DiCon Fiberoptics, Inc.

4-CHANNEL PDV HUB

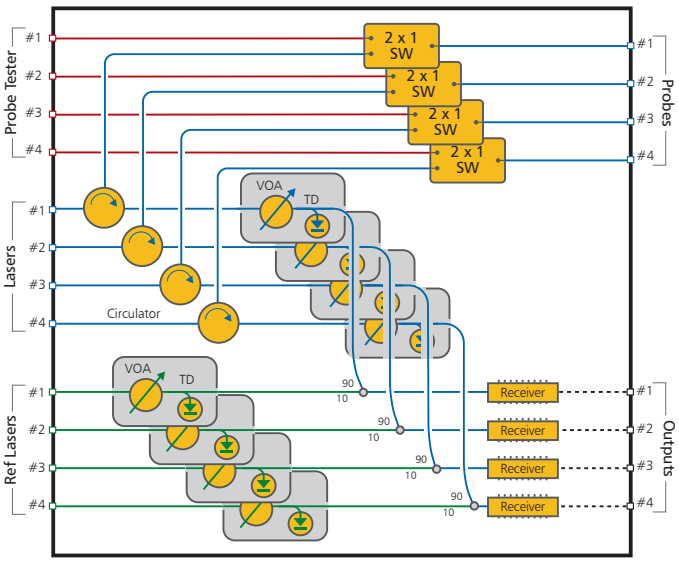
GP800, 1U Rackmount, 1 Fiber Probe Per Channel

DiCon's **4-Channel PDV HUB** is a 1U rack mount system that integrates many required optical components used in the Photonic Doppler Velocimetry (PDV) technique. This product connects laser sources with 4 fiber optic probes and collects interferometry signatures through 4 high speed receivers. Dynamic power control, probe test, and safety shutoff functions are implemented using DiCon's MEMS attenuators and switches.

- 4 Channels in a Compact 1U Chassis
- Automated Power Monitor and Control
- Probe Test and Safety Shutoff Functions

Applications

- Photonic Doppler Velocimetry (PDV)
- Shock Physics Experiments
- Detonation Wave Study



