

IPG Photonics Cutting Heads

from the World Leader in Fiber Lasers



Applications



Features



Advantages



www.ipgphotonics.com

IPG The Power to Transform®

IPG Cut D30 Cutting Head



Standard Features

IPG's D30 cutting heads are designed to provide consistent high-quality cuts with up to 10 kW of laser power across a wide range of materials and thicknesses. Completely sealed and lightweight, D30 cutting heads are reliable, fast and efficient to match the needs of demanding cutting applications. The IPG Cut-D30 provides effortless integration with IPG lasers and offers precise monitoring of height even under high power and high pressure cutting conditions. Available in multiple configurations with the broadest focus and collimator lens options.



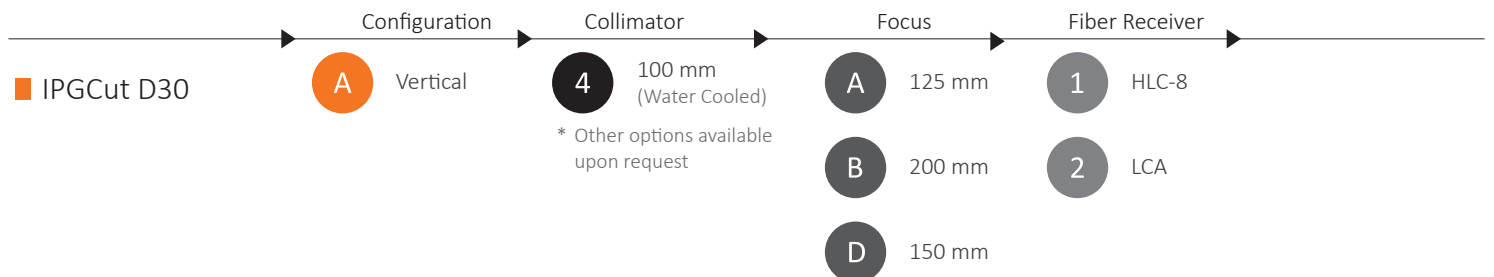
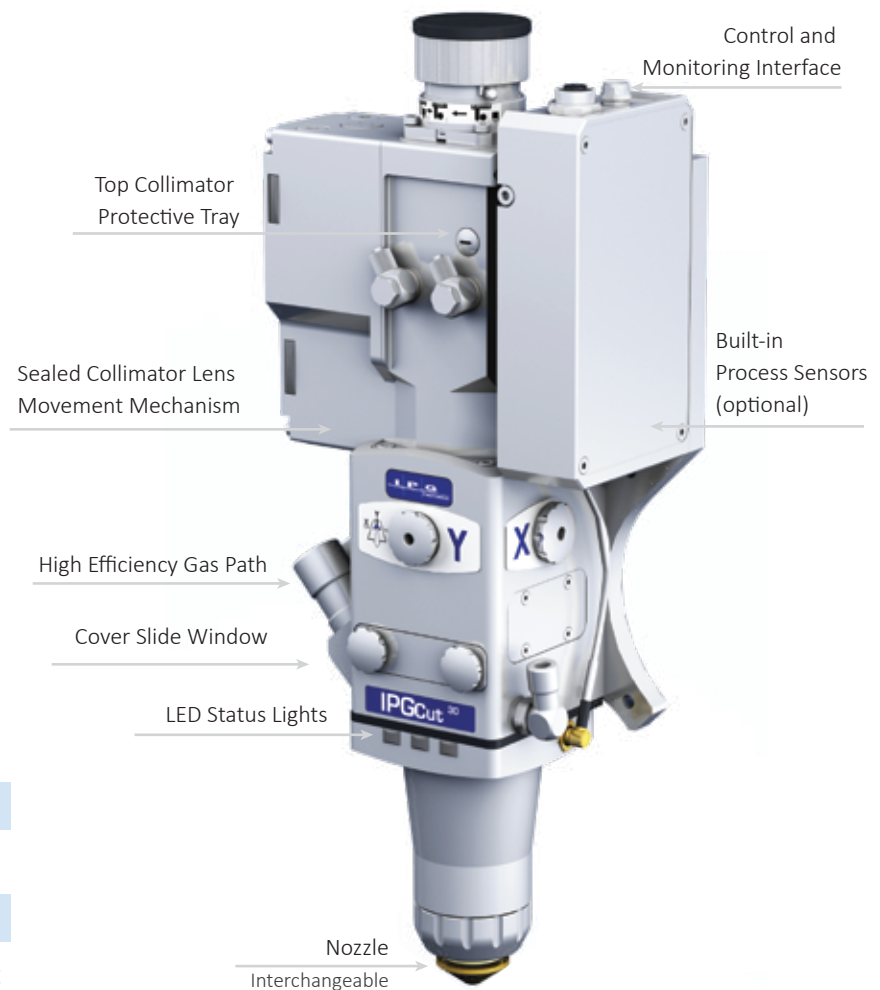
Specifications

