

Night Vision Optics







ACTinBlack® (ACT) is a leading developer and manufacturer specializing in Advanced Night Vision Optics. In addition to producing high-quality Night Vision Equipment, ACT is a recognized researcher in the field of Night Vision Technologies.

Working with the world's leading sub-suppliers as well as recognized experts in Optical and Night Vision research, ACT partners with law enforcement and military to develop premier quality Night Vision products and solutions.

ACT provides high-end products through years of experience and can offer qualified advice and service with a selection of products to fit the clients' needs. Knowing no two customers are the same, ACT provides customer specific solutions within a short reaction time to solve the most difficult of challenges.

Mission Statement

"The team focuses on bringing to life ACTinBlack® night vision solutions, utilizing extensive experience, expertise, and capabilities, whilst following a disciplined and structured set of processes, helping our partners to achieve their mission objectives."



DTNVG® - AVS / 14

	AVS
Magnification	٦x
Lens System	F/1.2
FOV	40°
Range of Focus	0.40
Diopter Adjustment	+2 to
Infrared Illuminator	Yes
IR Indicator	Yes (i
Low Battery Indicator	Yes (i
Power Supply	1 x CF
Environmental Rating	Wate
Battery Life	30 hr
Dimensions	72 x S
Weight	550 g
Standards	MIL-S

AVS x E/1.2 1.40 m to ∞ 1.2 to -6 dpt 2/es (in FOV) 2/es (in FOV) x CR123 Vaterproof 20 m 1.50 hrs 1.72 x 99 x 101 mm 1.50 g MIL-STD-810G 14
1x
F/1.2
40°
0.25 m to ∞
+2 to -6 dpt
Yes
Yes (in FOV)
Yes (in FOV)
1 x CR123
Waterproof 20 m
30 hrs





The DTNVG® goggle AVS / 14 is a lightweight binocular for the professional user with advanced solid-state technology to control all aspects of its operations using lenses compatible with PVS-14 & AVS9 systems. Low profile while folded to the helmet, self-supporting structure while stored and ergonomic design are key aspects of the DTNVG google.

In selecting advanced technology, it allowed an expanded feature set with higher reliability and reduced power consumption to extend mission time. In addition, many features were added to the DTNVG to simplify operations, with individual sideways ON/OFF for each eyepiece and Flip-Up ON/OFF when folded up preventing backsplash on the helmet. To complete the DTNVGs' features it incorporates built-in IR LED for close quarter missions with separate IR-ON indicator and low battery indicator in the field of view.





The DTNVS is the latest development in a line of lightweight binoculars from ACTinBlack. Building on our existing technologies and enhancing our advanced electronics we were able to provide an even more reliable tool for the operator. DTNVS google combines lightweight materials and a low profile while folded to the helmet to reduce neck strain during extended missions. The DTNVS goggle has a full feature set with individual sideways ON/OFF for each eyepiece and Flip-Up ON/OFF when folded up, preventing backsplash on the helmet. To complete the DTNVS's features it incorporates built-in IR LED for close quarter missions with separate IR-ON indicator and low battery indicator in the field of view.

DTNVS

Magnification Lens System FOV Range of Focus Diopter Adjustment Infrared Illuminator IR Indicator Low Battery Indicator **Power Supply Environmental Rating** Battery Life Dimensions Weight Standards

٦x F/1.2 40° 0.25 m to ∞ +2 to -6 dpt Yes Yes (in FOV) Yes (in FOV) 1 x CR123 Waterproof 20 m 30 hrs 76 x 105 x 111 mm 510 g MIL-STD-810G





AVIATION

Magnification Lens System FOV

Range of Focus Diopter Adjustment

Power Supply

Dimensions Weight Standards

AVS9

٦x F/1.2 40°

0.25 m to ∞ +2 to -6 dpt

External PSU via AN/AVS mount and Battery Pack 89 x 116 x 130 mm

550 g

MIL-STD-810G

The AVS9 is a rugged, lightweight night vision binocular for fixed and rotary-wing aviators, the system is offered with various objective lens filter options and various flight helmet-mount configurations all designed to meet individual customer requirements. Incorporating various objective lens filter options such as Class A, B, C, and UK 645 minus-blue filters to suit all types of cockpit lighting, colour displays and HUDs with 25-mm eyerelief eyepieces which easily accommodate eyeglasses.







