



## DART45

Compact Dual Wavelength Laser Designator and Rangefinder Module



DART45 is IAI/TAMAM's new Laser Designator and Rangefinder module. The lightweight, compact DART45 is designed to fit easily into small systems or mini and micro payloads, for airborne, ground and maritime applications.

DART45 encompasses state-of-the-art technologies in laser designator design:

- Dual wavelength:
  - Designation and range finding mode
  - Eye-safe range finding mode
- Diode pumped
- Conductive cooling
- Compact size
- Low weight
- Very low divergence
- Compatible with all laser guided munitions, including US and NATO munitions
- Flexible adaptation to customer systems

### Applications

- Targeting payloads
- Static and ground vehicle targeting sights
- Targeting hand held sights

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#### TAMAM's Product Line

TAMAM Division of the Systems Missiles and Space Group of Israel Aerospace Industries (IAI) is a proven supplier of advanced, state of the art electro-optical (EO) stabilized payloads for a variety of applications. These include the LOROS, the MOSP family, the POP, the MiniPOP and the ultra light MicroPOP. Tamam also manufactures a variety of thermal imagers and lasers.

#### DART45 General Description

The DART45 innovative design enables high performance in a lightweight, small package. Its design is based on diode pumped Nd:YAG laser, having an OPO (Optical Parametric Oscillator) based wavelength converter for the eye-safe wavelength. Range finding is enabled in both wavelengths.

#### DART45 Technical Specifications

| Parameters                | Value                   | Remarks                    |
|---------------------------|-------------------------|----------------------------|
| <b>General</b>            |                         |                            |
| Type                      | Diode Pumped, Dual Mode | Designator & Range Finder  |
| Dimensions                | 12cm X 5cm X 5cm        | Main Module                |
| Weight                    | ≈1.2kg                  |                            |
| <b>Laser designator</b>   |                         |                            |
| Wavelength                | 1.06μm                  | Designator & Range Finder  |
| Energy per pulse          | 45mJ                    |                            |
| Pulse width               | >10nsec                 |                            |
| Pulse repetition rate     | 8.8 to 20pps            | Programmable               |
| Divergence                | 220μRad                 |                            |
| <b>Laser range finder</b> |                         |                            |
| Wavelength                | 1.57μm                  |                            |
| Energy per pulse          | > 7.5mJ                 | Eye-safe mode              |
| Pulse repetition rate     | 10pps (default)         | Programmable (8.8 - 20pps) |
| Divergence                | < 700μRad               | Eye-safe mode              |



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