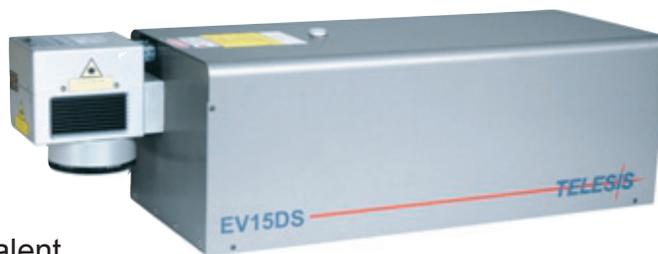# E-SERIES - EV10SDS, EV15DS
Diode-Pumped Solid State Laser

The Telesis EV10SDS and EV15DS markers are based on advanced Q-Switched, fiber-coupled diode end-pumped Nd:YVO4 laser technology. The outstanding beam quality of these lasers makes them superior to all other markers of equivalent power for high resolution and high speed marking. Additionally, the shorter pulse widths and high peak powers of this marker makes it the preferred choice for challenging marking applications on silicon or heat sensitive materials such as plastics or thin foils. The smaller spot size and extended depth of focus allows these lasers to mark much more highly irregular or curved surfaces than fiber lasers. They are air-cooled and an excellent choice for high speed Marking-On-the-Fly applications as well. With expected pump diode lifetimes of over 100,000 hours for the EV15DS and 200,000 hours for the EV10SDS, system down time is dramatically reduced. Diode replacement can be completed quickly and the fiber coupled diode design eliminates the need to re-align the laser marker. The marker's modular design, housing the diode in the laser controller, eliminates a large heat source from the laser insuring maximum stability as well as the need for water cooling.

LASER MARKER SPECIFICATIONS

Compliance...CDRH, CE
Wavelength...1,064 nm
Laser Type..........................Fiber-coupled diode end-pumped,
               Q-switched Nd:YVO4 laser
Laser beam mode..TEM_{oo}
CW Power.........................EV10SDS -- 10 W, EV15DS -- 15 W
Positioning...Visible Red Diode Light
Optical Fiber Length..............1.75 meters (5.74 feet) standard
               4.75 meters (15.58 feet) optional
Cooling................................Air-cooled, active thermo-electric
               (no water cooling required)
Operating Temperature Range..............................18° to 35°C
               (65° to 95°F)
Humidity.....................................10% to 85% Non-condensing
Mounting Weight................................Approx. 20 kg (45 lbs.)
EV10SDS Marketing Head Dimensions ....
               79.5(L) x 16.6(W) x 17.6 cm(H)
               (31.3″ x 6.6″ x 6.9″)
 EV15DS Marketing Head Dimensions ....
               68.0(L) x 16.2 (W) x 19.1 cm(H)
               (26.8″ x 6.4″ x 7.5″)
Controller Dimensions...
               42(W) x 14(H) x 50 cm(L)
               (16.8″ x 5.5″ x 19.2″)
Input Power .... 115/230 VAC 50/60 Hz
Max. Power Consumption................................Less than 500 W

STANDARD LENS CONFIGURATIONS

FOCAL LENGTH	MARKING FIELD
100 mm	65 mm X 65 mm (2.56″ X 2.56″)
160 mm	110 mm X 110 mm (4.33″ X 4.33″)
254 mm	175 mm X 175 mm (6.88″ X 6.88″)
330 mm	230 mm X 230 mm (9.06″ X 9.06″)
350 mm	250 mm X 250 mm (9.84″ X 9.84″)
420 mm	290 mm X 290 mm (11.42″ X 11.42″)

SOFTWARE

Software...................................**MERLIN® II LS** (see page 23)
Operating System.....................Windows® 2000, Windows XP,
               Windows Vista™, or Windows® 7
               with Desktop PC (Std), Optional Laptop
Communication Interface...........................Serial, TCP/IP, I/O

Model E10 Series Controller

QR Code Web Page Product Link

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