

ToT OF LONG RANGE OPTICAL TARGET LOCATER 1500 (OTL1500)

LASTEC has developed Optical Target Locater for detection and location of commonly used active and passive surveillance devices. It provides an important tool for detection of camouflaged passive or active surveillance device like optical day sight or sniper telescope, Night Vision Device, CCD cameras, reticle binoculars or electronic sensors as in Laser Range Finder, during day and night operations in urban scenarios.

The developed device, 'Long Range Optical Target Locater 1500 (OTL1500) has an operational range of the order of 1500m in day/ night operations.

OTL1500 comprises of a SWIR laser source with appropriate divergence control and a customized optical assembly with a SWIR sensor having high sensitivity at the wavelength of operation. It operates on Li ion rechargeable batteries and is ergonomically designed as a tripod mounted equipment. The optics and the system electronics are highly customized for contrast limited imaging so that the detected target appears as a bright pulsating spot on the background scene that can be viewed through the biocular and simultaneously on an external display. In addition, OTL1500 has the capability to compute and display the own coordinates as well as coordinates of the detected optical threat.

OTL 1500 finds application with military and Para military forces. It can be used for active scanning and monitoring of specific areas, detection of pointed optics viz., snipers, area sanitization as well as border security.

The equipment has been extensively demonstrated to several potential users. Security agencies responsible for homeland as well as border security have shown keen interest in this device. OTL1500 has undergone extensive user evaluation with Indian Army, and other security forces and it is short listed for procurement.

Although a few commercial systems for detection of optical devices, operating in NIR wavelength band are available internationally but following salient features of the developed device make it unique for the mentioned application:

- a. Laser invisible to all prevalent surveillance devices**
- b. Improved image quality**
- c. Target locating module for providing target coordinates**
- d. Laser 'On' at user's discretion for saving power**
- e. Audio buzzer on target confirmation.**
- f. In built cartridge type field replaceable battery**
- g. Live video streaming at a remote location**
- h. Video recording feature.**
- i. Remote operation capability**
- j. Mostly maintenance free operation**

