

# EDGE CUT1.5

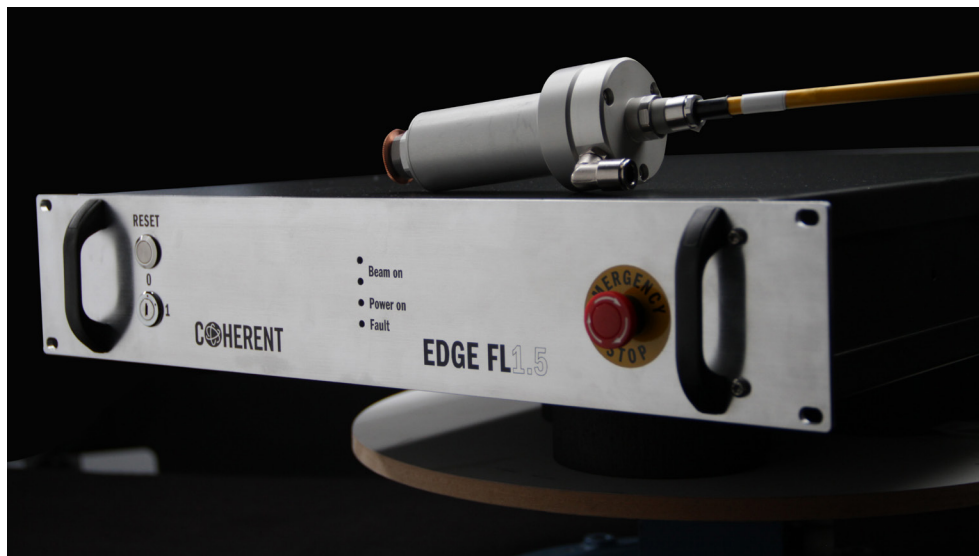
## Laser Cutting Made Simple

The EDGE CUT1.5 is a unique integrated laser cutting system combining Coherent's application knowhow with focus on innovation.

The CUT1.5 compact cutting heads enable high-speed fiber laser cutting of thin sheet mild steel in its most economical and simplest form – no laser cutting expert required. Optimal value is provided by leveraging unique Coherent innovations in beam delivery components, optical designs, and manufacturing scale.

Only available in combination with Coherent's EDGE FL 1.5 kW Fiber laser product line, every cutting head is integrated, aligned and tested prior to shipment, simplifying user experience as no fiber connectors—prone to contamination and damage—are required.

A unique optical design addressing back reflection management enables air cooled operation of the entire beam delivery system up to 1.5 kW of laser power, further simplifying the ease of use. Its ultra compact form factor also enables simplified cutting table systems.



### FEATURES

- Up to 1.5 kW of laser power
- Air cooled beam delivery system
- Ultra compact & integrated design
- Optimal total cost of ownership

### APPLICATIONS

- Thin Sheet Cutting
- White Goods Manufacturing

## EDGE CUT1.5

Specifications (Cutting Head)	EDGE CUT1.5
Laser Power (kW)	1.5
Spot Diameter (µm) (at focal point)	105
Cooling and Cutting Gas Handling	
Cooling	No water supply needed
Max. Permissible Cutting Gas Pressure (Bar) = Permissible Cutting Gas Pressure (Bar)	min. 3 Bar, max. 6 Bar
Gas Connector Diameter (mm)	8
Cutting Gas Requirements	Inert (e.g. N <sub>2</sub> ) or Active (e.g. O <sub>2</sub> ), oil and water- free, filtered, 40 µm max., pressure dew point approx. 5°C
Cutting Nozzle Thread	M11 x 0.75
Fiber Delivery System	
Interface	Integrated, no connector
Length (m)	10 (other lengths upon request)
Minimum Bending Radius (mm) Static (non-moving) Dynamic (robotic)	100 150
Dimensions and Weight	
Dimension (L x max. diameter) (mm)	112 x 58
Weight (g)	<500
Environmental Conditions	
Maximum Acceleration (g)	2 (in X/Y/Z)
Ambient Temperature (°C)	5 → 45
Humidity (%)	35 → 95, non-condensing
Specifications (Laser)	
Nominal Power (kW)	1.5
Beam Quality - BPP 9mm x mrad, at end of cutting head	Standard: 1.5, HB variant: 0.5
Operation Mode	CW/Modulated
Power Stability (%)	±1.5
Power Range (%)	10 to 100
Pulse Frequency Range (kHz)	CW – 5 (full depth modulation)
Wavelength (nm)	1064 ±10
Electrical Ratings	
Supply Voltage	220 VAC, Single Phase
Power Consumption (kW)	<4.5
Cooling	
Medium	Water
Water Cooling Temperature (°C)	20 → 35, non-condensing
Water Flow (l/min.)	>15
Dimensions and Weight	
Dimensions (L x W x H) (mm)	692 x 482.6 x 88
Weight (kg)	42
Environmental Conditions	
Ambient Temperature (°C)	5 → 45
Humidity (%)	35 → 95, non-condensing