MTEK

Introducing the FLUX Ballistic helmet the latest in tactical head protection. The FLUX helmet is specifically designed to follow the natural shape of your head to increased comfort and stability, which goes a long way to actively reduce mental and physical fatigue during a mission.

State of the art materials and processing technology are used to manufacture each and every FLUX helmet in the pursuit of the highest performing helmet system available today.

There are no drilled holes or inserts through the FLUX helmet to weaken the underlying ballistic material. Lightweight retaining structures are bonded directly to the outer shell utilizing the proprietary Magpul® M-LOK slots found on your favourite black rifle.

The Fluxliner™ gives the FLUX helmet a plush, custom fit with superior stability to your old helmet.

Depending on your mission needs, a Flux Carbon helmet is available for training when ballistic protection is not required.







PVS-7

Magnification lx Lens System 26

Lens System 26mm, F/1.2 FOV 40°

 $\begin{array}{ll} \mbox{Range of Focus} & \mbox{0.25 m to} \; \infty \\ \mbox{Diopter Adjustment} & \mbox{+2 to -6 dpt} \end{array}$

Infrared Illuminator Yes
IR Indicator Yes (in FOV)

Low Battery Indicator Yes (in FOV)
Power Supply 2x AA

Environmental Rating 1m for 30 minutes

Battery Life 40 hrs

Dimensions 148 x 79 x 155 mm

Weight 680 g

Our PVS-7 is completely ITAR free. The PVS-7 is perfect for observation and surveillance and can be head-mounted, helmet-mounted or just handheld. Utilizing one tube it is extremely cost efficient and adding magnification lenses can significantly increase the devices observation range.

PVS-14

Magnification 1x
Lens System 26mm, F/1.2
FOV 40°
Range of Focus 0.25 m to ∞
Diopter Adjustment +2 to -6 dpt
Controls Direct
Infrared Illuminator Yes
IR Indicator Yes (in FOV)

Low Battery Indicator Yes (in FOV)
Power Supply 1x AA

Environmental Rating 1m for 30 minutes
Battery Life 40 hrs

Dimensions 104 x 60 x 50 mm

Weight 335 g

Our PVS-14 is completely ITAR free. A monocular such as the PVS-14 is the most versatile of night vision devices. This PVS-14 is 100% compatible with the AN/PVS-14 used by the US Military for decades.



Advanced Modular System



DTAMS

The DTAMS google is a lightweight binocular that allow the detachment of the lens pods to be converted into two standalone monoculars (STAMS) for force multiplication while retaining the full set of capability seen on our DTNVS google.



STAMS

A full featured monocular compatible with all accessories for PVS14 optics, which can be directly connected to a Dovetail mount. The dovetails are positioned to allow left and right eye operation without the need for a J-Arm. The STAMS monocular includes an IR LED and indicator lights in the field of view, for IR ON and low battery warning.



TRMS 635

TRMS

Detection Range (Human) Width 0.75 m = 1.5 pixels

Detection Range (Vehicle) Width 2.30 m = 1.5 pixels Objective Lens (MF) FOV (HxV) Min. Focus Distance Human Detection Vehicle Detection Dimensions (WxLxH)

Weight (w/o accs)

Model

35 mm 60 mm 17.7° x 13.3° 10.2° x 7.7° 3 m 3 m 1020 m 1760 m 3160 m 5400 m 90 x 190 x 95 mm 90 x 225 x 95 mm 590 g (20.8 oz) 730 g (25.7 oz)

TRMS 660

75 mm 8.3° x 6.6° 9 m 2200 m 6750 m 90 x 230 x 95 mm 875 (30.9 oz) g



The TRMS is a high-resolution thermal device which can be used as a standalone thermal rifle scope or as a clip on thermal scope using 17 micron technology in 640x480 uncooled microbolometer, advanced image processing algorithm and electronic infrastructure combines with high resolution OLED display to provide exceptional images.



