

NXPLOS Series PLDRO: External Reference, Phase Locked DRO (PLDRO) - Typical Specifications

	PLCRO	PLDRO			
Frequency Range in GHz	0.5 - 2.8	2.8 - 9.0	9.0 - 14.0	14.0 - 16.5	16.5 - 23.0 (3)
Output Power in dBm (over temp)	+12	+12	+11	+10	+8
Frequency Stability (over temp)	Coherent to External Reference				
Power variation in dB (over temp)	< 2.0	< 2.0	< 3.0	< 3.0	< 3.0
Pulling (1.5:1 VSWR)	Will not break lock				
Harmonics in dBc (typ)	-15	-15	-20	-25	-25
Subharmonics in dBc (typ)					-45
Discrete Spurious in dBc (Fo<+/- 300 MHz)	-75	-75	-75	-75	-70
Discrete Spurious in dBc (Fo>+/- 300 MHz) (1)	-65	-65	-65	-65	-65
Spurious plots (in GHz)				16.0	22.6
External Reference Frequency (2)	100 MHz nominal (Direct lock to 10 MHz is possible)				
External Reference Input Power	+10 +/- 3 dBm nominal (Lower reference input level @ 0 +/- 3 dBm option available)				
Typical Phase Noise in dBc/Hz @ 100 Hz offset	-83	-83	-80	-77	-75
@ 1KHz offset	-102	-102	-98	-95	-92
@ 10KHz offset	-115	-115	-110	-105	-103
@ 100KHz offset	-120	-120	-115	-110	-108
@ 1MHz offset	-125	-125	-125	-125	-123
Phase Lock Alarm	Open Collector, locked open, unlocked ground				
Phase Voltage Monitor	1 - 11V				
Operating Temperature (base plate)	0 to +60 deg C (Military temperature range available)				
Power Supply (4)	+12 +/- 3% VDC, 225 mA typ (+10 to +15 range)				
RF Connector (2 places)	SMA Female (Field replaceable option available)				
DC Connector	Solder pin				
Size: Length X Width (inches)	2.25 X 2.25				
Size: Height (exclude tuning screw [.25" max]) (inches)	.63	.75	.63	.63	.63
Outline: DC200102	Rev 4C	Rev 16	Rev 15		
Weight (in ounces):	3.3				
Other outline options:	Low Freq: DC200105 - Rev. 1D - Rev. 1E, Low Profile DC200102 - Rev. 14, Dual Output DC200102 - Rev.9				
Notes: (1) Lower spurious option (<-90 dBc) available.					
(2) Other Reference Frequencies to be specified by customer, contact factory for details.					
(3) External Reference (Fr) must be = Fo/2N where N is an integer.					
(4) Other supply voltage available.					
*Please note: Guaranteed phase noise is 5 dB higher than typical. Better phase noise available.					
Phase noise plots (in GHz)	1.5, 6.5, 13.2, 14.5, 19, 22, 12.8 w/ 10 MHz external ref.				