



F-SERIES FQ10, FQ20 and FQ20DH Fiber Lasers

Innovative, compact and flexible F-SERIES Fiber Lasers are perfectly suited for marking applications that require 24/7 “set and forget”, unattended operation.

Select the 10W FQ10 for low to medium speed applications and the 20W FQ20 when higher power/faster process speeds are required. Both lasers offer the additional long-term safeguard of built-in, polarization/optical isolators.



Example — Laser marking on Coated Label Stock



LASER MARKER SPECIFICATIONS

Compliance	CDRH, CE, CSA
Wavelength	1070nm
Laser Type	Q-Switched Ytterbium Fiber Laser
Average Power FQ10.....	10 Watts
Average Power FQ20	20 Watts
Peak Power FQ10.....	>4KW
Peak Power FQ20.....	>8KW
Beam Quality	M ² < 2
Fiber Length FQ10.....	5 Meters (16 ft) Std.
Fiber Length FQ20.....	3 Meters (9.8 ft) Std.
Optical Isolator FQ10	Standard
Optical Isolator FQ20	Standard
Positioning	Visible Red Diode Light Input Power
Input Power Selectable.....	115VAC/230VAC, 50/60HZ
Cooling.....	Air Cooled, Fan/Filter (no water cooling required)
Operating Temperature Range.....	18° to 35° C Non-Condensing (65° F to 90° F)



Model 6 Controller



Customized Part Handling Options Available



Features DATA MATRIX™ 2-D Code Marking Capability — Meets all Department of Defense UID Requirements



F-SERIES FQ10, FQ20 and FQ20DH Fiber Lasers

Powered by 110/230VAC with no water-cooling requirements, these F-Series units are extremely dependable over a long life.

"All of your employees seem to be willing and able to give that "little bit extra" to make everything go right. The laser marking equipment you have supplied to us thus far has been totally reliable and continues to perform flawlessly, helping Federal-Mogul Corporation reduce costs as it continues to improve product quality. I look forward to a continued relationship with the people I consider my "friends" at Telesis Technologies."

Best Regards,
Ed Reinemeyer
Process Engineer,
Federal-Mogul Corporation



FQ10 Marking Head dimensions for 100mm lens.....	51.0(L) x 12.7 (W) x 14.0cm (H) (20.1" x 5.0" x 5.5")
FQ10 Mounting Weight.....	6.82 kg (15 lbs.)
FQ20 Marking Head Dimensions for 100mm lens.....	51.0(L) x 12.7 (W) x 14.0cm (H) (20.1" x 5.0" x 5.5")
FQ20 Mounting Weight.....	6.82 kg (15 lbs.)
Model 6 Controller Dimensions.....	42.5 (W) x 13.7 (H) x 50.8cm (D) (16.7" x 5.4" x 20.0")

LENS CONFIGURATIONS AVAILABLE

FOCAL LENGTH	MARKING FIELD
100mm	65mm X 65mm (2.56" X 2.56")
160mm	90mm X 90mm (3.54" X 3.54")
163mm	110mm X 110mm (4.33" X 4.33")
254mm	175mm X 175mm (6.89" X 6.89")
330mm	230mm X 230mm (9.06" X 9.06")
350mm	250mm X 250mm (9.84" X 9.84")
420mm	290mm X 290mm (11.42" X 11.42")

SOFTWARE

Software	MERLIN® II LS (see page 15)
Operating System	Windows® 2000, Windows XP, or Windows Vista™
Desktop PC (Std), Optional Laptop	
Communication Interface	Serial, TCP/IP, I/O

The FQ20DH features an advanced, dual-scan marking head that is based on our successful Pulsed-Fiber Laser platform. Capable of extremely high-speed, high quality, simultaneous, duplicate marking on two surfaces, it offers lower operation costs along with increased production and handling efficiencies. In addition to marking, the FQ20DH is an excellent choice for scribing, trimming and a variety of material processing applications.

