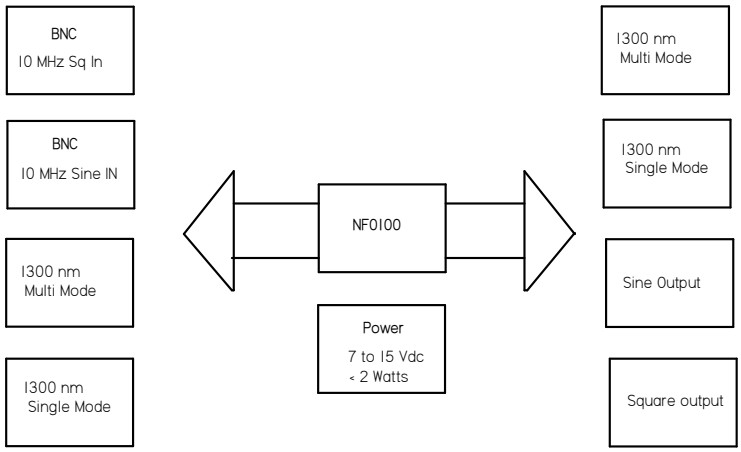
	COMPANY DATASHEET	NF0100
	REVISION	A
	DATE	10-1-17

NF-0100

Signal Converter

KEY FEATURES



The NF0100 is a single channel signal converter. It allows complex signal problems to be addressed easily. Convert a DC to 10 MHz reference from coaxial to fiber optic to handle an electromagnetically active environment. Distribute PPS signals over fiber optics. Convert a sine to square wave to handle a high slew rate reference client. A single master reference can be extended across a large facility without the need for repeaters or compromising reference quality. 1300 nm single-mode offers low phase noise contribution and 0.5 dB attenuation/ km.

.

Versatile Compact Package

1.0” x 1.0: x 3.0” allows simple integration of an optical channel where needed.

LN- Option Low Phase Noise

Typical Phase noise:
1 Hz - 90 dBc/Hz
10 Hz -125 dBc/Hz
100 Hz -140 dBc/Hz
1000 Hz -145 dBc/ Hz

Internal Power Regulator

Internal low noise linear regulator minimizes phase noise degradation.

Flexible Signal Conversion

Sine to Square
Square to Sine
Sine to Fiber Optic
Fiber Optic to Sine or Square
Square to Fiber Optic

Technical Specifications

Sine input amplitude	6 to 14 dBm dB into 50 Ohms, or 3.3 VDC or 5 VDC square wave	
Power required	7 to 15 VDC power @100mA (adapter available) Powered directly from specific Novus reference products.	
Output power	10 MHz sine- 10 dBm±2 dB, Square wave 5 VDC CMOS	
Square/Sine connector	BNC	
1300 nm fiber	ST- over 10 km range, power typical - 20 dBm	
650 nm fiber	Versatile multi-mode transmit power -13 dBm range 200 um – 200m	
Indicators	Green LED - power present	
Impedance	Sine 50 Ohms, Square (1 K to 50 Ohm - contact factory)	
Power connector	Power connector mate is a ON-Shore Tech Part# OSTTJ0211530	

Environmental and Mechanical

Operating temperature	0 to 50°C non-condensing	
Storage temperature	-40 to 70°C	
Height	1.0”	
Width	1.0”	
Depth	3.0”	
Weight	< 0.25 lbs.	

Options

		G