



SYSTEM CONTROLS
Versatility is Reality

System Controls Technology Solutions Pvt Ltd



Products:

- Stabilized Platforms
- Gimbals
- Positioners
- Pointing Systems
- Pan Tilt Units
- Radar Subsystems
- Electro-Optical Systems
- Opto-Mechanical Systems
- Motion Controls Systems
- Test Benches

Services:

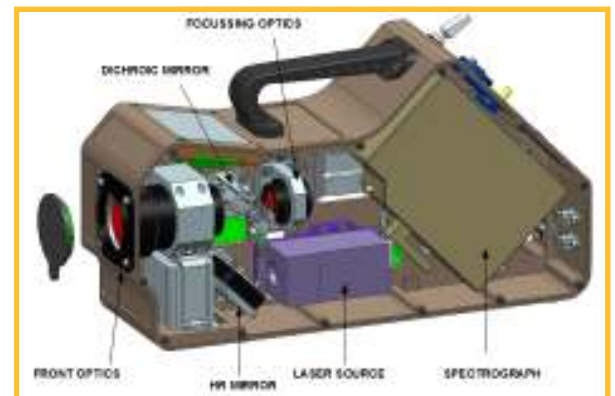
- Engineering Design & Development
- Electronic Testing & Assembly
- CNC Machining & Manufacturing
- System Integration

Hand Held Stand-off Explosive Identification System (HHEI)

HHEI - Hand Held Explosive Identification System for identification of different types of explosives from a standoff distance based on Raman spectroscopy technique.

It is a laser based system which illuminates the target materials with laser and identifies the explosive/ chemical using the back scattered signals. This is a complete portable stand-off identification system with built-in hardware and software for screening of explosives and chemicals.

The hardware comprises of an opto-electronic system housed in a portable mechanical assembly.



System Specification

S No.	PARAMETER	SPECIFICATIONS
1	Operational Principle	Raman scattering
2	Stand-off range	30cm (for systems with weight of ~4.5 kg)
3	Limit of detection (LoD)	~10 mg
4	Detection time	< 10 sec
5	Laser wavelength	532 nm
6	Optics aperture	50 mm
7	Laser power	400 mW (Variable)
8	Laser linewidth	0.1 nm
9	Spectral range	530 –640 nm
10	Spectral resolution	5-10 cm ⁻¹
11	Library	50 Explosives/ precursors