TRMS COMMON DATA ACT CONNECT

GENERAL DATA

Sensor Technology : Uncooled Microbolometer
Sensor Resolution : 640 x 480 pixels

Spectral Range : LWIR; 8 µm to 12 µm

Sensor Pitch : 17 µm

Frame Rate : 30 Hz (Optional 60 Hz)

Sensor Sensitivity : <50 mK @f/1.0

Display Type : Colour OLED

Eye Relief

(635,660,675) : «

E-Zoom* : 2x, 3x, 4x, 8x (PiP Mode)

Start-up Time : <5 sec

 Calibration
 : Auto, Semi-Auto, Manual

Working Mode

(635,660,675) : Direct Use / Clip-on Use

ENVIRONMENTAL DATA

Operating Temperature Range:-35°C to +55°CStorage Temperature Range:-40°C to +65°CImmersion:1 m / 30 mins

Recommended Recoil Resistance** : Compatible with 7.62, 5.56, 8.59***

& 12.7*** NATO

ADVANCED FEATURES

Integrated Wi-Fi
Integrated Bluetooth
Laser Range Finder**

: Yes
: Yes
: Yes

 Video Recording
 : Yes (Format: MP4 | Capacity: 120 minutes)

 Image Capturing
 : Yes (Format: JPEG | Capacity: 10000 photos)

2-Axis Angle Indicator : Yes Stadia metric Range Finder : Yes

Continuous E-Zoom :+0.05x (1.00, 1.05, 1.10...)

Reticle : Multiple Reticle Patterns

Reticle Color : Blue, Red, Green, Yellow, White, Black, Auto

Reticle Zeroing : Manual, One Shot, Auto

Zeroing Profile : 10 Profiles
Brightness Adjustment : Yes (Manual)
Contrast Adjustment : Yes (Manual)

Gain Mode : Yes (Low, High, Auto)

Polarity : White-Hot, Black-Hot, multiple colours

Outline Mode : Yes
Zoom Assist (PiP Modu) : Yes

Video Output : Yes (Digital, USB & Analog)

ELECTRONICAL DATA

Battery Type : 2 x 18650 Rechargeable Li-ion

Battery Life**** : 6+ hours

EMC : MIL-STD 461E compatible



^{*} E-Zoom cannot be used in clip-on mode.

^{**} Optional.

Services

Custom Solutions

ACTinBlack® is in a unique position being able to offer customized solutions perfectly covering the needs of our customers. From slight modifications to completely new developments, almost everything is possible.



Training

Effective training is essential when it comes to night vision. Our experienced instructors will guide you through every scenario imaginable. Being prepared for what might happen in the dark can make all the difference. Onsite or remote training at our dedicated sites are available on demand.



Maintenance and Repair

Our team of engineers can look after and maintain your night vision devices. We excel in speed and quality of service with over 15 years of in-house experience. We can get your gear working again with our large stock of spare parts or help to extend the life of your night vision equipment through regular, routine maintenance programs.

Upgrades & Conversions

Housing conversions

Eliminate our housing conversions limitations and design flaws in legacy equipment and provides increased strength and functionality while maintaining 100% backwards compatibility.



AN/AVS systems to DTNVG conversions

Now you can extend the life of your legacy ground or aviation binocular by taking a functioning or non-functioning system and converting the valuable components of IITs and lenses to an advanced lightweight binocular with solid-state technology to control all aspects of its operation.

PVS14 to DTNVG conversions

Bring new capability to your legacy PVS-14 by converting two functioning or non-functioning systems to an advanced lightweight binocular with advanced solid-state technology using lenses compatible with all PVS-14 accessories. Note upgrades of MUM, PVS-15, PVS18 are also possible on request.

Tube upgrades

By upgrading your existing housing with a new image intensifier tube you can give your existing systems extended life. We supply Gen3 tubes from Harder Digital and Harris®, 4G tubes from Photonis®. All our image intensifier tubes are supplied new with original OEM manufacturer image intensifier tube data sheet.





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