ADVANCED **AR HELMET TECHNOLOGY**

ACE-AR

ADVANCED COMBAT ENVIRONMENT – AUGMENTED REALITY

ACE-AR delivers immediate situational awareness and vision of multiple displays in confined, space-limited environments. Designed with the user in mind, ACE-AR features a high-resolution dual-eye display and best-in-class eye relief, eliminating eye fatigue and nausea.

KEY FEATURES

- High resolution, dual-eye display
- Best eye relief in class
- Ultra-low latency
- High optical transmissivity
- SWaP optimised
- Picatinny rail/NVG mount compatible
- Optional replaceable ballistic glass
- Optimised for safe driver vision
    - Augmentation or replacement of driver display
- Commander vision
    - Glass armour visualization
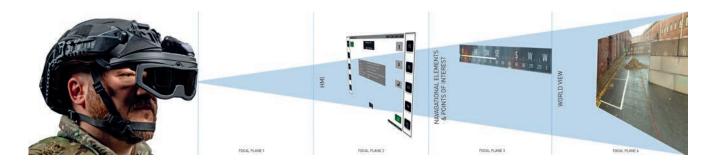   - Augmented tactical picture

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ACE-AR MULTIFOCAL

SINGLE FOCAL PLANE with 2.5 m vs. MULTIFOCAL SYSTEM with 0.35/0.5/0.67/1 m placement of planes.
- ACE-AR gives a comfortable and eye safe depth of field.
- Viewing distance of 0.35 m to 1.4 m with precise image projection
- Reduced parallax error below 1 mm

SPECIFICATION

PROPERTY	VALUE
Resolution *	From 850 x 500 for multifocal to FHD+
Latency	‹1 frame
Visable FoV	35° to 40° TBC
Refresh rate	›50 Hz
Weight	‹500 grams
Head Tracking	IMU Based/IMU+GPS Option
Connectivity	Display Port over USB Type C
SDK	Support for Unity and Vulkan

Resolution can vary depending on the brightness requirement

HUMAN MACHINE INTERFACE
Function
On/Off Control
Re-centre/zero button
Brightness control
Physical interface
Display Port 2.1a
Support for functional safety
Cyber hardened

PRODUCT TOPOLOGY

HEADSET
High resolution/quality image creation
Head Position Tracking   "Gold-Standard Tracking" when dismounted and mounted
Ultra-low latency ‹1 frame (max)
Support for functional safety IEC 61508 or ISO 26262 SIL 2/ASIL B
Frozen video
Late video
Incorrect video source
Adjustable brightness
Ballistic eye protection
50% transmissivity
Single hand-operation to engage/disengage HUD

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