

GP850 MODULAR PDV SYSTEM GP850 Chassis



DiCon's **PDV Modular System** is a flexible and user configurable rackmount platform. It integrates many required optical components used in the Photonic Doppler Velocimetry (PDV) technique. The modular chassis is field serviceable and comes with a swappable controller and a swappable power supply. Each system has 8 slots available to house and control a wide array of plug-and-play modules, making the PDVM easy to configure for optimal PDV measurements.

- Plug and Play Modularity
- Intuitive Front Panel
- Ethernet, RS-232, or Web GUI
- Front or Rear Loading Options
- Expandable with Additional Chassis

OPTICAL SPECIFICATIONS

Fiber Type	9/125 um Single Mode
Wavelength Range	1530 to 1570 nm
Back Reflection	< -50 dB

CHASSIS SPECIFICATIONS

Chassis Type	19", 4U Extended Rackmount
Plug-In Module Slots	8 per Chassis

ORDERING INFORMATION

GP850 - - -

Type

CS Chassis (Main)

EC Expansion Chassis

PSU

A1 AC 100-240V Single

D1 DC -48V Single

A2 AC 100-240V Redundant

D2 DC -48V Redundant

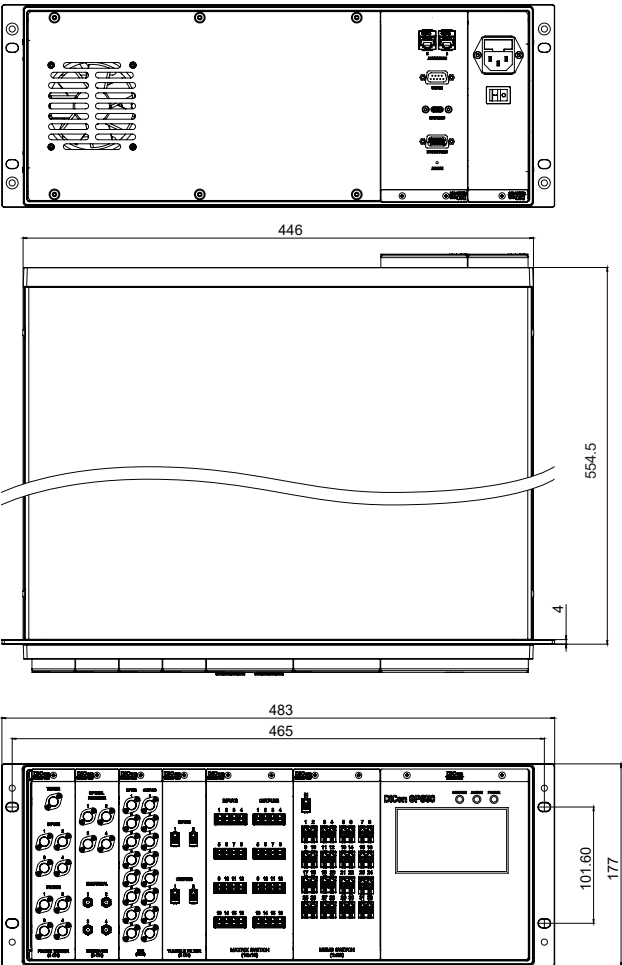
Slot Card Location

F Front Loading

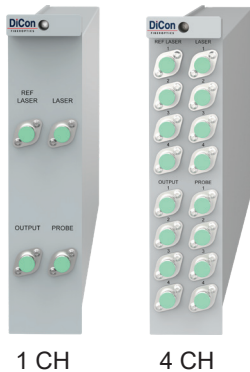
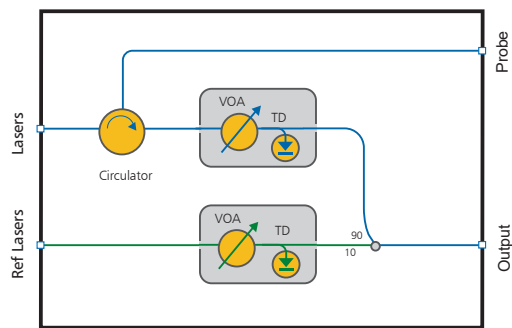
R Rear Loading

MECHANICAL SPECIFICATIONS

Dimensions in mm



GP850 PDV Slot Card - Mixer (1 Fiber Probe Per Channel)



