

VPS-1550-M-A



1550 nm Variable Pulsed Source Module, 10-250 ns, 4-200 kHz

The Optilab VPS-1550-M-A is a variable pulsed DFB laser source. It is a building block ideal for MOPA, LIDAR, OTDR laser systems development and applications. This fully integrated compact module contains a Distributed Feedback (DFB) laser and variable nanosecond pulse generation circuits. The VPS-1550-M-A provides 20 mW optical peak power in 1550 nm wavelength region. The pulse width is programmable from 10 ns to 250 ns and the pulse repetition rate is selectable from 4 kHz to 200 kHz. Pulse generation can alternatively be controlled via an external electrical trigger. In a compact design, VPS-1550-M-A is either for OEM integration or as a stand alone pulsed laser source. Contact Optilab for more information.

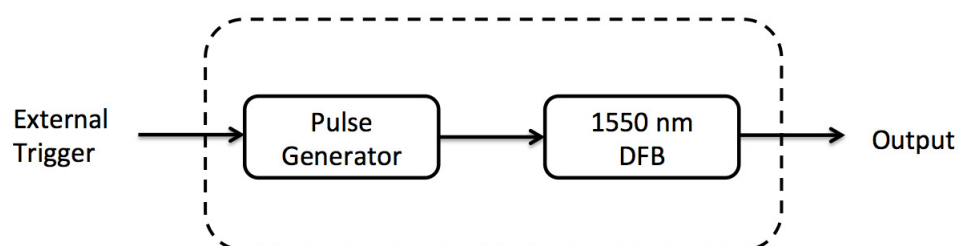
Features

- DFB Laser wavelength: 1550 ± 10 nm
- Requires no external pulse generator
- Pulse width: 10 ns to 250 ns, programmable
- Selectable repetition rate: 4 kHz to 200 kHz
- 20 mW peak power
- RS-232 monitor and control interface

Applications

- Master Oscillator (MO) for MOPA
- Pulsed light source for LiDar
- Laser source for OTDR
- Pulse based optical instrumentation
- Raman distributed sensing

Functional Diagram



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OPTIONS

VPS-1550-M-A-XX

ZZ PM: Polarization
Maintaining

TECHNICAL INFO

For technical info and support:

sales@optilab.com

www.optilab.com

WEB ORDER

To order, please visit OEQuest.com.

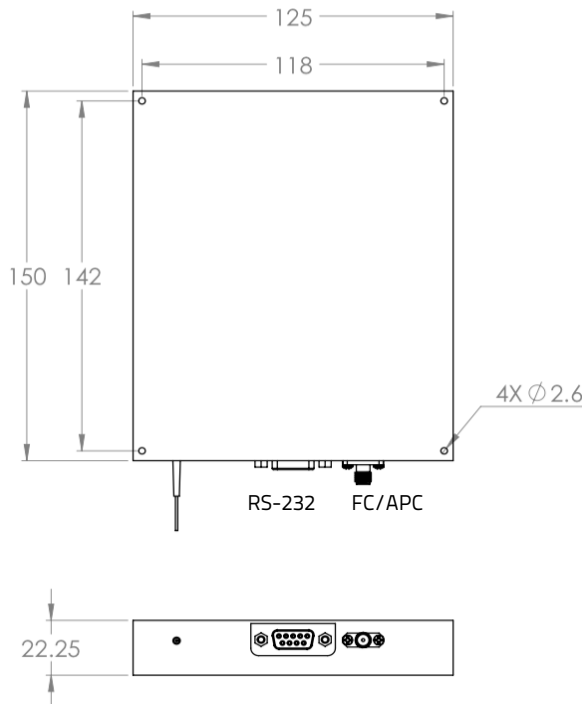


Optilab Advantage

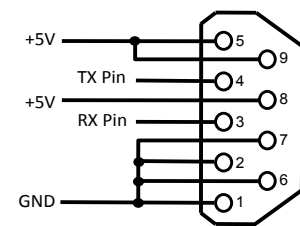
- Innovation
- Performance
- Quality
- Customization
- Warranty

