

Overview

The CAE Medallion MR e-Series visual system integrates CAE's best-of-breed CAE Medallion image generator and synthetic environment solutions with leading-edge Commercial-Off-The-Shelf (COTS) projection technology and innovative rear-projection display system. The exceptional realism provided by this visual system creates unprecedented visual immersion maximizing mission training value and permits the training of complex and risky procedures in a safe virtual environment.

CAE's Medallion MR e-Series visual system provides a high-quality, realistic visual environment for training an extensive range of mission operations in single and tandem seat military fighter and fast-jet applications.

Designed to be flexible and scalable in both field-of-view and resolution, this integrated solution is suited for intermediate to advanced levels of training, including distributed mission operations (DMO) and integrated Live-Virtual-Constructive (iLVC) environments.

Our most immersive visual training experience optimizes the balance of live and synthetic training to enable pilots to:

- Train in a bright, high-contrast, high-resolution simulation environment populated with realistic and challenging content
- Fly in formation; detect and engage ground and air targets in a detailed, compelling visual environment
- Perform complex maneuvers such as air-to-air refueling (boom and hose and drogue) safely, without high logistic overhead
- Fly tandem cockpit configurations via two linked visual displays each crew member benefits from the same high-fidelity, no-compromise visual experience
- → Fly within rich and realistic scenery using CAE's latest Medallion-6000MR image generator technology

The training organization can benefit by:

- Leveraging the Open Geospatial Consortium Common Database (OGC® CDB) standard, maximizing database correlation and facilitating content management.
- Transfering some qualified flying instructor (QFI), training to synthetic media, thus increasing pilot throughput.



Training fidelity beyond traditional displays:

- Near eye-limiting resolution for enhanced Detection, Orientation, Recognition and Identification (DORI) performance
- → Available full 360° coverage with minimal rear cut-out
- 120 Hz operation maximizes dynamic resolution with no loss of display brightness
- E-collimation eliminates parallax error associated with typical small-radius displays, improves Heads-Up Display (HUD) and Helmet-Mounted Display (HMD) registration
- Innovative, hybrid night-vision goggles (NVG) via dedicated infrared (IR) emitter in projector and dynamic reallocation of image generator (IG) resources in NVG mode
- Available 3D stereoscopic view for ultimate realism in tasks such as close formation flight and air-to-air refueling

Your worldwide training partner of choice



The CAE Medallion MR e-Series visual system brings the following benefits to your mission training devices:

- High-brightness, high-contrast, ultra-high-resolution rear-projected display with unobstructed field-of-view
- Choice of resolutions to satisfy specific training objectives high-value 4 arcmin/OLP or cost-effective 2.5 arcmin/OLP configurations using COTS projectors
- E-360 offers full 360° x 135° for full mission simulators (FMS); E-225: optimized 225° x 90° with smaller footprint for part task trainer (PTT) or entry-level devices
- ➔ Continuous blended imagery across screen segments
- Optical blending for artifact-free visuals in any time-of-day conditions, including stimulated NVG
- Compatible with a wide range of fast-jet cockpits. Adjusts to align pilot and design eyepoints

- ➔ Easy pilot ingress and egress via linear actuated door
- E-360: Compact 8 m x 6 m (26' x 20') device footprint.
 Can be accommodated in less than 6 m ceiling height (depending on cockpit height)
- Offered as a turnkey solution, pre-integrated with CAE's Medallion-6000MR image generator supporting extensive synthetic environment content, including OGC CDB
- Meshes seamlessly with CAE's MR Series Synthetic Environment to provide a comprehensive, correlated and high-quality training experience, including distributed mission operations (DMO) and integrated Live-Virtual-Constructive (iLVC) environments
- Optional dedicated HUD projector
- ➔ Optional light closeout to augment facility lighting management

	CAE MEDALLION MR E-360	CAE MEDALLION MR E-225	CAE MEDALLION MR E-360X	CAE MEDALLION MR E-225X
Display type	10 channel rear-projection dome	5 channel rear-projection	10 channel rear-projection dome	5 channel rear-projection
Field of View	360° x 135°	225° x 90°	360° x 135°	225° x 90°
Projectors	4K Pixel Shift projectors; 120Hz operation 8K-class e-shift projectors; 120Hz operation			ctors; 120Hz operation
Average Resolution	4 arcmin/OLP		2.5 arcmin/OLP	
Brightness	15 ft-L		13 ft-L	
Contrast ratio	>15:1			
Eyepoint Correction	Yes, via head-tracked e-collimation			
Smear Reduction	Yes, via 120 Hz, no brightness loss			
Stereoscopy	Yes, with optional 3D eye wear			
NVG	Unique Hybrid-mode Stimulated NVG driven by dedicated IG with available IR-specific features			
HUD	Optional dedicated HUD projector matched to OTW			
Footprint (L x W x H)	7 x 6.5 x 6 (m) 23 x 21.5 x 20 (feet)	6 x 6.5 x 4 (m) 20 x 21.5 x 13.5 (feet)	7 x 6.5 x 6 (m) 23 x 21.5 x 20 (feet)	6 x 6.5 x 4 (m) 20 x 21.5 x 13.5 (feet)

Canada Tel: +1-613-247-0342 milsim@cae.com

Europe Tel: +49-2402-106-0 info@cae-gmbh.de

India Tel: +91-80-2625-6000 caeindiapvtltd@cae.com

Your worldwide training partner of choice United States Tel: +1-813-885-7481 cae_usa@cae.com

Australia Tel: +61-2-9748-4844 caeaus@cae.com.au

Middle East Tel: +971-2-676-7676 milsim@cae.com United Kingdom Tel: +44 (0) 1444-247535 cae_plc@cae.co.uk

Asia Tel: +65 6430 4390 milsim@cae.com

Corporate Headquarters

Tel: +1-514-341-6780 milsim@cae.com

milsim@cae.com 9 @CAE_Defence CAE cae.com

