

<u>MK-85</u>

Diode-pumped passively Q-switched erbium glass laser transmitter

SPECIFICATIONS

Wavelength	1535 nm
Laser Energy	2 mJ minimum 4 mJ nominal
Pulse Repetition Rate	1 to 10 Hz
Laser Pulse Width	6 ns nominal
Raw Beam Diameter	0.6 mm nominal
Beam Divergence (D4 σ method)	4 mrad nominal
Average Radial Beam Wander	≤ 0.5 mrad
Beam Profile/Quality	Guassian in X and Y (far field)
Laser Head Size	1.67 H x 3.06 W x 6.20 L cm (0.66 H x 1.20 W x 2.44 L in)
Laser Head Weight	133 g nominal
Laser Operational Temperature	-30°C to +50°C (-22°F to +122°F)
Laser Storage Temperature	-55°C to +90°C dewpoint kept ≤ -20°C (-22°F to +194°F dewpoint kept ≤ -4°F)
Electrical Requirements	4 V, 100 A, < 3 ms
Conductive Cooling Requirements	< 12 W
Integrated Photodiode	Yes
Laser Classification	≤ 2 Hz: Class 1 > 2 Hz: Class 3R ≤ 6 Hz: Class 3B



The MK-85 is a 1.54 μ m diodepumped passively q-switched erbium glass laser transmitter with integrated photodiode.

ABOUT L3HARRIS

L3Harris is an ISO 9001:2015-certified full-service manufacturer of miniature eye-safe diode-pumped 1.54 µm erbium glass laser transmitters and specialty laser and filter glass material. These items are used in applications including laser range-finding, range gate imaging, Light Detection and Ranging (LIDAR) and Laser-Induced Breakdown Spectroscopy (LIBS).

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