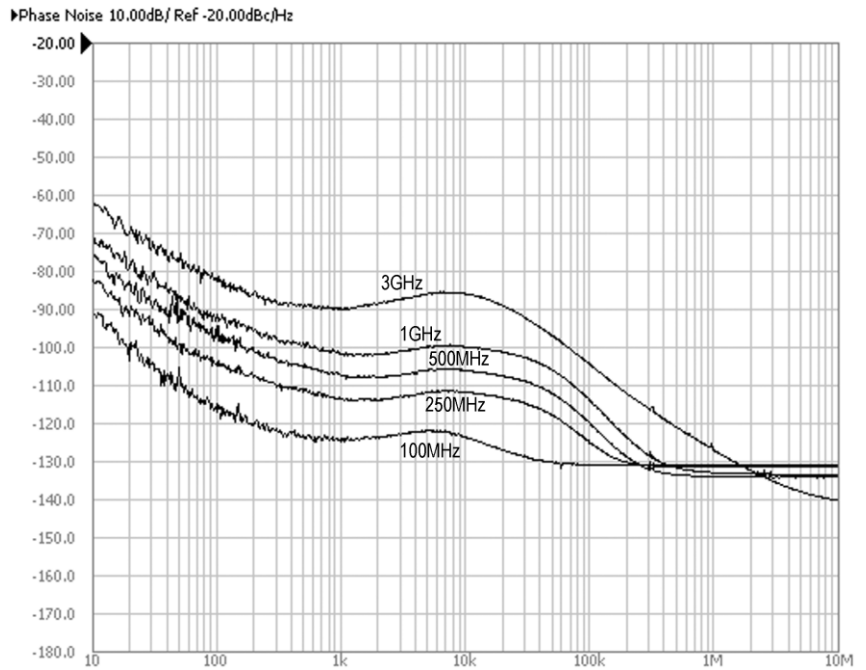
Frequency range	5MHz-3200MHz	
Frequency resolution	0.001Hz	
Output level	+14dBm - -40dBm	
RF OFF output level	<-60dBm	
Output level accuracy	+/-1dB or less (output level >-30dBm ) +/-2dB or less (output level from under -30dBm - -40dBm exclusive)	
Output level resolution	0.1dB	
Phase offset range	-360.0° - +360.0°	
Phase offset resolution	0.1°	
Output impedance	Nominal 50Ω	
Spurious	<-60dBc	
Harmonic spurious	<-30dBc (When the output level is from +10dBm to -30dBm, and supply voltage is form 5V to 7V )	
Internal reference clock	Frequency accuracy	<±2.5ppm (0 - 50 degree C)
	Long term frequency stability	<±1ppm per year
External reference input	Frequency	10MHz
	Input level	+6dBm (±3dB)
	Impedance	50Ω
Frequency save times	More than 10,00 times	
Interface	Type	Asynchronous serial data RS-232C Use a straight cable for PC serial port
	Connector	D-Sub 9 pin
Frequency switching time	Frequency	max 76mS (depends on the frequency)
	Output level	max 1mS (time after CR code is sent until the prompt * is returned)
Dimension	W100 x H35 x D100 (mm)	Weight 300g
Operating temperature range	0°C - +50°C	
Power supply	+4.75V - +7V 1.5A	

## ● Control board FIX-3.2GX

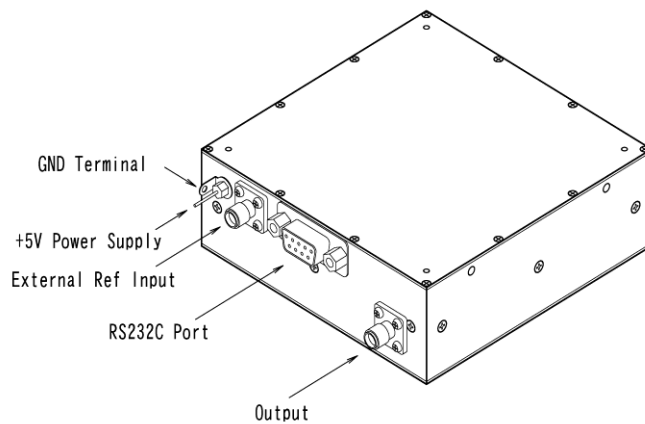
FIX-3.2GX is an optional control board for DPL-3.2GXF to set frequencies, output level, ON/OFF set of RF and so on with a LCD display and an encoder on the board. Also, the level converter is available for CMOS, the differential PECL, and the differential LVDS which are very useful as a logic circuit clock source.

● Phase Noise (Typical)

Under the internal reference clock mode  
 Phase noise (dBc/Hz)



● Terminal



Pin number	Name	Description
1	Power supply terminal	Connect +5V $\pm 5\%$ The power supply having more than 1.5A current capacity
2	Ground terminal	Connect the ground of the power supply (Caution: Do not touch + side of the power supply to the ground. To use a heat shrinking tube is recommended for its protection)
3	External reference clock input terminal	Apply 10MHz reference clock to this connector(SMA) which has 50 $\Omega$ input impedance. The external clock mode must be selected
4	RS-232C port	This is a connector for serial communication for setting frequency and output level and so on. Interface is RS-232C. Use a D-sub9 pin (male) connector and a straight cable for PC serial port.
5	Output port	This is a connector of output signal. Use SMA (male) connector

● Outline Dimension

