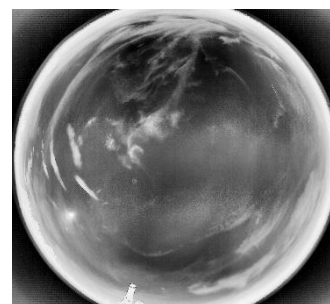


PeriSight Top Attack

High Performance Zenithal Situation Awareness System (SAS) for Land Vehicles

Key features

- ◆ Compact optronic modules for night and day vision enhancement, even in harsh conditions
- ◆ Modular & scalable solution
- ◆ Thermal sensor LYNRED ATTO: 1280x1024 @ 12μm
- ◆ UAV automatic detection
- ◆ Sky Watcher
- ◆ Low latency
- ◆ Designed and manufactured in France



Thermal image taken with the PeriSight Top Attack thermal mode equipped with a 4.3mm lens

PeriSight Top Attack is a zenithal situation awareness system designed for land vehicles, based on high performance optronic module. Providing 2π steradian zenithal view of the vehicle's surroundings, this equipment assists vehicle squad in detecting threats coming from above (and in particular UAV), improving the safety of the crew.

With a compact design, this embedded system can easily be integrated into any armored vehicle. Based on a scalable architecture, this versatile solution is complementary to other PeriSight systems and can be strategically placed above the vehicle. In addition, the automatic moving target detection algorithm makes it possible to reduce the mental load of the crew and to implement effective countermeasure systems

PeriSight Top Attack complies with military standards, operates in constrained environments, and provides multiple viewing modes such as full image, full resolution and zoom ROI.

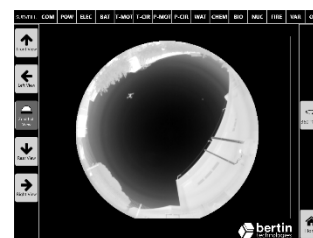
Bertin Winlight offers full integration services. Videos are displayed on a screen, that also serves as the control interface for operating PeriSight Top Attack.



PeriSight Top Attack camera module
extra wide field of view (180°)



PeriSight Top Attack video server module
Automatic moving target detection



PeriSight Top Attack HMI
System configuration
Threat alert

PeriSight Top Attack can be used as a standalone or in conjunction with PeriSight HD or PeriSight Light.

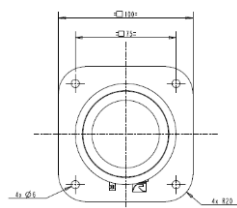
PeriSight Top Attack

SENSORS

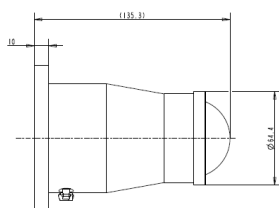
	Thermal channel
Model	LYNRED ATTO1280D-02 (+)
Type	Uncooled microbolometer
Resolution, pixel size	1280 x 1024 Pixels (HD), 12µm
Spectral band	8µm – 12µm (LWIR)

PHYSICAL CHARACTERISTICS

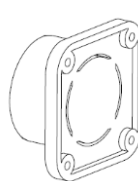
	Weight (kg)	Dimensions (h x L x l) cm	Military standards
Camera module	0,6	65 x 65 x 135	MIL-STD-810-G STANAG 4370 IP68
Video server module	2	81 x 150 x 190	



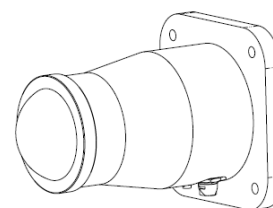
Top view



Side view



Rear view



Three-quarter view

INTERFACES

Video	HD-SDI or USB
Frequency	Up to 25Hz (Low latency) (>9Hz requires a dual-use license delivered by the French government)
Communication	RS 422

ELECTRICAL CHARACTERISTICS

	Camera module	Video Serveur module
Tension	5V DC	7-28V DC
Consomption	3 W	84 W
Display time	few seconds (from power off to on)	1 min (from power off to on)
EMC	Standard AECTP 500 edition E V1	Standard AECTP 500 edition E V1

PeriSight Top Attack

OPERATION & CONTROL

Calibration	Shutterless (factory calibration / no periodic maintenance required)
Camera control	Thermal : Gamma correction Image polarity inversion Contrast enhancement algorithm LUT Regions of Interest for CLHE Histogram equalization Temporal histogram filter Sharpening algorithm Edge enhancement filter Column filter Flattening filter Image state output

ENVIRONMENTAL CHARACTERISTICS

Operating temperature	- 40°C / + 60°C
Storage temperature	- 40°C / + 85° C
Military standards	MIL-STD-810-G / STANAG 4370
Shock resistance	Pre-compliance with the standard STANAG 4370 AECP400 Ed3
Humidity	IP68
Environment	CE, RoHS, REACH

QUALIFIED LENSES

	Thermal
Foc. @ F#	4,3mm@f/1.4
FoV Camera module	180° x 180°
DRI V	450 / 150 / 80
DRI I	210 / 60 / 20
DRI UAV	290 / 100 / 50

The DRIs were calculated using TRM4
DRI (V) = DRI vehicle to NATO standard
DRI (I) = DRI infantry
Unit: meter