ORDERING INFORMATION

GP850 - SL - PDV - MX1 - -

No. of Channels

1	1Ch
2	2Ch
4	4Ch

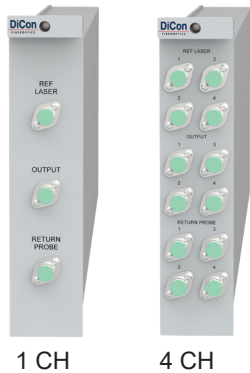
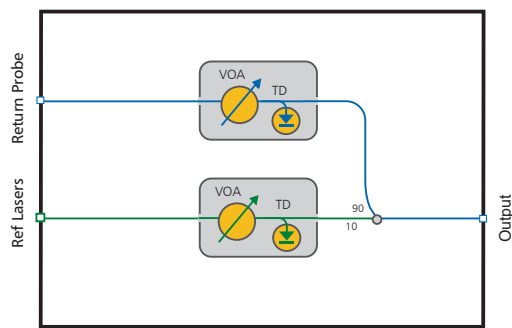
Connector Type

FC/APC FC/APC
LC/APC LC/APC

Insertion Loss (IL) ¹	Laser to Probe	0.8 dB max.
	Probe to Output	2.8 dB max.
	Ref to Output	11.8 dB max.
Attenuation Range		30 dB min.
Measurable Power Range		-50 to +22 dBm
Input Optical Power		0.5 W max.

1. Test Wavelength at 1550 nm. Measured with 3-jumper method or equivalent.
See TIA/EIA 526-7

GP850 PDV Slot Card - Mixer (2 Fiber Probes Per Channel)



ORDERING INFORMATION

GP850 - SL - PDV - MX2 - -

No. of Channels

1	1Ch
2	2Ch
4	4Ch

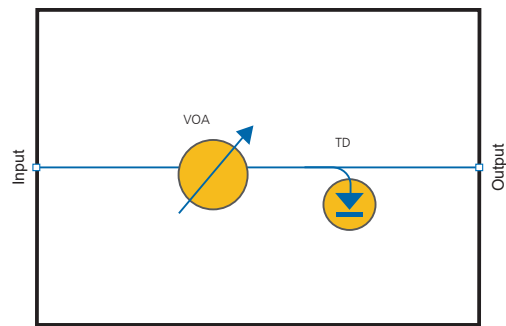
Connector Type

FC/APC FC/APC
LC/APC LC/APC

Insertion Loss (IL) ¹	Prob to Output	2.0 dB max.
	Ref to Output	11.8 dB max.
Attenuation Range		30 dB min.
Measurable Power Range		-50 to +22 dBm
Input Optical Power		0.5 W max.

1. Test Wavelength at 1550 nm. Measured with 3-jumper method or equivalent.
See TIA/EIA 526-7

GP850 PDV Slot Card - DPE (Dynamic Power Equalizer)



ORDERING INFORMATION

GP850 - SL - PDV - DPE - -

No. of Channels

- 1 1Ch
- 2 2Ch
- 4 4Ch

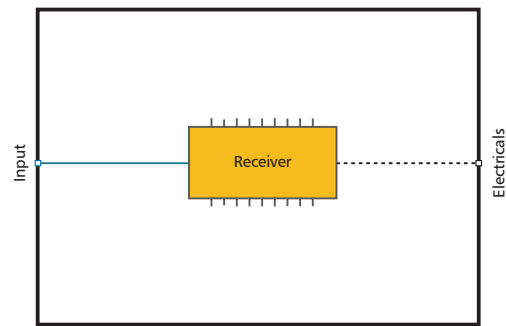
Connector Type

- FC/APC FC/APC
- LC/APC LC/APC

Insertion Loss (IL) ¹	0.9 dB max.
Attenuation Range	30 dB min.
Measurable Power Range	-50 to +22 dBm
Input Optical Power	0.5 W max.

1. Test Wavelength at 1550 nm. Measured with 3-jumper method or equivalent.
See TIA/EIA 526-7

GP850 PDV Slot Card - Receiver



ORDERING INFORMATION

GP850 - SL - PDV - REC25 - -

No. of Channels

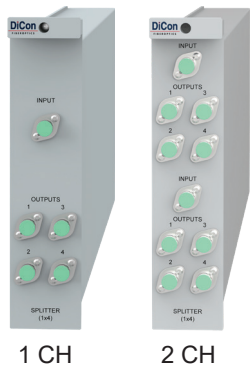
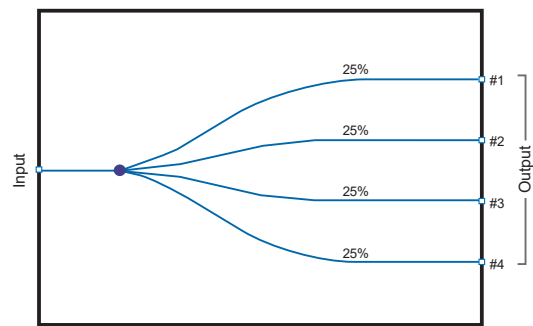
- 1 1Ch
- 2 2Ch
- 4 4Ch

