

Typical Specifications for FRDRO in 0.5 to 30 GHz range				
Available Models	NXOSCR		NXOS	
Any fixed frequency (GHz) in the range of	500 to 3200 MHz	3 to 6.5 GHz	6 to 18 GHz	17 to 30 GHz
Mechanical Tuning BW (+/- XX)	N/A	10 std, 0.75% option	25 std, 1% option	25 std, 1% option
Frequency Stability (+/- ppm/C)	25	5 standard down to 1 option		
Frequency Accuracy (+/- MHz, 25C)	0.3	0.3	0.5	1.0
Output Power in dBm (over temp)	> +11 standard, up to +20 dBm option			
Power variation in dB (over temp)	< 2			
Power variation in dB (over tuning range)	N/A	< +/- 0.5		
Pushing (+/- kHz/V)	20			
Pulling (1.5:1 VSWR), +/- MHz	0.5	0.5	1.0	0.5
Harmonics in dBc	< - 20			
Subharmonics in dBc	N/A	N/A	N/A	-20 std, -45 option
Discrete Spurious in dBc	< - 80			
Phase Noise	See Tables			
Operating Temperature ranges	0 to 60°C, -20 to 70°C, -40 to 85°C, -55 to 85°C			
Power Supply (Vdc, +8V, 15V, 24V option)	+12			
DC Current Draw	70	60	60	200
RF Connector	SMA Female (Field replaceable option available)			SMA or K
DC Connector	Solder pin			
Size: Length X Width Height (inches)	1.00" x1.75" x 0.63"	1.00" x1.75" x 0.75"	1.00" x1.75" x 0.63"	2.25" X 2.25" X 0.63"
Outline drawing	DC200104 Rev 7	DC200104 Rev 7	DC200104 Rev 7	DC200102 Rev 15
Weight (in ounces):	2.0	2.0	2.0	4.5

- (1) coherent to external reference
- (2) Input power levels from -20 to +10 dBm possible
- (3) Output frequency may be specified to nearest 1000 Hz regardless of ref freq
- (4) standard is +/-5 ppm, as low as +/-0.05 ppm stability over -40 to +85C available
- (5) Standard outline is thicker by 0.125" below 6 GHz

Free Running DRO (P/N NXOSCR, NXOS) Typical Phase Noise Data vs Frequency											
Phase Noise in dBc/Hz vs offset vs output freq in GHz	1	2	4	6.5	9	12	14	16	18	22	26
10 KHz	-128	-118	-107	-104	-102	-99	-97	-94	-90	-86	-84
100 KHz	-145	-135	-132	-130	-130	-124	-122	-119	-117	-115	-112
1 MHz	-160	-155	-155	-155	-153	-149	-149	-144	-138	-134	-130
Note: Guaranteed phase noise specs will be 5 dB worse than typical											