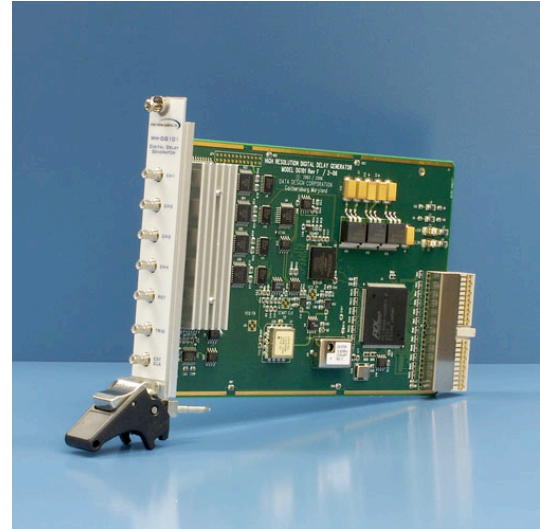


- 1ns delay resolution.
- Cycle to cycle jitter less than 250ps.
- Programmable output amplitude of 0 to 5 volts.
- Programmable trigger level of 0 to 5 volts.
- External clock synchronizing option at 10 MHz.
- Modular design for turnkey integration of high channel count systems.
- Turnkey control panel software for Windows.



Overview

The MH-DG101 Digital Delay Generator is a CompactPCI module designed to furnish four precisely timed outputs when triggered by an external input. Each output delay and terminal pulse width is independently programmable. Delays up to 167ms may be programmed with 1ns resolution, while extremely low jitter operation makes each cycle precisely repeatable. An auto triggering feature makes the MH-DG101 operable as a precision pulse generator. Outputs are provided by high power pin driver devices with programmable amplitude and include a reference output for applications which must compensate for insertion delay. The trigger input threshold may also be programmed and the external clock input may be used to synchronize multiple modules. The MH-DG101 and included software provide a turnkey digital sequencing solution, while included software source code and drivers provide powerful system level integration options. Applications include laser timing, camera systems, automatic test, and radar/lidar signaling.

Specifications

Dataway Interface

CompactPCI at 32 Bits and 33 MHz
 Compliant With PICMG 2.0 R3.0
 Single Width 3U CompactPCI Card

Resolution

Delays: 1ns
 Width: 10ns

Outputs

4 Channels, 0 to 5V amplitude
 1 Reference Channel, 5V amplitude
 Sourced from 50 Ω

External Trigger Input

Single Ended DC Coupled Positive Edge
 Programmable from 0V to 5V, 470 Ω 10 pF

Ambient Temperature Range

0 to 70 C

Jitter

< 250ps RMS cycle-to-cycle
 Measured from Trigger to Output

External Clock Input

10 MHz Reference
 1 K Ω 20 pF