Connector Type

- FC/APC FC/APC
- LC/APC LC/APC

Receiver (25 GHz)	Thorlabs RX25AF
-------------------	-----------------

GP850 PDV Slot Card - 1X4 Splitter



ORDERING INFORMATION

GP850 - SL - PDV - SPL4 - -

No. of Splitters

1 1
2 2

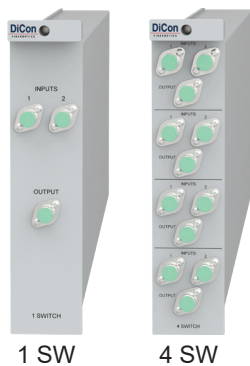
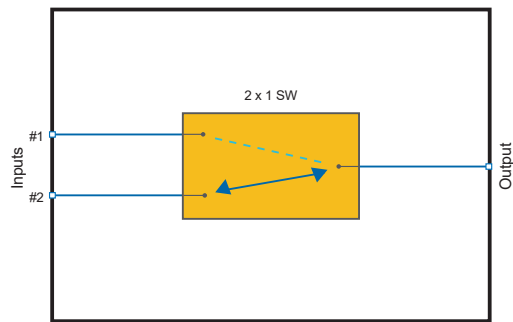
Connector Type

FC/APC FC/APC
LC/APC LC/APC

Insertion Loss (IL) ¹	7.0 dB max.
Input Optical Power	2.0 W max.

1. Test Wavelength at 1550 nm. Measured with 3-jumper method or equivalent.
See TIA/EIA 526-7

GP850 PDV Slot Card - 2X1 Switch



ORDERING INFORMATION

GP850 - SL - PDV - MS2X1 - -

No. of Switches

1 1
2 2
4 4

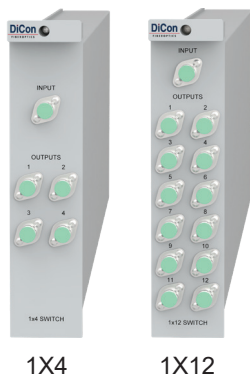
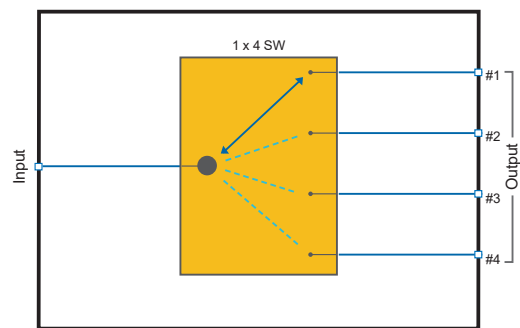
Connector Type

FC/APC FC/APC
LC/APC LC/APC

Insertion Loss (IL) ¹	0.6 dB max.
Crosstalk / Off State	-50 dB max.
Optical Power	0.5 W max.

1. Test Wavelength at 1550 nm. Measured with 3-jumper method or equivalent.
See TIA/EIA 526-7

GP850 PDV Slot Card - MEMS 1X4, 1X8 and 1X12 Switches



ORDERING INFORMATION

GP850 - SL - PDV - MS1X - 1 -

No. of Channels

4 1x4
8 1x8
12 1x12

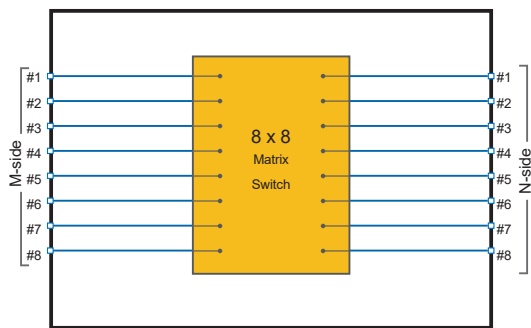
Connector Type

FC/APC FC/APC
LC/APC LC/APC

Insertion Loss (IL) ¹	0.8 dB max.
Crosstalk / Off State	-50 dB max.
Optical Power	0.5 W max.

1. Test Wavelength at 1550 nm. Measured with 3-jumper method or equivalent.
See TIA/EIA 526-7

GP850 PDV Slot Card - MEMS 8X8 Matrix Switch



ORDERING INFORMATION

GP850 - SL - PDV - SX8X8 - 1 -

Connector Type

FC/APC FC/APC
LC/APC LC/APC

Insertion Loss (IL) ¹	1.0 dB max.
Input Optical Power	0.5 W max.

1. Test Wavelength at 1550 nm. Measured with 3-jumper method or equivalent.
See TIA/EIA 526-7