Optical Specifications	
Center Wavelength	1550 ± 10 nm
Optional Wavelength	1570 nm to 1600 nm
Laser Type	DFB 14 pin butterfly
Laser linewidth	< 3 MHz
Optical Pulse Width	10 ns to 250 ns (selectable)
Pulse Repetition Rate	4 kHz to 200 kHz (selectable)
Pulse Contrast Ratio	50 dB typ.
Peak Optical Output Power	20 mW typ.
Input Trigger Level TTL	> 3.5 V
Electrical Connector	DB-9
Optical Connector	FC/APC
Mechanical Specifications	
Operating Temperature	-10° C to +60° C
Storage Temperature	-40° C to +70° C
Humidity	10% to 90%
Power Supply	+5 V, 1A max.
Accessories	PS-5 Power supply and cable
Cooling	Passive
Communication Interface	RS-232 interface cabling from PC to units
Output Fiber	SMF-28 or panda (PM)
Mechanical Dimensions	150 x 125 x 22 mm

Mechanical Drawing



Electrical Pin Out Diagram



Unit: mm

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Sample Measurement Results

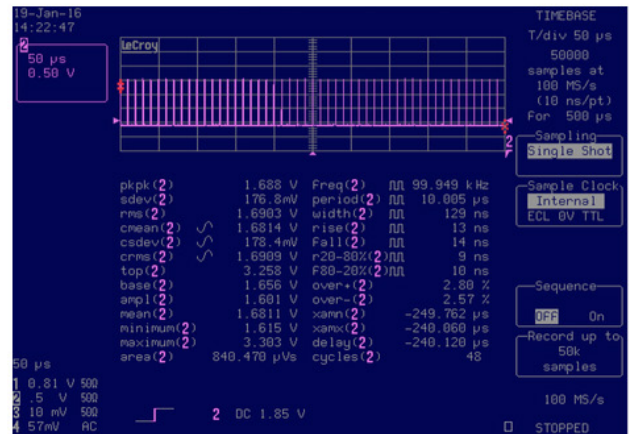
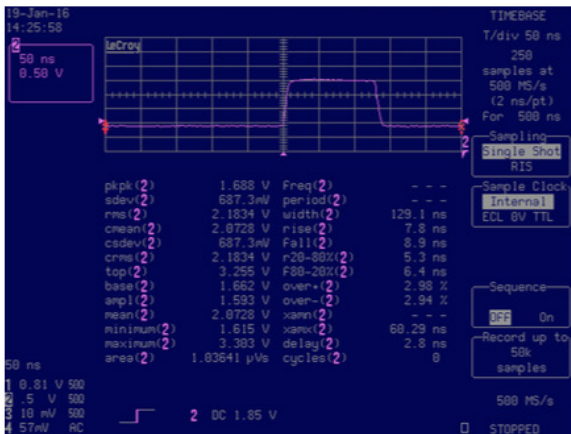
Model Number: VPS-1550-M-A
Description: 1550 nm Variable Pulsed Source Module, 10-250 ns, 4-200 kHz

Pulse Width Range (ns)		Repetition Rate Range (kHz)		Wavelength (nm)	Average Output Power @ 100ns PW/100kHz RR (dBm)
Min	Max	Min	Max		
5	250	4	200	1547.23	-6.83

Pulse Width: 100ns	Output Power
Repetition Rate: 10 kHz	-16.84 dBm
Repetition Rate: 200 kHz	-3.82 dBm

Repetition Rate: 100 kHz	Output Power
Pulse Width: 10ns	-14.65 dBm
Pulse Width: 250ns	-3.39 dBm

Taken at Settings: Pulse Width: 100ns/ Repetition Rate: 100 kHz



Measurement Configuration

