

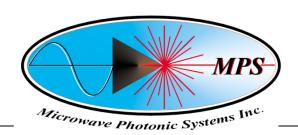
MP-5000-DL / MP-6000-DL RF and Microwave Photonic Delay Line 100 MHz - 18 GHz



Microwave Photonic Systems, Inc. (MPS) of West Chester, PA is pleased to announce the release of their newest line of Wideband, Low Noise, RF Photonic Fixed Delay Lines.

The MPS RF and Microwave Photonic Delay Line product family includes the MP-5000-DL and the MP-6000-DL. This product family supports fixed delays over frequency ranges from 100 MHz up to 20 GHz. The MP-5000-DL and MP-6000-DL are packaged in a compact, flange mount, self contained enclosure. Front panel LEDs provide a visual indication of the DC and Optical Power alarm status. The RF input and RF output ports are both SMA-Female 50Ω connectors and are position on opposite ends of the front panel. The Delay Line input power requirements are +12 to +15 VDC and is supplied via a front panel DB-9 connector. The Microwave Photonic Systems MP-5000-DL and MP-6000-DL compact form factor can provide up to 12µsec delays within 1% accuracy of the customer specified fixed delay. Applications include Radar Target Simulation, Signal Processing, and Phase Noise Testing. Custom packaging options available including a 1U Rack Mountable Chassis Solution.

For additional product inquiries and technical data, please contact Microwave Photonic Systems, Inc. via phone at 610.344.7676 or via email at info@b2bphotonics.com.



| Parameter | Specification | | | | | |
|--------------------|-----------------------------|--|--|--|--|--|
| Frequency | 100 MHz to 18 GHz | | | | | |
| Wavelength | 1310 nm, 1510 nm (option) | | | | | |
| Gain | -27 dB (typ), 0 dB (option) | | | | | |
| Gain Flatness | +/- 0.5 dB | | | | | |
| Noise Figure | 45 dB (typ), 25 dB (option) | | | | | |
| Input IP3 | + 24 dBm | | | | | |
| Max RF Input Level | +13 dBm | | | | | |
| Input VSWR | 2.0 : 1 (1.6:1 Typ) | | | | | |
| Output VSWR | 2.0 : 1 (1.6 : 1 Typ) | | | | | |
| Voltage Supply | +15 VDC (Typ) | | | | | |
| Impedance | 50 Ohm | | | | | |
| RF Connectors | SMA (Female) | | | | | |
| Temperature Range | -20 C to + 70C | | | | | |
| Delay | Up to 12 μs | | | | | |
| Delay Accuracy | 1% | | | | | |

Table 1: DELAY LINE SPECIFICATIONS

| Feature | | Option Designator | | | | | | | | | | |
|---------------------|----|--|---|---|---|---|---|---|---|----|----|----|
| Doloy Value (up) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Delay Value (μs) | | Specified By Customer at Time of Order | | | | | | | | | | |
| Frequency | | Up to 12 GHz, MP-5000-DL | | | | | | | | | | |
| | | Up to 18 GHz, MP-6000-DL | | | | | | | | | | |
| RF Connectors | | Customer Stated Option, SMA (f), 50 Ω Standard | | | | | | | | | | |
| Mechanicals | 6. | 6.75 x 6.00 x 2.38 Standard , Custom Packing Available | | | | | | | | | | |
| Monitor and Control | | RS-232 via DB-9 | | | | | | | | | | |

Table 2: FEATURES



Figure 1: MP-5000-DL; Fixed RF and Microwave Photonic Delay Line, 8μs