# E-Series - EV15DS
# Diode-Pumped Solid State Laser



The TELESIS EV15DS marker is based on advanced Q-Switched, fiber-coupled diode end-pumped Nd:YVO$_4$ laser technology. The outstanding beam quality of this laser 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 an expected pump diode MTTF of over 250,000 hours for the EV15DS and 500,000 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..................................................................1,064nm
Laser Type..........................Fiber-coupled diode end-pumped,
              Q-switched Nd:YVO$_4$ laser
Laser beam mode...........................................................TEM$_{oo}$
Average Power (EV15DS)...............................Up to 15W
Average Power (EV10DS)...............................Up to 10W
Positioning.........................................Visible Red Diode Light
Optical Fiber Length..............1.75 meters (5.74 feet) standard
              4.75 meters (15.58 feet) optional
Mounting Weight.........................................Approx. 20kg (45lbs.)
EV10SDS Marketing Head Dimensions .................................
              79.5(L) x 16.6(W) x 17.2cm(H)
              (31.3˝ x 6.6˝ x 6.8˝)
EV15DS Marketing Head Dimensions .................................
              71.9(L) x 16.2 (W) x 19.1cm(H)
              (28.3˝ x 6.4˝ x 7.5˝)
Controller Dimensions.................................................................
              42.7(W) x 14.0(H) x 48.8cm(L)
              (16.8˝ x 5.5˝ x 19.2˝)
Input Power ............................................. 115/230VAC 50/60Hz
Max. Power Consumption.................................Less than 500W
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





## STANDARD LENS CONFIGURATIONS

| FOCAL LENGTH | MARKING FIELD |
|---|---|
| 100mm | 65mm X 65mm (2.56˝ X 2.56˝) |
| 160mm | 90mm X 90mm (3.54˝ X 3.54˝) |
| 254mm | 175mm X 175mm (6.88˝ X 6.88˝) |
| 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 26)
Operating System......................Windows® 2000, Windows XP,
       Windows Vista™, Windows® 7, or Windows® 8
     with Optional Embedded, Desktop or Rackmount PC
Communication Interface...........................Serial, TCP/IP, I/O





QR Code Web Page Product Link

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

Model E10 Series Controller