# LASER MARKING

### AREX-30W

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. 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



# **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 Lenght	3 m standard		
Wavelength	1060 – 1080 nm		
Laser source	Pulsed Fiber Laser		
Modulation	30 kHz ÷ 100 kHz		
Pulsewidth	100 nsec		
Working area	100x100 mm	140x140 mm	
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)		
	Up to 4 mechanical axis driving capabilities (stepper motor)		
Integration	Up to 10 digital inputs and 10 digital output fully programmable		
	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		

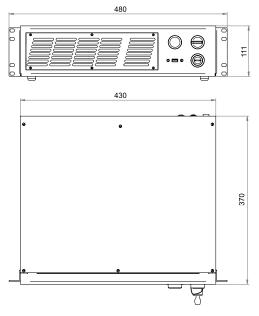
All laser sources described in this product guide are Class 4 laser sources. Laser interaction with organic or inorganic material can cause TOXIC FUMES/PARTICLES. The OEM laser components described in this product guide is for sale solely to qualified manufacturers, who shall provide interlocks, indicators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

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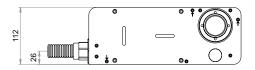
160S	254S
181	290
196	309
100X100	140X140
	181 196

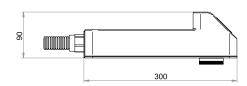
# **DIMENSIONS**

## 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

















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