LASTEC has developed an Optical Target Locator for detection and location of commonly used active and passive surveillance devices. It provides an important tool for detection of camouflage passive or active surveillance devices like optical day sight or sniper telescope, Night Vision Device, CCD cameras or electronic sensors as in Laser Range Finder, binoculars during day and night operations in urban scenarios. The Short Range Optical Target Locator (OTL300) developed by LASTEC has an operational range of 300m. After several interaction with users, this equipment (OTL300) has now been upgraded to OTL600 which has several advanced features and operational range upgrade to 600m.

OTL600 comprises of a NIR laser source with appropriate divergence control and a customized optical assembly with a NIR sensor having high sensitivity at the wavelength of operation. It operates on Li ion rechargeable batteries and is ergonomically designed as a handheld equipment and tripod mounting capability. The optics and system electronics are highly customized for contrast limited imaging so that the detected target appears as a bright pulsating spot on the background scene on a micro display screen that can be viewed through the monocular.

OTL600 finds application with military and para-military forces. It can be used for active scanning and monitoring of specific areas, VIP security and detection of pointed optics viz., snipers and area sanitization.

The equipment has been extensively demonstrated to several potential users. Various agencies responsible for homeland security have shown keen interest in this device. OTL600 has undergone extensive user evaluation with Indian Army, and para-military forces and is shortlisted for procurement.

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

1. Improved image quality
2. Laser 'On' at user's discretion for saving power
3. Coloured target marking and clutter rejection modes for confirmation of target detection
4. Audio buzzer on target confirmation.
5. In-built cartridge type field replaceable battery for powering the device
6. Capability of live video streaming at a remote location
7. Video recording feature.
8. Mostly maintenance free operation
9. Networking and remote operation capability

Photograph of developed OTL600