

The F-Series FQ20D from TELESIS features an advanced, dual-scan marking head, 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 FQ20D is an excellent choice for scribing, trimming and a variety of material processing applications.



**GENERAL SPECIFICATIONS**

Compliance ..... CDRH, CE, UID  
 Wavelength ..... 1,060 nm (+/-10nm)  
 Laser Type ..... ytterbium doped Q-Switched fiber laser  
 Q-Switch Frequency ..... 20KHZ to 80KHZ  
 Average power per scan head ..... 5 Watts (combined 10Watts)  
 Beam quality ..... M2 < 2  
 Long term power stability ..... less than ± 5%  
 Positioning ..... two red diodes  
 Fiber optic cable length ..... 3 meters (9.8 feet)  
 Cooling ..... Air cooled  
 Max. Power Consumption ..... less than 550W  
 Operating Range ..... 10° to 35°C (50° to 95°F)  
 Humidity ..... 10% to 85% non-condensing  
 Expected MTTF (Diode) ..... Greater than 100,000 hours  
 Shipping weight (for 160mm lenses) ..... approx. 35 kg (77 lbs)

**Laser Controller Specifications**

Dimensions (W x H x L) ..... 16.74" x 5.25" x 20.0"  
 Weight ..... approx. 15.5 kg (34 lbs)  
 Input Power (selectable) ..... 115/230VAC 50/60 Hz

**FEATURES**

- Reliable, maintenance free performance
- Compact size and modular construction
- Requires a fraction of normal power consumption for optimum performance
- Exceptional beam quality and stable output power
- Active AO Q-Switching
- Output laser beam delivery via fiber optic cable
- Sealed marking head prevents dust penetration into the optical compartment
- Two scan head configuration for doubling marking throughout
- Two visible "red light" diodes for dry run / positioning for each scan head
- Air cooled
- Display monitors the actual laser power
- Display monitors worked hours
- Standard 115/230VAC wall plug operation
- DoD-compliant Unique Identification (UID) marking

**LASER MARKING HEAD SPECIFICATIONS**

Dimensions (L x W x H) ..... 20.0" x 13.9" x 5.486"  
 Mounting Weight (with 160mm lenses) ..... approx. 16 kg (35lbs)  
 Mounting Holes ..... six M5-0.8



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