



ADVANCED PHOTONICS

Multi-Task Augmented Reality

Heads Up Display

MTAR™-HUD

Millions of Night Vision Devices were manufactured and many are in still service since an Image Intensifier Tube was invented. Now with the help of the MTAR™-HUD most of these devices can be upgraded to enable features they were missing.

## MEET THE FIRST AND ONLY AUGMENTED REALITY MODULE FOR NIGHT VISION

Just for a small cost the MTAR™-HUD supercharges your night vision device by displaying an array of vital readings for maximum situational awareness. Each of these data elements can be displayed or hidden through the device's menu to show an operator only the information he needs at a particular instance. Such user customization reduces the operator's distractions and helps focus on mission objectives.

YOUR PVS-14 WITHOUT  
MTAR™-HUD



YOUR PVS-14 WITH  
MTAR™-HUD



## SMALL IN SIZE. POWERFUL IN EVERYTHING ELSE.

Universal Port for Video  
Streaming and Power

GPS Module, 9-Axis Heads-up-Display

Removable MicroSD  
Card

Thread to insert MTAR into  
PVS-14 body

Full-Size Colour  
OLED Display

PVS-14 Eyepiece Thread

Ergonomic Tactile Keypad

Micro Cam. Lens

Powered by CR123 Battery

Video Recorder Status

Battery Indicator

GPS Coordinates  
Heading (Yaw)

Stadiametric Rangefinder  
and Optional Crosshair

Inclinometer (Roll)

Inclinometer (Pitch)

Date-Time Stamp

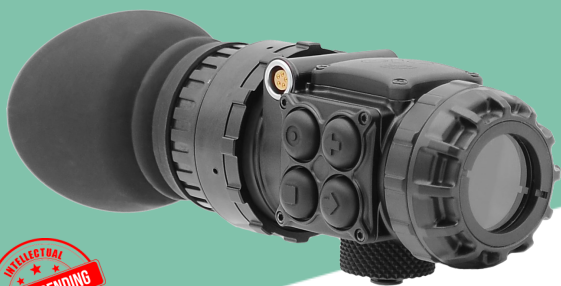


Designed, Developed, Manufactured by GSCI Advanced Photonics

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**MTAR™-HUD**

## KEY FEATURES

- |   |  |
|---|--|
| ⇒ Solitary Use or Together with Most Monocular NVDs         | ⇒ Green Phosphor/White Phosphor Switchover   |
| ⇒ On-Screen Display Brings Data Directly to the User's Eye  | ⇒ Synchronized Compass and GPS               |
| ⇒ Enhances Reconnaissance and Maneuvering Experience        | ⇒ Concurrent Video Recording and Streaming   |
| ⇒ Increases Mobility and Situational Awareness in the Field | ⇒ Compact, Rugged and Lightweight Design     |
| ⇒ Rapid Target Acquisition                                  | ⇒ Handheld, Head-, Helmet-, Weapon-Mountable |

The first of its kind - MTAR™-HUD is a Multi-Task Augmented Reality Heads Up Display with unrivaled functionality.

Stand-alone functionality is just one of the many advantages of the system, however, the real advantage behind the design is to transform a conventional night vision device into a full-scale tactical surveillance, even weapon mountable station. The GPS module allows the operator to identify and display their location, and the unit significantly enhances situational awareness referring to pitch-roll-yaw readings. Recordings can be re-produced and analyzed from the built-in digital video recorder. All of the data is displayed on-screen of a night vision device in an informative, and non-distractive way.

The MTAR™-HUD is the strategic choice when it comes to upgrading the existing fleet of night vision devices of virtually all makes and models, especially the widely popular PVS-14.



Press to play a Performance Video

## ONE MTAR™-HUD. WIDE SPECTRUM OF USE.

### MTAR™-HUD Core



To be used with PVS-14 optics. No Eyepiece is included, or: standalone, including the eyepiece (as shown).

### HMD:



Can be used as a Head Mounted Display for viewing live video feed from any optical-electronic device which has video-out signal.

