

GLTD III Ground Laser Target Designator



The Ground Laser Target Designator (GLTD) II performed with distinction in both Operation Enduring Freedom and Operation Iraqi Freedom. This rugged and reliable tactical laser was used by Special Operations Forces, Joint Terminal Attack Controllers, and Forward Air Controllers under difficult wartime conditions to designate high value and time sensitive targets for precision munitions engagement in both Afghanistan and Iraq. The results significantly contributed to coalition success in both conflicts and allowed quick and precise destruction of enemy forces with minimal collateral damage.

In order to make this proven product even more effective for the warfighter, Northrop Grumman Laser Systems developed an advanced version that is smaller, lighter and significantly more energy efficient, the GLTD III. The GLTD III replaces the power hungry, flashlamp-pumped laser in the GLTD II with a state-of-the-art, athermal, diode-pumped laser that requires no active cooling system. The result is a silent running, more efficient laser designator with a longer mean time between failure.

Use of athermal technology eliminates the major drawbacks of most diode-pumped laser systems, specifically warm-up time and standby power consumption. The GLTD III significantly reduces the number of batteries required for operation, allowing operators to carry additional essential items when performing terminal attack control missions.

The GLTD III is a significant improvement in laser technology and provides the warfighter a smaller, lighter, quieter, more reliable, and more efficient laser designator.

GLTD III Benefits:

- Less weight, fewer electronics less complexity
- Significantly longer battery life
- Smaller size and volume
- Silent operation
- Increased system reliability
- Continuous operation at 25° C



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Physical Characteristics

- Size: 11.2 x 13.2 x 5.2 inches (28.5 x 33.6 x 13.1 centimeters)
- Weight: 11.3 lbs (5.2 kg)
- Volume: 435 cubic inches (7,100 cubic cm)
- Operating Temperature: -32° to $+49^{\circ}$ C (-30° F to $+120^{\circ}$ F)
- NATO: Three (3) mounting rails for night vision devices
- Tripod Interface: ¼" -20 tapped hole
- Tilted Eyepiece: 45 degrees
- Operation Manual and Remote Control
- Battery Power: 24 VDC Lithium or re-chargeable NiCad
- Vehicle Power: 24 VDC (MIL-STD-1275)

Performance

- Laser Type: Nd YAG
- Wavelength: 1.064 im
- Pulse Energy: 80 millijoules
- Pulse-to-Pulse Stability: 15%
- Beam Divergence: 0.3 mrad
- Boresight Retention: 0.3 mrad
- Modes: Range and Mark (Designate)

Ranging

- Ranging: 200 to 19995 meters (± 1 meter)
- Range Counter Logic: Selectable First/Last
- Range Discrimination: 35 meters
- Display: 5 Digit Red LED in Eyepiece

<u>GLTD III</u> Part Number: 61005205-19

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Sighting Optics

- Power: 10X
- Field of View:

Horizontal: 5 Degrees Vertical: 4.4 Degrees

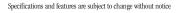
- Reticle: 0.2 mrad open cross
- Diopter Adjustments: +2 to -6
- Exit Pupil: 5 mm Diameter (nominal)
- Eye Relief: 15 mm

Mark (Designate)

- Marking: Target in Excess of 10 km
- Pulse Repetition Frequency: Band I / Band II
- User Programmable PRF Codes
- PRF Coding: Selected by Three Pushbuttons

I/O and Data Display

- Data Input and Output: RS-422 Compatible Full Duplex DATA OUTPUT
- Range 5 Digit Display DATA INPUT
- Azimuth: 0000 to 6399 mils or 0 to 359.9 degrees
- Elevation:
 -400 to +400 mils or
 -22.5 to +22.5 degrees





DS-428-MRB-0709

System Specifications