

Defence & Aerospace & Civil

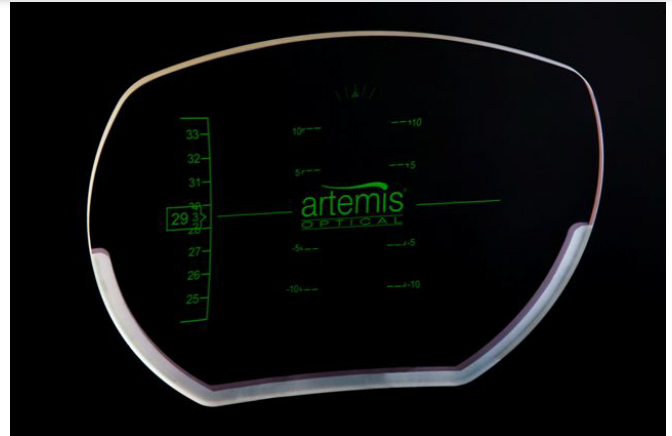
Combiners

Head Up Displays

Artemis Optical Ltd design and manufacture Combiners for use within Head Up Displays.

Proud to manufacture some of the best Combiners available to the industry, Artemis are able to offer a solution that will specifically suit your required specification.

Following many years of research and development at our facility, we are able to achieve single or multiple, colour selective notches, providing freedom in tailoring the design to any configuration. We use innovative Rugate coatings, a powerful technique which enables us to produce advanced and unique combiners that would not be possible if using conventional techniques.



Our Combiners offer exemplary levels of colour neutrality and image consistency, ensuring increased vision and a seamless display for the end user pilot.

Application

Combiners are used in Head Up Displays. HUD's are relatively large sheets of optical material used to project data into the users line of sight to allow them increased operational effectiveness by removing the distraction of having to look down at instrumentation.

Typical Performance

- +/- 2nm Uniformity Over Combiner.
- NEUTRAL Max.%R: %T 50 %R 50 d,(u,v) 0.007
- NEUTRAL Typical %T 70 %R 25 d,(u,v)0.007
- C.S.C Wide %T 80 %R 35 d,(u,v) 0.019
- C.S.C Narrow %T 82 %R 27 d,(u,v) 0.013

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Durability Spec

Conforms to MIL 49497A.

Adhesion	paragraph 4.5.3.1
Abrasion	paragraph 4.5.5.1 (Severe)
Temperature	paragraph 4.5.4.1

Conforms to MIL-STD-810E.

Humidity Aggravated	Method 507.3 Procedure III
Temperature Shock	Method 503.3
Salt Fog	Method 509.3 Procedure 1
Rain	Method 506.3 Procedure II
Fungus	Method 508.3 (by similarity)



Artemis Optical & Our Facilities

Headed by the team of five Directors, Artemis, a world renowned company employs in excess of 50 talented staff, with an unbeatable history of more than 50 years in the design and application of its high precision, technically differentiated optical coatings.

Our customer portfolio includes blue chip original equipment manufacturers in the defence, aerospace, security, photonic surgery and medical and analytical instrumentation markets.

Our state of the art facilities are located at Langage Science Park in Plymouth the South West of England. Our factory includes a 22,000 square foot bespoke, environmentally controlled coating room, together with a range of modern coating chambers, to include APS, APS PRO, Sputtering and thermal evaporation coating technologies.

Sales Director

Claire Burke



Claire.burke@artemis-optical.co.uk
+44 (0)1752 294907

a 1 Western Wood Way, Langage Science Park, Plympton, Plymouth, Devon, PL7 5BG

t + 44 (0)1752 341 907

f + 44 (0)1752 342 467

w www.artemis-optical.co.uk

Special features of Artemis Combiners

- Design & manufacture of Rugates which offer higher colour neutrality & higher image brightness.
- Custom single or multiple, colour selective notches, allowing you to choose the colour, or colours, you want to reflect.
- Dual plate, Amplitude Graded Combiners, giving seamless display balance.
- Angle of incidence compensated coating, giving consistent image across the entire display.