### Head/Helmet Mountable



The MTAR™-HUD, combined with the AN/PVS-14 unit.  
J-Arm Helmet Mount Attachment required.

### MTAR™-WM



Transfers your Night Vision Monocular into a fully operational Weapon Mountable System, with adjustable cross-hairs and 8 individual reticle profiles.

**Available Variations  
of the MTAR™-HUD**

Model	SKU:	Description
MTAR™-HUD-Core	NVAR-14CU	Core Unit, ready for AN/PVS-14 installation; No eyepiece included
MTAR™-HUD-PU	NVAR-14PU	AN/PVS-14 eyepiece installed; Can be used as a "standalone"
MTAR™-HUD-PD	NVAR-14PD	Compact eyepiece installed; Can be used as a "standalone"

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### TECHNICAL DATA

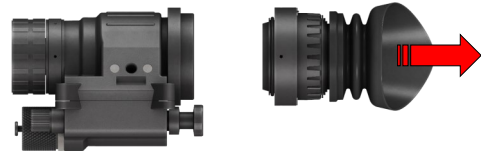
Video Streaming Options	Video-In/Video-Out
Fast Frame Rate	50fps, no lags or delays.
MULTIPHOSPHOR	White Phosphor/Green Phosphor, IIT-independent
Colour Modes	Auto, Full Colour, Grayscale, WP/GP
Compass	Yes: Magnetic and Gyro-Compass
GPS	Yes: Degrees-Minutes-Seconds, Speed Reading
Stow Safety Feature	Yes
Stadiametric Rangefinder	Yes
Auto Power Off	Yes, Programmable
Internal Display	0.6-Inch Diagonal, AMOLED, Colour 800x600
Brightness Control	Manual
Sensitivity	Automatic/Manual
Memory	32GB MicroSD removable card.
Power Source	1pc CR123, battery not included
External Power Port	4VDC .. 15VDC
Battery Life	Up to 2.5 Hours with CR123 Battery
Dimensions	70x50x58mm
Mass	<135 grams
Operating Temperature	-35°C .. +60°C
Storage Temperature	-40°C .. +70°C
Mechanical and Optical Fitting	Standard AN/PVS-14 compatible
Immersion	IP67, purging ready
Environmental	MIL-STD-810G

No special tools or skills are necessary to connect the MTAR™-HUD with a night vision device. The operation takes under a minute even in field conditions.

Step 1. Remove the Lens Shield of the MTAR™-HUD



Step 2. Remove the eyepiece of the Night Vision Monocular



Step 3. Place the MTAR™-HUD between the body of the Night Vision Monocular and its eyepiece. Screw-in the Monocular and the eyepiece to the MTAR™-HUD



Step 4. The Night Vision Monocular has been transformed into a full-scale tactical surveillance station and is ready for action.



### STANDARD EQUIPMENT: WHAT'S IN THE BOX

- ⇒ MTAR™-HUD Core Unit
- ⇒ 32GB microSD Card and SD Adapter
- ⇒ Set of Cables (USB Power Cable, Video-In/Out Cable)
- ⇒ Cleaning Kit (3-in-1 Multi-Pen + Soft Cleaning Cloth)
- ⇒ User Manual and Quick Reference Guide
- ⇒ 7-Year Warranty with Activation Form
- ⇒ Soft Carrying Pouch
- ⇒ Waterproof Hard Case

### OPTIONAL EQUIPMENT

- ⇒ PVS-14 Eyepiece
- ⇒ Advanced Helmet Harness HMH-1 for MICH / ACH Helmets
- ⇒ J-Arm Helmet Mount Attachment for MTAR™-HUD
- ⇒ Set of Allen Keys
- ⇒ Universal Multi-Voltage Battery Pack MVP-240 (Comes with Connection Cable)
- ⇒ Universal Remote Control "Multiconnection" Unit TRC-120 (Comes with Connection Cable)
- ⇒ Tactical Infrared Illuminator IR-250S. Kit Includes IR-250S (850nm), Remote Control, Picatinny Mount
- ⇒ Multi-Use Weapon mounting bracket, including DQRM-14 mount

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