



AREX 30W, medium power Fiber Laser System addressed to Automotive industry for Direct Part Marking and Engraving on metal parts and components.

With 30W fiber laser source, improved scan head, new rack design and advanced LIGHTER Software features, the new AREX 30W increases performance in term of high-speed marking, reliability, quick installation and setup, flexible programming and control.

High-speed marking

30W Fiber Lases Source increase marking performance:

- Higher output power to improve deep engraving performance
- Higher output power, more speed for enhanced productivity

Reliability

Arex-30W ensures maximum protection and reliability even in harsh environments

- Improved Scan Head with IP54 Protection Class
- Rack cooling air channel with the removable dust filter easy to access for maintenance

Quick installation and setup

Arex-30W drastically simplifies system design and machine integration.

- Rack with all connection on back panel included: double and redundancy safety interlock inputs and double channel ENABLE Input
- Embedded Red Laser Spot for focus position in the small head foot-print (112x298x90 mm) allows fast focusing of the laser beam during setup
- Installation, laser marker setup and operation are most easy with the Embedded Marker Controller platform (EMC) and LIGHTER 6 Suite
- 4 independent axis controls (X,Y,Z, rotative axis) to implement Multi-Layers and Rotating Marking and to change marking head position

Flexible programming and control

Arex-30W and LIGHTER 6 Suite allows OEMs and Machine builders to develop a complete, cost effective, Laser Marking Station, based on embedded hardware and software resources, (STAND ALONE mode) or to design an advanced Laser Marking Solutions able to control a complete machinery over a simple Ethernet connection with supervisor computer (MASTER-SLAVE mode).

- Advanced Graphical Layout
- Local and Remote laser diagnostic
- Local and Remote I/O & axis control
- Local and Remote laser test & setup
- Local and Remote ActiveX
- Ethernet protocol for easy integration with PLC and industrial environments
- Marking On Fly capability



LASER MARKING

APPLICATIONS

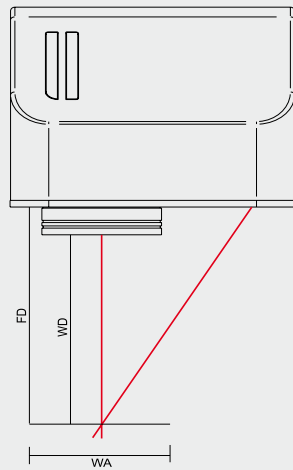
- Deep engraving marking
- 2D codes marking on automotive parts
- Black Laser Annealing on precision metal components and Medical equipment



AREX 30W

	AREX 30W F-Theta 160S	AREX 30W F-Theta 254S
Nominal power	30W	30W
Peak power (max)	10 kW	10 kW
Head cable Length	3 m standard	
Wavelength	1060 – 1080 nm	
Laser source	Pulsed Fiber Laser	
Modulation	30 kHz ± 100 kHz	
Pulsewidth	100 nsec	
Working area	100x100 mm	140x140mm
Working distance	181 mm (fixing distance 196 mm)	290 mm (fixing distance 309 mm)
Marking capabilities	Standing, Rotary axis, On the fly (marking in motion)	
Integration	Up to 4 mechanical axis driving capabilities (stepper motor) Up to 10 digital inputs and 10 digital output fully programmable 1 dedicated connector for dual line high resolution encoder and 1 dedicated connector for photocell	
Interface	Ethernet, RS 232, USB	
Aiming Beam	Class 2M red diode laser 635nm	
Focus Beam	Class 2M red diode laser 635nm	
Protection degree	Head: IP54	
Temperature Range	Operative 10°C to 35°C Storing 0°C TO 50°C	
Cooling	Air cooled	
Power Supply	100/240 VAC – 50/60 Hz	
Head Dimension & Weight	mm 90x112x298	kg 2
Rack Dimension & Weight	mm 106x430x370	kg 16

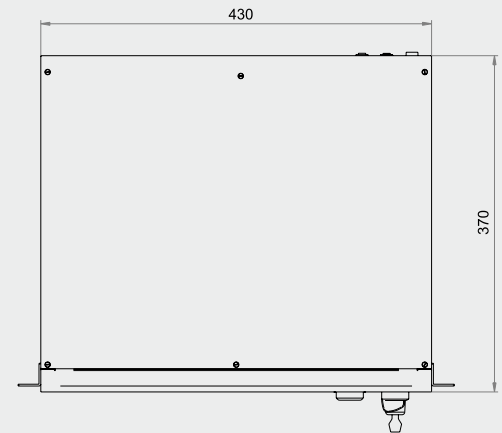
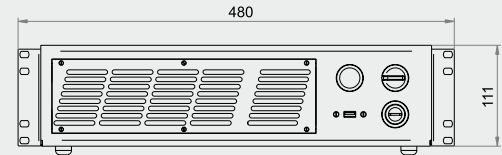
All laser sources described in this product guide are Class 4 laser sources. Laser interaction with organic or inorganic material can cause TOXIC FUMES/PARTICLES. The OEM laser components described in this product guide is for sale solely to qualified manufacturers, who shall provide interlocks, indicators and other appropriate safety features in full compliance with applicable national and local regulations.



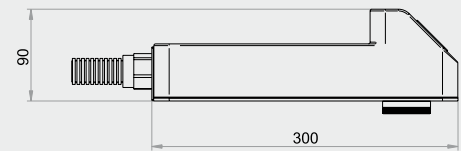
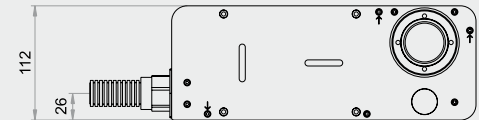
Objective F-Theta mm	160S	254S
Working distance (WD) mm	181	290
Fixing distance (FD) mm	196	309
Working area (mm x mm)	100X100	140X140

DIMENSIONS

CONTROL UNIT (RACK)



MARKING HEAD



MODEL SELECTION AND ORDER INFORMATION

MODEL	DESCRIPTION	ORDER N°
AREX 1300-1341-000 Fiber IR System	30W IR Fiber Laser Marker F-THETA 160S	985180003
AREX 1300-1641-000 Fiber IR System	30W IR Fiber Laser Marker F-THETA 254S	985180006