



LION ADVANCE

Lightweight Infrared Observation Nightsight



- Unique image enhancement techniques
- Auto focus and image stabilisation

DESCRIPTION

THALES OPTRONICS B.V.'s latest development in thermal imagers, the LION ADVANCE, is a unique handheld, lightweight, uncooled thermal imaging viewer, for day and night observations. Spectral wavelength used is the 8-12 μm band. LION ADVANCE traces its pedigree to the successful LION of which many units have been sold worldwide in a lot of countries.

FUNCTION

The LION ADVANCE has been designed in accordance with the latest military specifications. This thermal uncooled binocular is field-proven as an observation sight for infantry soldiers, special forces and border police, security and peace-keeping operations during day and night, including conditions of poor visibility. The LION ADVANCE provides active and passive observation for detection, recognition and identification in conditions from total darkness to full sunlight, using the thermal radiation emitted by all objects.

UNIQUE DESIGN

The LION ADVANCE is compact and lightweight because of its non-corrosive composite housing. Its unique shape, especially adapted to handheld use, fits snugly in the user's hand. The LION ADVANCE is a binocular system; the user looks with both eyes at a mini display.

UNCOOLED

LION ADVANCE makes use of the latest third generation state-of-the-art uncooled microbolometer detector array. Switch it on and within a few seconds, the user has a stable and clear thermal image. This detector technology keeps weight and power consumption to a very minimum resulting in many hours of autonomous operating time on one set of batteries, very attractive MTBF values and low cost of ownership.

EXCEPTIONAL PERFORMANCE

The LION ADVANCE offers exceptional performance, giving the user an excellent image quality, day and night, through smoke and fog. LION ADVANCE has been fielded in several countries.

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FEATURES

- Handheld
- Uncooled
- Lightweight
- Binocular viewer
- Low life cycle costs
- High MTBF
- Excellent image quality
- Good range performance
- Auto gain/offset control
- Short start-up time
- Electronic zoom
- Inaudible
- No cold-spot signature
- Remote control, power supply and viewing
- Internal battery supply
- Use of standard C-size batteries or rechargeable Li-Ion battery sticks
- Low power consumption

LION CONFIGURATION AND ACCESSOIRES

Remote control & supply box, viewer, external cables, power adapter, rechargeable Li-Ion battery sticks and charger, tripod adapter and versatile tripod.

LONG ENDURANCE OBSERVATIONS

For lengthy and special observation tasks, LION ADVANCE may be mounted on a tripod, and connected to a remote control unit that directs and monitors all the imager's operations. LION ADVANCE produces a standard TV image that may be viewed on an external monitor, and recorded on a video tape for viewing and evaluation at a later time. In addition, LION ADVANCE can be connected to an external power supply, enabling continuous observation.

TECHNICAL DATA

Optical	
Spectral range	8 - 12 µm
Field of view (hor. X vert.) FOV	8° x 6°
Focus range	8.5 m to ∞ (auto/manual)
NETD	<100 mK
Unique image enhancement techniques and image stabilisation	
Physical	
Weight (excl. batteries)	1.8 kg
Dimensions (H x W x D in cm)	10 x 20 x 24
Electronics	
Display type	Binocular, miniature flat panel
Start-up time	17 sec.
Acoustic noise	Inaudible
Interface options	Remote control RS422 External video, CCIR/RS170. Ext. power adapter, 24 V or 12 V
Power consumption	<6 W
Internal batteries	6 C-cells or 2 rechargeable Li-Ion battery sticks
Battery type	Primary Lithium, Alkaline, Rechargeable NiCD, NiMH, Li-Ion
Operating time	20 hours typical (depending on mission profile and battery type)
Reticle	Aiming mark
Environmentals	
Compliant with	MIL-STD-810E
Operating temperature	-32° to +50° C
Storage temperature	-40° to +70° C