Laser Power Up to 10 kW

Weight (V) <4 kg

Control Unit IPG CHCE

Z Adjustment on Focus Collimator lens movement
+15/-30 mm (100/200)

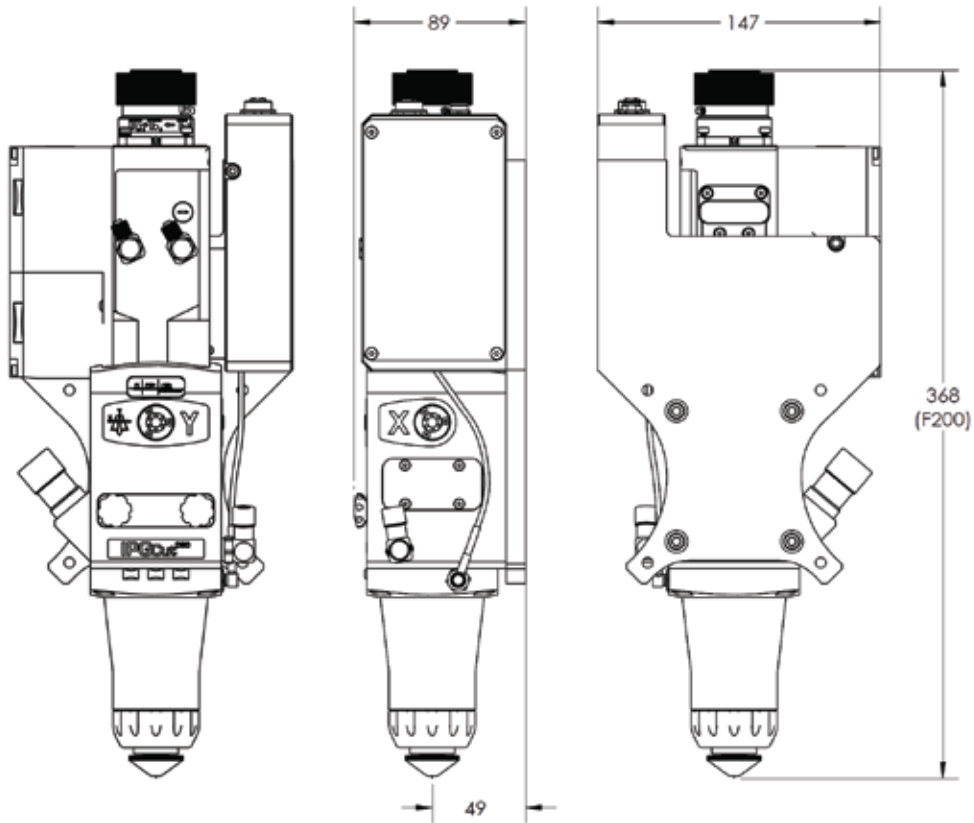


AVAILABLE NOW
IPG Cut D50

- Power handling 20 kW+
- Plug and play interface with IPG lasers



D30 Configurations



CUTTING HEAD ACCESSORIES



Replacement Nozzles

Diameters Available

	Wide	Narrow	Dual Gas Passage
• 0.8 mm	P40-003805-001	P40-007141-004	P40-008038
• 1.0 mm	P40-003805-002	P40-007141-005	P40-008038-001
• 1.2 mm	P40-003805-003	P40-007141-006	P40-008038-002
• 1.5 mm	P40-003805	P40-007141-001	P40-008038-003
• 1.8 mm	P40-003805-004	P40-007141-007	P40-008038-004
• 2.0 mm	P40-003805-005	P40-007141-002	P40-008038-005
• 2.3 mm	P40-003805-006	P40-007141-010	P40-008038-006
• 2.5 mm	P40-003805-007	P40-007141-003	P40-008038-007
• 2.8 mm	P40-003805-008	P40-007141-008	P40-008038-008
• 3.0 mm	P40-003805-009	P40-007141-009	P40-008038-009
• 3.2 mm	P40-003805-010		P40-008038-010
• 3.5 mm	P40-003805-011		P40-008038-011
• 4.0 mm	P40-003805-012		P40-008038-012
• 4.5 mm	P40-003805-013		
• 5.0 mm	P40-003805-014		

