

SCORPION[®]

HELMET MOUNTED CUEING SYSTEM

THE WORLD'S ONLY FULL-COLOR
HELMET MOUNTED CUEING SYSTEM.

GAME CHANGING
AFFORDABLE
IN FULL-RATE PRODUCTION

THALES





Thales Visionix, Inc. presents **Scorpion®** — the world's only, full-color **Helmet Mounted Cueing System (HMCS)**.

Scorpion HMCS is currently in production, fielded and offers the following:

TECHNOLOGIES

- Light Optical Element (LOE) waveguide technology
- Magnetic or Hybrid-Inertial Tracker options available
- Fully programmable symbol generator allows Aircraft Integrator flexibility to define, re-program and implement both raster and vector symbols independently
- Full 24-bit color capability - Scorpion display can match head down display color philosophy
- Full 24-hour day/night capability; compatible with AN/AVS-9 Night Vision Goggles and Panoramic Night-Vision Goggles (PNVGs)
- Optional integrated, helmet mounted color camera available for post-flight mission debrief/BDA and training

COMPONENTS

Integrates with the widest range of Flight Helmets and Life Support Equipment

(System pictured below features HGU-55/P aircrew helmet. System is able to integrate with other flight helmets.)



*Hybrid inertial/optical tracker available. Does not need magnetic tracker power supply.



ADVANTAGES

Precise head-steered weapons and sensor cueing

Full-color, dynamic 360 x 360 conformal color symbology overlaid on the "real world"

Rapid target acquisition and hand-off to sensors and weapons

Sensor video capability with full-color overlay symbol suite

DTEDS, JTIDS and tactical type data display capabilities

Seamless 24-hour operation / in-flight transition day-night

Simple/accurate bore sight procedure

Rapid aircraft integration; No avionics bay LRUs

Backward/Forward compatibility with standard head and life support gear, including: HGU-55/P, HGU-56/P, SPH Series, MBU-20/P, MBU-12/P, AN/AVS-9, JSAM

Compatible with Clear/Glare/Yellow/LEP/Step-in visors, spectacles

System interchangeable between pilots, NOT one per pilot

Lowest procurement cost and projected life cycle cost



FEATURES

Supports full day/night transition missions

Full 24-hour day/night capability; totally compatible with AN/AVS-9 NVGs and Panoramic Night-Vision Goggles (PNVGs)

No interruption of symbology/video during NVGs attachment/detachment

Full-color, high-resolution SVGA display

Virtual HUD or Multi-Function Display (MFD) capability

On-demand sensor video (IR) display

High-speed tracker with a full-spherical Field of Regard(FOR); choice of Hybrid-Inertial or Magnetic tracker

Lowest system latency/highest accuracy

FOV 26° x 20°

Minimal head-borne weight

Low total system weight

Low power consumption



MISSION SUPPORTABILITY USER FRIENDLY

Programmable, compact Interface Control Unit (ICU) mounted in cockpit; no avionics bay intrusion

ICU includes a 16 GB removable data cartridge, in cockpit

Ethernet, 1553, or other standard interfaces

ICU provides aircraft power to the NVGs (and battery backup)

Military qualification 810D/461E/704A

Ejection system compatible/Qualified HVI Safety Disconnect System

SCORPION BATTLEFIELD COLOR VIEW - SIMULATED



LOOK ➤ DESIGNATE ➤ SHOOT

WORLD'S ONLY **FULL-COLOR**
HELMET MOUNTED DISPLAY (HMD)



360° FIELD OF REGARD

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