AREX

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AREX

AREX is the ultra compact Pulsed Fiber Laser System addressed to Automotive and Electronics industry for Direct Part Marking and Label Marking on metal parts, plastic parts and components.

Available with 10W and 20W high performance fiber laser source, improved scan head, new rack design and advanced LIGHTER Software features, the new AREX increases performance in term of power, reliability, quick installation and setup, flexible programming and control.

• High performance and reliability
- Warranty 10/20 W power after scan head & focal lens increase speed marking for enhanced productivity.
- Zero bleed-through power ensure no ghost lines even on sensitive materials.
- Up to 50°C operative temperature guarantees high reliability and best performance also on extreme operative condition
- Improved Scan Head with IP54 protection class ensures maximum protection and reliability even in harsh environments
- Rack cooling air channel with the removable dust filter easy to access for maintenance

• Quick installation and setup
AREX 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 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 and LIGHTER 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

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APPLICATIONS

This product has been developed to satisfy to requirements of the following reference applications:
- Excellent contrast on metal surfaces
- Optimum for plastic and electronic PCB

AREX

|	AREX 10W	AREX 20W
Nominal power	10W	20W
Peak power (max)	5 kW	10 kW
Head cable Lenght	3 m standard	
Wavelength	1060 – 1080 nm	
Laser source	Pulsed Fiber Laser	
Modulation	10 kHz ÷ 100 kHz	
Pulsewidth	100 nsec	
Working area	100x100 mm with F-Theta 160S 140x140 mm with F-Theta 254S	
Working distance	181 mm (fixing distance 196 mm) with F-Theta 160S 290 mm (fixing distance 309 mm) with F-Theta 254S	
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 • 5°C to 50°C (50% emission time) • 5°C to 42°C (100% emission time) 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.
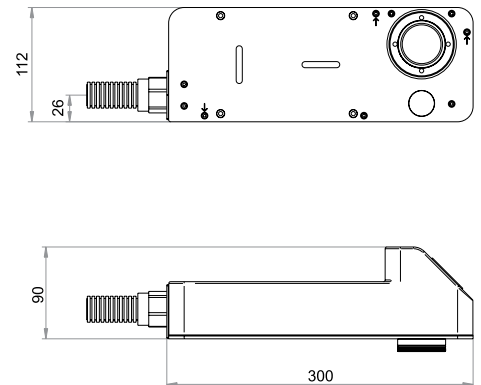
DIMENSIONS

CONTROL UNIT (RACK)
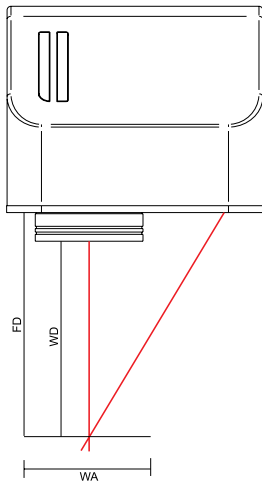
MARKING HEAD

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
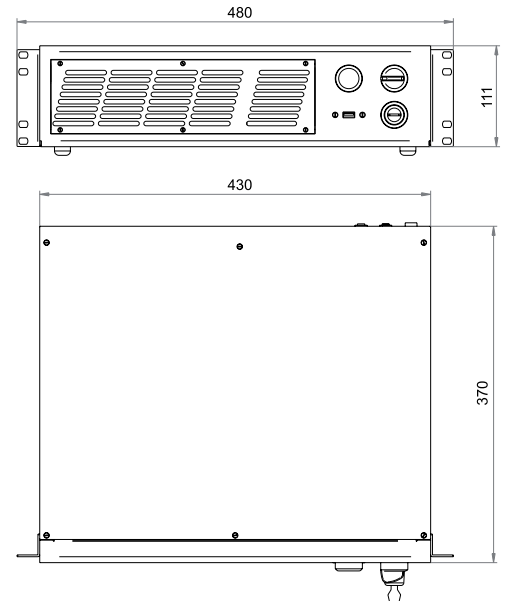
MODEL SELECTION AND ORDER INFORMATION

MODEL	Description	ORDER N°
AREX 1100-1341-000 Fiber IR System	10W IR Fiber Laser Marker F-THETA 160S	985180001
AREX 1100-1641-000 Fiber IR System	10W IR Fiber Laser Marker F-THETA 254S	985180004
AREX 1200-1341-000 Fiber IR System	20W IR Fiber Laser Marker F-THETA 160S	985180002
AREX 1200-1641-000 Fiber IR System	20W IR Fiber Laser Marker F-THETA 254S	985180005

CE · CSQ UNI EN ISO9001 · CISQ · I-Net · CSQ ecc · CISQ eco · VISIBLE AND INVISIBLE LASER RADIATION / CLASS 4 LASER PRODUCT EN60825 2007 · FDA Conforming to FDA regulations

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