Protective Window

Parts Available

- Optics [P45-012927](#)



Nozzle Ceramic

Assembly

- Ceramic Assembly [P30-007834](#)

IPGCut Compact Cutting Head

IPG Photonics' Process Heads



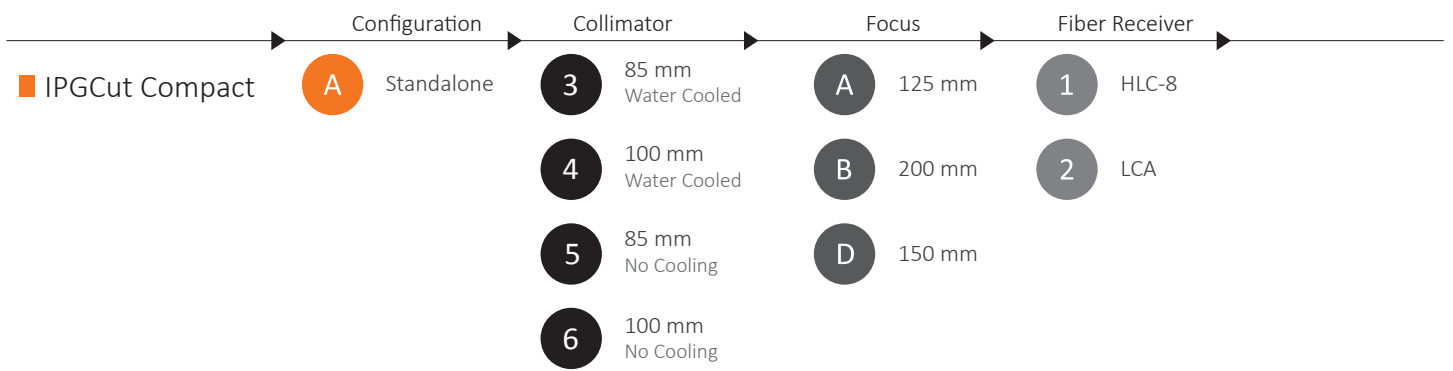
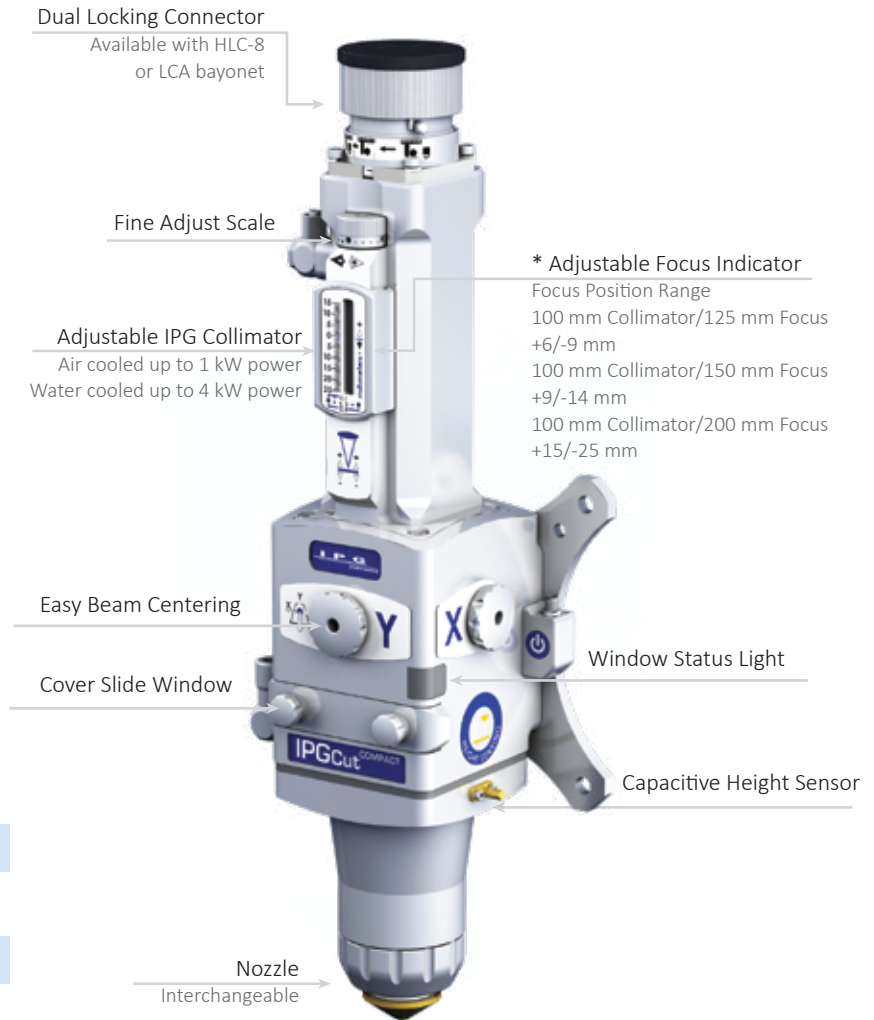
Standard Features