ORDERING INFORMATION

GP800 - 1U - PDV1 - 4CH25 - 9 - C - □ - N - F

Chassis Type

1U	1U

Product Type

PDV1	PDV

Configuration

4CH25	4Ch, 25GHz Receiver

Fiber Type

9	9/125 µm SMF

Optimized Wavelength Range

C	1530-1570 nm

Connector Type

FC	FC/UPC
FC/APC	FC/APC
SC	SC/UPC
SC/APC	SC/APC
LC	LC/UPC
LC/APC	LC/APC

**Other connector types available upon request*

Connector Key Orientation

N	None

Connector Location

F	Front

4-CHANNEL PDV HUB

GP800, 1U Rackmount, 1 Fiber Probe Per Channel

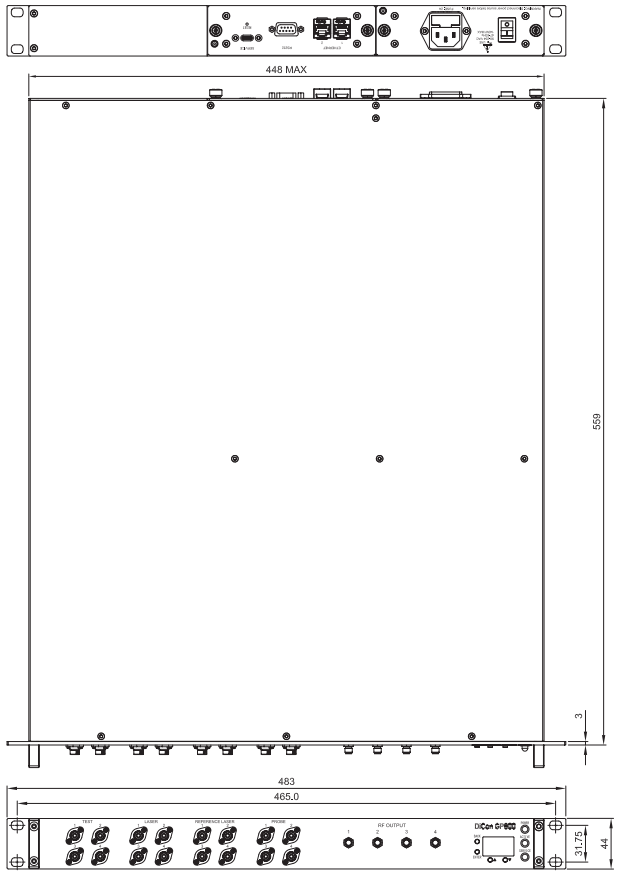
OPTICAL SPECIFICATIONS

Fiber Type		9/125 um Single Mode
Wavelength Range		1530 to 1570 nm
Back Reflection		-50 dB max.
Crosstalk		-50 dB max.
Attenuation Range		30 dB min.
Switching Time		20 ms min.
TD Measurable Power Range		-50 to +22 dBm
TD Accuracy		+/- 0.3 dB
TD Resolution		0.01 dB
Coupler Ratio		90/10
Input Optical Power		0.5 W max.
IL[1]	Laser - Probe	1.4 dB max.
	Tester - Probe	0.6 dB max.
	Probe - Receiver	3.4 dB max.
	Ref Laser - Receiver	11.8 dB max.
PDL	Laser - Probe	0.2 dB max.
	Tester - Probe	0.1 dB max.
	Probe - Receiver	0.7 dB max. @ 0 dB Att.
	Ref Laser - Receiver	0.4 dB max. @ 0 dB Att.
Receiver		Thorlabs RX25AF (25 GHz)

1. Measured at optimized λ (e.g. 1550 nm), 25°C, excluding connectors (Each pair of connectors will add extra 0.2 dB loss.)

MECHANICAL

Dimensions in mm



ELECTRICAL SPECIFICATIONS

Power Supply	100-240 VAC, 50/60 Hz
Connectors	RJ45 (Ethernet) DB9 (RS232) USB-C (Service)
Control Interface	Web GUI, SSH, RS232, REST API, Telnet

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0 to 50°C, < 85% RH
Storage Temperature	-40 to 70°C, < 40% RH

DiCon Fiberoptics, Inc.

4-CHANNEL PDV HUB

GP800, 1U Rackmount, 2 Fiber Probes Per Channel

DiCon's **4-Channel PDV HUB** is a 1U rack mount system that integrates many required optical components used in the Photonic Doppler Velocimetry (PDV) technique. This product connects laser sources with 8 fiber optic probes and collects interferometry signatures through 4 high speed receivers. Dynamic power control, probe test, and safety shutoff functions are implemented using DiCon's MEMS attenuators and switches.

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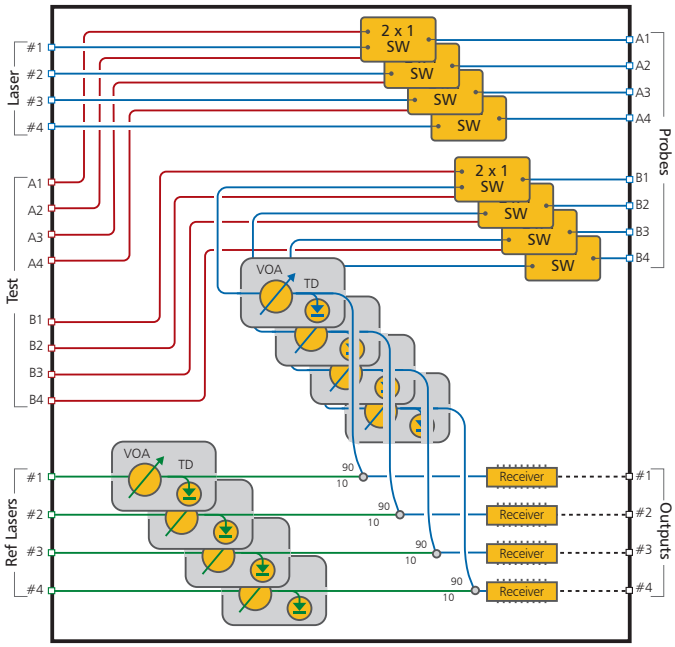

ORDERING INFORMATION

GP800 - 1U - PDV2 - 4CH25 - 9 - C - □ - N - F

Chassis Type

1U	1U

Product Type

PDV2	PDV

Configuration

4CH25	4Ch, 25GHz Receiver

Fiber Type

9	9/125 µm SMF

Optimized Wavelength Range

C	1530-1570 nm

Connector Type

FC	FC/UPC
FC/APC	FC/APC
SC	SC/UPC
SC/APC	SC/APC
LC	LC/UPC
LC/APC	LC/APC

**Other connector types available upon request*

Connector Key Orientation

N	None

Connector Location

F	Front

4-CHANNEL PDV HUB

GP800, 1U Rackmount, 2 Fiber Probes Per Channel

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Fiber Type		9/125 um Single Mode
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Coupler Ratio		90/10
Input Optical Power		0.5 W max.
IL[1]	Laser - Probe A	0.8 dB max.
	Tester - Probe A	0.6 dB max.
	Probe B - Receiver	3.4 dB max.
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PDL	Laser - Probe A	0.2 dB max.
	Tester - Probe A	0.1 dB max.
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