

## SHARP

### Lightweight Multi Sensor Observation system

The **SHARP** is a compact Day/Night observation system for small light

A/C, helicopters, balloons, ground vehicles

The **SHARP** is a new light weight payload with long range cameras.

The payload turret is flexible for mounting sensors or cameras defined by the customer.

640 x 512 Resolution

The **SHARP** is easily integrated onto a wide variety of carrying vehicles due to its flexible configuration, making it suitable for most airborne and ground requirements.

The **SHARP** has built-in automatic target tracker and image enhancement algorithm.

The **SHARP** has a wide range of communication interfaces to the host vehicle including RS-422, ARINC 429 (optional) and MIL-STD-1553

The **SHARP** is operated by a ruggedized Control Unit (CU) with a thumb LOS control stick and all control switches specially designed for rough environment conditions and for best human comfort.

The system could be supplied with a ruggedized video display (8.4" 10.4" or 15").



### Applications

- Observation - Day & Night.
- Law Enforcement.
- Search & Rescue.
- Homeland Security
- Force Protection

### Platforms

- Helicopters.
- Light Aircraft.
- Aerostats / Balloons.
- Ground vehicles

### Options

Laser Pointer.

Built-in Inertial Navigation System (INS) on Line of Sight (LOS).

Flexibility and free volume for other system defined by the customer.

Display Unit.

DVR.



**Performance Specifications**

**Electro-Mechanical**

Type:	3 Gimbal Gyro Stabilized System:
Stability Level:	Better than 35 $\mu$ Rad RMS (including at the NADIR)
Field of Regard:	Azimuth: 360° x n (continuous) Elevation: +30° to -105°
Angular Velocity:	Azimuth: 60° / Sec (max) Elevation: 60° / Sec (max)

**FLIR Sensor**

Spectral Range:	3.0 - 5.0 $\mu$ m
Detector:	FPA 640 x 512 pixels InSb
Lens:	Continuous Optical Zoom x15
Field of View:	Widest                      Narrowest                      x3 Elect. Zoom 25.5° x 19.2° to 1.7° x 1.3° to 0.6° x 0.45°

Cooler: Closed cycle cooler

**Daylight Channel**

Camera:	High Resolution Color CCD
Lens:	Continuous Optical Zoom x 22
FOV:	Widest                      Narrowest                      x3 Elect. Zoom 40° x 28.5° to 1.8° x 1.4° to 0.6° x 0.45°

**Laser Range Finder (optional)**

Type:	Eye-safe, Class 1
Wavelength:	1.55 $\mu$ m
Range:	10 – 4,500 m

Automatic Video Tracker  
Video Processing: Local AGC, Image Enhancement, Sharpness, Continuous Electronic Zoom and more, PIP.

**Physical Characteristics**

Weight (Turret):	10 Kg (22Lb)
Weight (PEB):	1.5 Kg (3.3Lb)
Dimensions (Turret):	240 mm(d) x 328 mm(h)
Dimensions (PEB):	200 mm x 210mm x 61mm

**Environmental Conditions**

Temperature : -20°C to +50 °C

**Electrical Interface**

Voltage:	+28 VDC
Power Consumption:	70 Watt (Nominal)
Video Output:	2 Channels simultaneously NTSC or PAL
Communication:	RS-422 Serial (MIL-STD 1553, ARINC 429 optional)

