

MLSP PERFORMANCE SPECIFICATIONS (Continued)

Model No.	MLSP-2018	MLSP-2020
Reference Oscillator Options		
Option A		
External Reference (Note 3)	1 - 200 MHz	1 - 200 MHz
External Ref. Input Power	0 +/- 3 dBm	0 +/- 3 dBm
Frequency Stability (< +/- 20ppm)	Cust Supplied	Cust Supplied
Option B		
External Reference with Internal Crystal (Note 4)	1 - 100 MHz	1 - 100 MHz
External Ref. Input Power	0 +/- 3 dBm	0 +/- 3 dBm
Frequency Stability (Note 6)	Cust Supplied	Cust Supplied
Option C		
Internal Reference	100 MHz	100 MHz
Frequency Stability	+/- 1 PPM	+/- 1 PPM
Supply Voltage & Current (Note 5)		
+15 Vdc (± 0.5 Vdc)	1975 mA	2075 mA
+5 Vdc (± 0.25 Vdc)	350 mA	350 mA
Power dissipation	31 watts	33 watts
Supply Voltage Ripple (Pk-Pk from 60 Hz to 3 MHz)	<50 mV	<50 mV
Control Format	5-Line Serial USB	5-Line Serial USB
Phase Lock Alarm (P13) (TTL)	1=Locked	1=Locked
Weight	15 oz / 426 g	15 oz / 426 g

MLSP Options:

Option A: External Reference / No Internal Reference

Option B: Internal Reference / External Reference

Option C: Internal Reference / No External Reference, Drawing 181-003 & 181-004

Option D: RF Connectors Front, Drawing 181-001

Option E: RF Connectors Side, Drawing 181-002

Part Number Example: MLSP-2020BD 2 GHz to 20 GHz with Internal Reference and External Reference with RF connectors on front.

Notes:

- 1) Special operating temperature range available.
- 2) Special frequency ranges available.
- 3) 50-100 MHz OCXO recommended for best phase noise performance. External reference directly effects phase noise performance.
- 4) Output phase noise performance is not dependent on external reference phase noise.
- 5) All values stated for units with external reference. For internal reference add 125mA on the +15 Vdc line.
- 6) Frequency accuracy must be within exact reference frequency selected, +/- 5ppm.