

PicoBlade[®] 3 Picosecond Micromachining Laser

Precision and flexibility for optimized processes—
a fully featured, machine-ready system

The PicoBlade 3 laser system is a versatile tool for processing virtually any material with the highest precision and reliability.

Features

- Robust industrial design
- Integrated electronic controller
- High-volume manufacturing
- Easy integration
- Modular design for field serviceability
- High productivity:
 - Wide range of PRF from single shot to 8 MHz standard
 - A/D power modulation capability
 - FlexBurst™ technology
 - Process shutter and safety shutter

Options

- AccuTrig™ triggering function
- MegaBurst™ high-energy burst
- SYNC for high-speed line scanners

Applications

- OLED cutting
- PCB production
- Glass cutting, welding, scribing
- Sapphire cutting, scribing
- High-speed precision metal machining
- Selective thin-film ablation
- Medical device manufacturing



Specifications

Parameter ^{Note:1}			
Output power	High Power Plus	High Power	Medium Power
IR		180 W ^{Note:2}	70 W
Green		100 W	50 W
UV	75 W ^{Note:3}	50 W ^{Note:4}	30 W ^{Note:4}
Repetition rate	Single shot to 8 MHz		
Pulse width measured at 1064 nm	10 ps		
M ²	<1.3		
Spatial mode	TEM ₀₀		
Polarization	>100:1 linear horizontal		
Laser Head			
Dimensions (L x W x H)	740 x 573 x 211.5 mm (29.1 x 22.6 x 8.3 in)		
Exit beam location and reference (W x H)	154.5 x 176 mm (6.1 x 6.93 in)		
Power Supply (fits 19-in rack)			
Dimensions (L x W x H)	388 x 475 x 43 mm (15.3 x 18.7 x 1.7 in)		

Note:

- All specifications for 400 kHz, unless otherwise noted. Other repetition rate optimization available upon request
- 180 W at 8.2 MHz, 160 W at 400 kHz
- 75 W at 1 MHz
- Also available at 1 MHz

Regulatory Compliance

The products listed in this datasheet comply with the following regulatory standards, and display the certification and laser safety markings shown below. Contact your local Lumentum sales representative for additional information on specific products or configurations.

Regulatory Standards

IEC/EN 61010-1
IEC/EN 61000-6-2
CDRH 21 CFR 1040.10

IEC/EN 60825-1
IEC/EN 61000-6-4

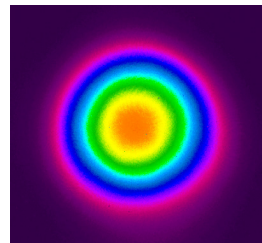


Safety certification markings



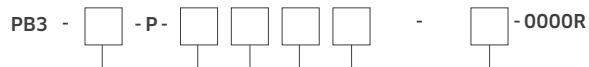
Laser safety warning label

Output Beam Profile



Ordering Information

For more information on this or other products and their availability, please contact your local Lumentum account manager or Lumentum directly at customer.service@lumentum.com.



Power Level	Code	PRF	Code	NLO	Code
High Plus	U	400 kHz	0400	1064 nm	R
High	H	1 MHz	1000	532 nm	G
Medium	M			355 nm	V

Accessories

Description	Product Code
AccuTrig	AT-0000R
MegaBurst	MB-0000R
SYNC	SC-0000R



North America
Toll Free: 844 810 LITE (5483)

Outside North America
Toll Free: 800 000 LITE (5483)

China
Toll Free: 400 120 LITE (5483)

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Product specifications and descriptions in this document are subject to change without notice.

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