

## TECHNICAL SPECIFICATIONS

### Optical

	PDM	PDM <sub>4</sub>	PDM <sub>MULTIMODE</sub>	PDM <sub>MULTIMODE HP</sub>
Peak power	Up to 2W	Up to 6W	Up to 120W	Up to 200W
Pulse width	From 1ns to CW	From 1ns to CW	From 100ns to 1µs	From 100ns to 1µs
Repetition rate	From single shot to 250 MHz	From single shot to 250 MHz	From single shot to 100 kHz	From single shot to 100 kHz
Available wavelengths (nm)	808, 976, 1030, 1064, 1075 <sup>(1)</sup>	976, 1064, 808 <sup>(2)</sup>	976	976
Operating mode	Pulsed and CW	Pulsed and CW	Pulsed	Pulsed
Beam quality	M <sup>2</sup> <1.2	M <sup>2</sup> <1.2	105 µm ; N.A.=0.12	150 µm ; N.A.=0.22
Command interface	TTL/LVTTL <sup>(3)</sup>	TTL/LVTTL <sup>(3)</sup>	TTL	TTL
Output fiber	SM/PM	SM/PM	MM 105 µm N.A.=0.12	MM 150 µm N.A.=0.22

(1) Other available wavelengths: 845, 1310, 1480, 1550 nm...  
 (2) Choose two wavelengths from 976, 1064, 808 nm...  
 (3) LVDS or other on demand (LVPECL, CML, LVS)

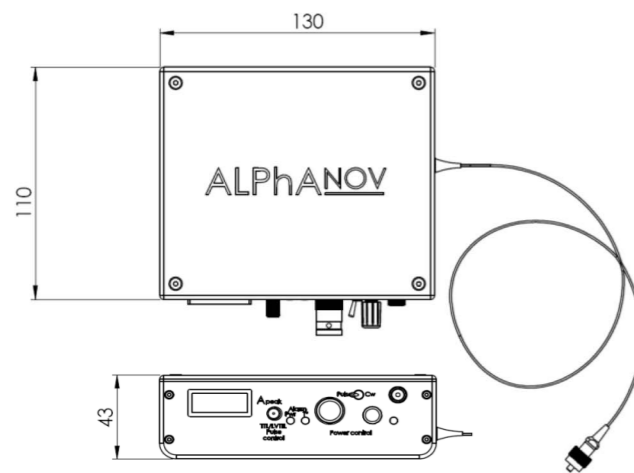
### Options

- Polarized fiber (single-mode only)
- Output isolator
- Narrow emission bandwidth
- Separated collimator
- Interlock
- Various fiber connectors (FC, SMA...)
- 150 picosecond pulses (PDM only)

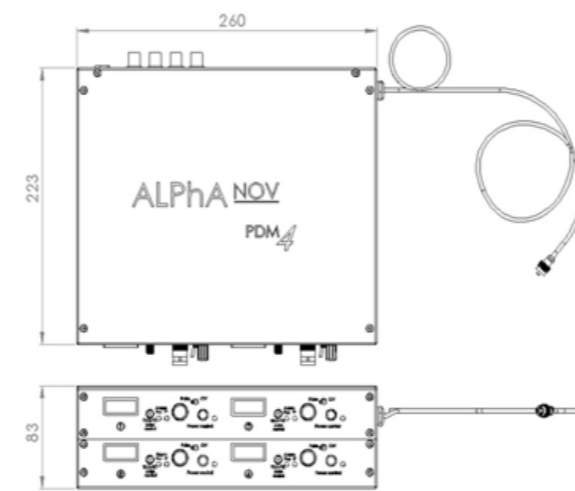
### Electrical

Operating voltage	12-15 Vdc (OEM) 110/220V ac/dc converter included
Input impedance	50 Ω

### Mechanical



PDM and PDM<sub>MULTIMODE</sub>



PDM<sub>4</sub> and PDM<sub>MULTIMODE HP</sub>

Photos: ALPhANOV



PULSE-ON-DEMAND MODULES

# PDM SERIES

# PULSE-ON-DEMAND MODULES

FOR FULL TEMPORAL AGILITY

Generate optical pulses on demand from your input TTL/LVTTL digital signal

## PDM<sub>4</sub>



Dual Wavelengths (980 and 1064 nm)  
Single-mode output fiber  
High power (up to 6W)

## PDM MULTIMODE



Low N.A. (0.12)  
Low fiber diameter (100  $\mu\text{m}$ ) for reduced spot size  
Very high power (up to 120W)

## PDM MULTIMODE HP

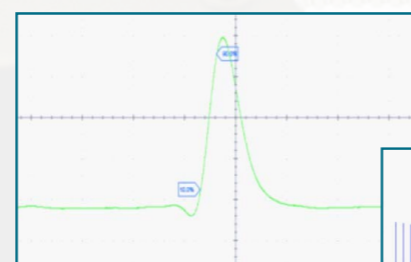


Double diode for very high power (up to 200W)  
Red beam pointer

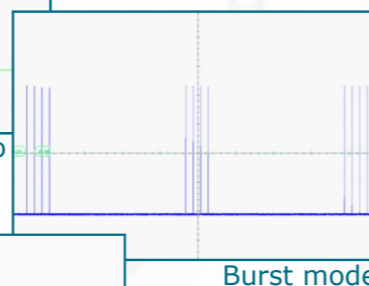
## PDM



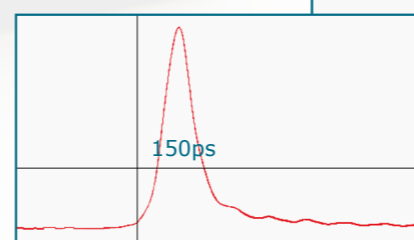
Versatile optical pulse generator  
Single-mode output fiber  
High power (up to 2W)  
<8 ps temporal jitter



Very short pulses, down to 1nsec in standard version



Burst mode



150 psec pulses (optional)

The PDM series consists of OEM laser modules which generate optical pulses from input TTL/LVTTL digital signal. From single-shot to CW, with pulse length from 1ns to any required pulse-burst configuration, the PDM series offers the best temporal flexibility on the laser market.

### Key features:

- Single-shot, burst mode or CW operation
- Up to 200W peak power
- Min. pulse duration: 1 nsec (FWHM)
- Extremely low jitter (<8ps)
- Large range of wavelengths from UV to IR
- Up to 250 MHz repetition rate
- Excellent beam quality
- Low N.A.

### Key applications:

- MOPA architecture
- Low power micromachining
- Laser development
- Non destructive control
- Telemetry
- Doppler measurements
- Metrology
- Semiconductor testing