

CUT12 CUTTING HEAD

Versatile 2D Cutting Head for Powers up to 12 kW

CUT12 is a flat sheet (2D) cutting head for use with fiber lasers in the 4 kW to 12 kW (CW) power range. With a maximum NA of 0.15 and a magnification of 2.0, it can utilize the full power of both standard and beam shaping fiber lasers to yield the focused spot characteristics necessary for high-speed, high-quality cutting. Plus, it features an adjustable focal plane to adjust to process demands.

CUT12 also offers connectivity options, including direct EtherCAT controllability, to facilitate use in settings as diverse as job shop and highly integrated automation lines. Additionally, it is mechanically configured for maximum compatibility and can be used with flange connectors as well as quick exchange connectors.

CUT12 builds on the well-established reliability of Coherent BIMO series cutting heads. It has been designed for easy serviceability and is backed by the global Coherent service and spare parts infrastructure.

When paired with a Coherent EDGE series fiber laser, in particular, CUT12 delivers an unbeatable combination of performance, economy, and reliability.



FEATURES

- Up to 12 kW of laser power
- All EtherCAT control
- Multi-sensor integrated design
- Thin sheet cutting
- Thick sheet cutting
- All industry segments
- Stand-alone cutting machines
- Connected, automated systems

APPLICATIONS

- Best in class total cost of ownership
- Full serviceability
- IOT ready

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Specifications ¹	CUT12
Laser Power (kW)	12
Magnification	2
Central Wavelength (nm)	1070 ±15
Numerical Aperture Allowance (NA)	0.15
Focus Position Range (mm)	-40 to 40
Fiber Receiver Type	QF LOE.x compatible QBH ² QD ²
Water Cooling	
Water Flow Rate (l/min)	>1.5
Water Pressure (Mpa)	<0.6
Water Temperature (°C)	+15 to +40 (avoiding due point)
Electronics	
Field BUS	EtherCAT, ProfiNET ² , Ethernet IP ²
Height Sensing Interface Internal External	Provides distance signal Via SMA contact to preamplifier
Environmental	
Storage Temperature (°C)	-10 to +70
Operating Temperature (°C)	+5 to +55
Humidity (%)	<85
IP Certification	IP53
Dimensions and Weight	
Dimension (height) (mm)	385 to 450
Weight (kg)	<7900
Environmental Conditions	
Ambient Temperature (°C)	5 → 45
Humidity (%)	35 → 95, non-condensing

Notes:

1. Module performance is not guaranteed beyond the standard operating range (see Section VI). Exceeding the limits below may damage the product permanently.
2. Optional configuration.