IPG's compact cutting heads are the ideal solution for standard flat-bed cutting applications. The combination of IPG's compact cutting heads internal heads optics and its completely sealed architecture provide long term stability of both focal plane and beam quality at lasers up to 4 kW power. IPG's compact cutting heads are plug and play with all IPG lasers providing ease of integration and service. Utilizing all its attributes, IPG compact cutting heads not only provide precise cutting results, but they also maintain its precision cut quality over both time and laser power.

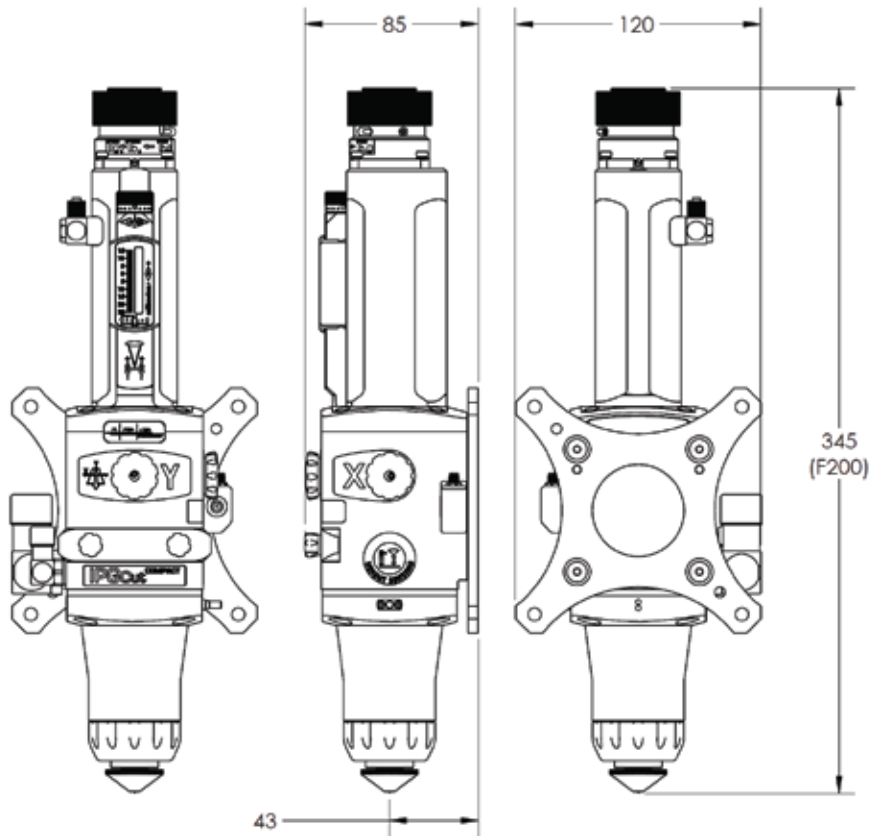


Specifications

Laser Power	Up to 4 kW
Weight (V)	<2.5 kg
Control Unit	IPG CHCE / External
Z Adjustment on Focus	Collimator lens movement +15/-25 mm (100/200)



