

SABRE SAFETY LTD

DATA SHEET



SOLOvision - SPECIFICATION

The **SOLOvision** thermal imaging camera is designed to be used as:

1. An independent unit held and viewed similarly to a pair of binoculars, the strap allowing it to be hung around the neck.
2. A unit which interfaces and seals against the visor of most types of breathing apparatus face masks to provide hands-free use without smoke interference.
3. The **SOLOvision** thermal imaging camera is designed primarily as an aid for fire-fighters to facilitate "hands-free" viewing through smoke, enhanced capability for detecting sources of heat and fire, as well as to greatly improve the speed of detecting life forms in peril.
 - The camera may also be used in other applications such as:
 - Search and Rescue at sea [from the air or sea].
 - Heat detection in industrial applications.
 - Covert crime detection.
 - Military security applications.
 - Camera Unit Assembly
 - Camera can be used as strap-on hands-free thermal imaging camera, or as traditional hand-held unit.
 - Water-proof to IP68-1m (immersion to 1 metre of water).
 - Minimum operation time from one fully-charged battery pack is 2 hours.
 - Each camera assembly is supplied with 2 battery packs as standard.
 - Battery charge indicator, super-imposed on to the lower part of the viewing screen, reads the "gas gauge" from the battery pack for accurate status. Each "bar" represents approximately 20 minutes of operation.
 - Fully adjustable elastic neck strap woven from **Nomex** fabric.
 - 100mm (short) waterproof and vibration proof connecting cable supplied together with neck-strap mounted battery pouch (woven from **Nomex** fabric).
 - 500mm (long) waterproof and vibration proof connecting cable supplied for optional battery location as required.
 - Camera Shell

- Manufactured from biaxial woven fibreglass fabric, bonded with fire retardant resin. Finished in Class 1 fire retardant polyurethane high gloss paint.
- Will withstand flash over of 1000°C for 10 seconds.
- Stainless steel neck-strap fittings are internally bonded and laminated.
- Lip seal around viewing window ensures a smoke-tight interface with breathing apparatus face mask/visor.
- Intelligent Battery
 - Nickel metal hydride (NiMH) battery. 2 supplied with each **SOLOvision**. Will last approx. 2.5 hours each per charge.
 - Loading is achieved externally to the vision housing, on the neck strap of the vision.
 - Integrated electronics allows the battery to self-protect via thermistors and self-resettable current overload fuse.
 - Built-in "Gas Gauge" displaying accurate battery charge status on the camera and battery charger.
 - Built-in charge control will rapidly charge to 80% capacity within 90 minutes then automatically switch to lower rate charging modes such that permanent charging is permissible without damage to the battery pack.
 - Integrated electronic on/off switch giving remote switching at the camera.
 - Regulated 3.6v DC output via DC-DC power converter giving fixed output over full battery range.
 - Automatic low power "switch off" to protect the battery pack from over discharge.