Compact Head Configurations



CUTTING HEAD ACCESSORIES



Replacement Nozzles

Diameters Available

Wide	Narrow	Dual Gas Passage
• 0.8 mm P40-003805-001	• 0.8 mm P40-007141-004	• 0.8 mm P40-008038
• 1.0 mm P40-003805-002	• 1.0 mm P40-007141-005	• 1.0 mm P40-008038-001
• 1.2 mm P40-003805-003	• 1.2 mm P40-007141-006	• 1.2 mm P40-008038-002
• 1.5 mm P40-003805	• 1.5 mm P40-007141-001	• 1.5 mm P40-008038-003
• 1.8 mm P40-003805-004	• 1.8 mm P40-007141-007	• 1.8 mm P40-008038-004
• 2.0 mm P40-003805-005	• 2.0 mm P40-007141-002	• 2.0 mm P40-008038-005
• 2.3 mm P40-003805-006	• 2.3 mm P40-007141-010	• 2.3 mm P40-008038-006
• 2.5 mm P40-003805-007	• 2.5 mm P40-007141-003	• 2.5 mm P40-008038-007
• 2.8 mm P40-003805-008	• 2.8 mm P40-007141-008	• 3.0 mm P40-008038-008
• 3.0 mm P40-003805-009	• 3.0 mm P40-007141-009	• 3.5 mm P40-008038-009
• 3.2 mm P40-003805-010		• 4.0 mm P40-008038-010
• 3.5 mm P40-003805-011		• 4.5 mm P40-008038-011
• 4.0 mm P40-003805-012		• 5.0 mm P40-008038-012
• 4.5 mm P40-003805-013		
• 5.0 mm P40-003805-014		

Protective Window

Parts Available

- Optics [P45-012927](#)
- O-Ring [P40-009015](#)



Nozzle Ceramic Assembly

- Ceramic Assembly [P30-007834](#)

IPGCut Micro Cutting Head

IPG Photonics' Process Heads



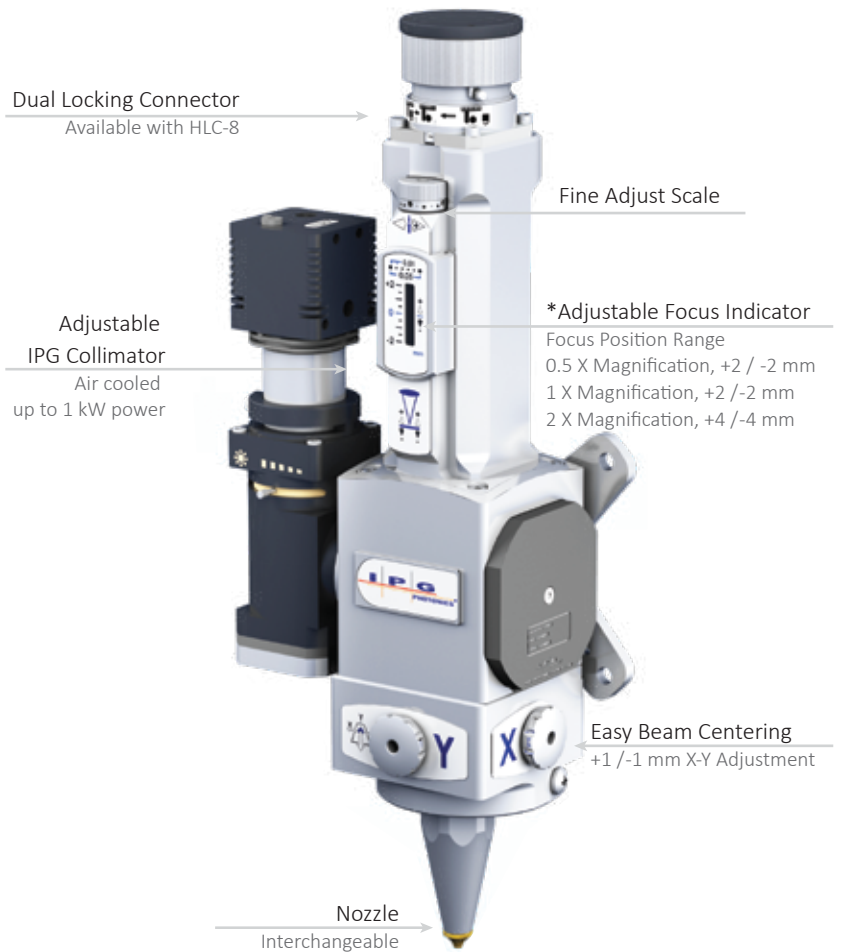
Standard Features

IPG micro cutting heads provide the ideal solution for micro-machining applications which require small spot sizes and high-resolution focus adjustment. The combination of IPG Micro cutting head's internal optics and its completely sealed architecture provide long term stability of both focal plane and beam quality. IPG micro cutting heads are plug and play with all IPG lasers providing ease of integration and service. IPG micro cutting heads not only provide precise cutting results, but they also maintain its precision cut quality over both time and laser power.



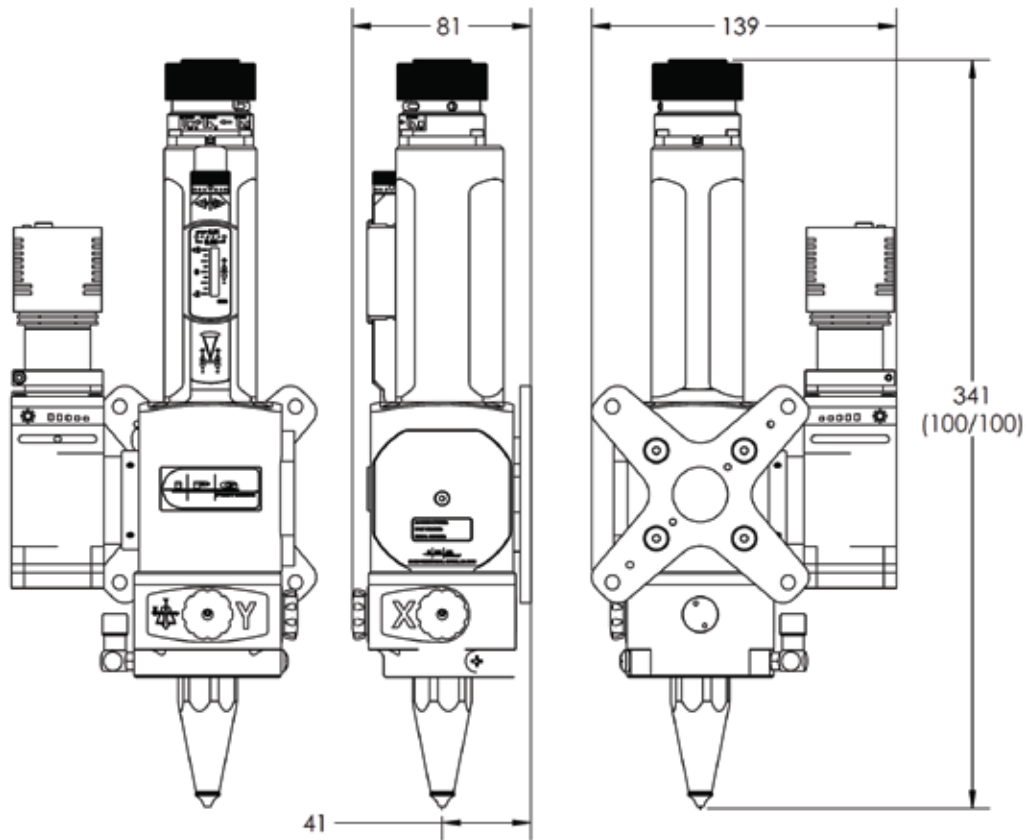
Specifications

Laser Power	Up to 1 kW
Weight (V)	<2 kg
Control Unit	N/A
Z Adjustment on Focus	Collimator lens movement
	*See table for details



	Configuration	Collimator	Focus	Fiber Receiver
IPGCut Micro	R Horizontal (RHS)	1 50 mm	A 50 mm	1 HLC-8
	L Horizontal (LHS)	3 85 mm	C 85 mm	
	V Vertical	4 100 mm	D 100 mm	
	S Horizontal Standalone (Vertical no camera mount)			

Micro Head Configurations



CUTTING HEAD ACCESSORIES



■ Replacement Nozzles
Diameters Available

- 0.2 mm [P45-017701-001](#)
- 0.3 mm [P45-017701-002](#)
- 0.4 mm [P45-017701-003](#)
- 0.5 mm [P45-017701-004](#)
- 0.8 mm [P45-017701-005](#)
- 1.0 mm [P45-017701-006](#)
- 1.2 mm [P45-017701-007](#)

■ Protective Window
Parts Available



- Optic only [P45-012927](#)

■ Camera Module

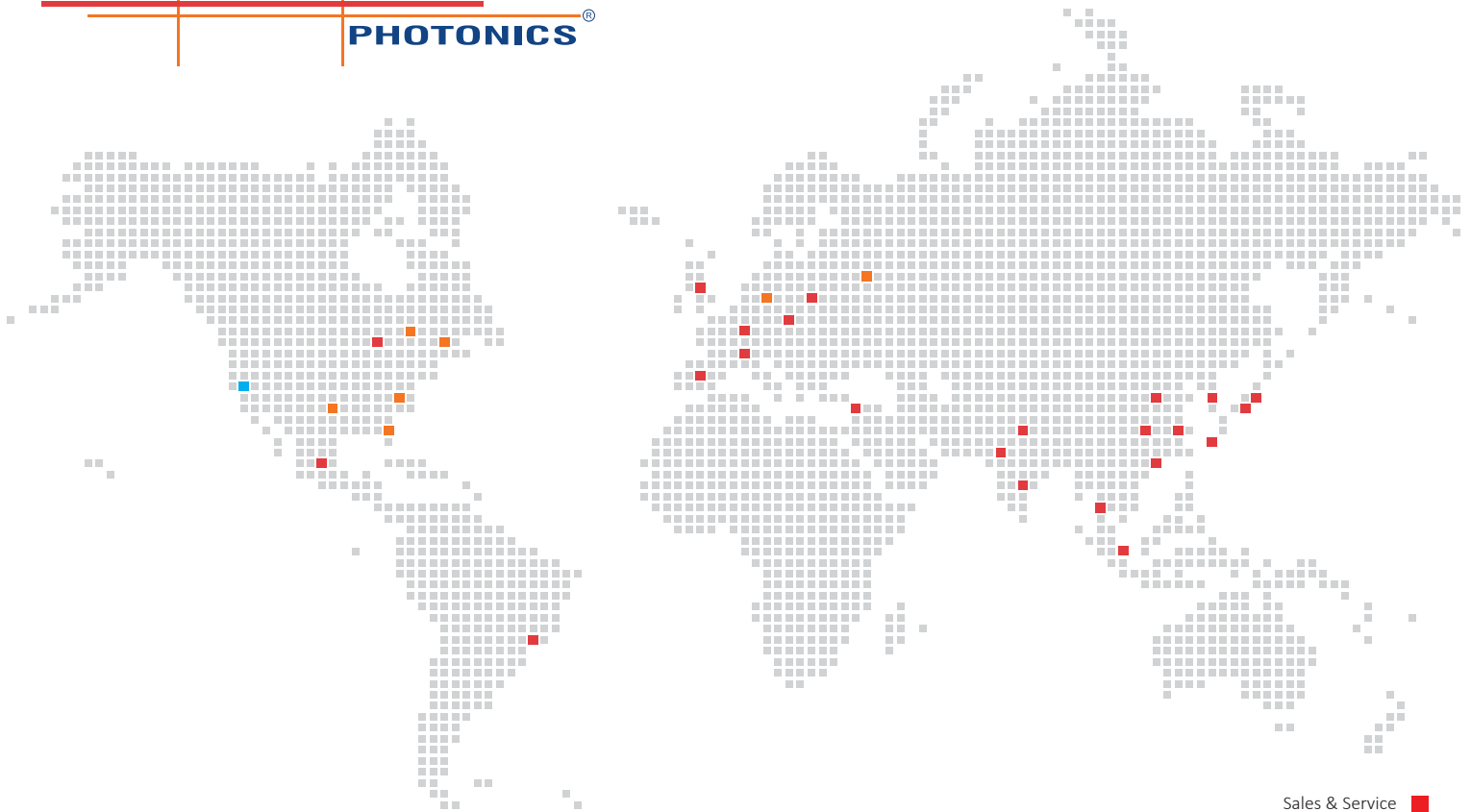


[P30-002424](#)

■ Camera



- HD Camera (HDMI Connection)
[P40-000125](#) (1280x720 resolution, 60fps)
[P40-000128](#) (Power supply for camera)
[P40-000130](#) (Controller for camera)
- PoEHS Camera (Ethernet Connection)
[P40-000126](#) (1280x966 resolution, 40fps)
[P40-000129](#) (Power supply for camera)



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IPG Photonics manufactures a wide range of laser products with laser classifications ranging from Class I to Class IV. Please review the individual product specification for the optical performance characteristics specific to the device. This information typically includes the wavelength range, output power (CW and/or Peak), Pulse Energy, Pulse Repetition Rate, Pulse Width, etc.

