

# Optical systems for head-up displays

[www.elya.com](http://www.elya.com)



We develop cutting-edge modular optical systems for head-up displays that perform even in the most demanding conditions. In addition, we can adapt and use the system in virtually any required head-up display size while maintaining the same level of quality.



Development and production in the Czech



10+ years of development



NVG compatibility



Full HD resolution

## Technical data

### HUD GEN 1

Dimensions (w/h/l):	192 x 354 x 572 (mm)
Weight:	< 9 kg (UFPC bez obrázku)
Power supply:	18 v + 33 V / typically MIL-STD-704E
Power consumption:	< 70W max. at full brightness level Operating temperatures: -40°C + +60°C
Operating temp. range:	od -40 °C do +60 °C
Video Input Interface:	HD-SDI
Average brightness in the area:	23°
Brightness:	> 3500 fL applies to a line thickness of 2 pixels
Contrast:	1,35 : 1 ( 10,000 ftL)
Display resolution:	1280 X 720 pixels, active area is circle within 720 x 720 pixels square
Angular resolution:	0.582 + 0.600 > mrad per pixel
Eye Motion box:	140 x 50 mm (HxV)
Accuracy 0-5°:	< 2.0 mrad
Accuracy 5-10°:	< 2.5 mrad
MTBF:	> 10 000 hours

### HUD GEN 2

Dimensions (w/h/l):	201 x 372 x 565 (mm)
Weight:	< 11 kg (UFPC not included)
Power supply:	18 v + 32 V / typically 28 V
Power consumption:	< 85W
Operating temp. range:	from -40 °C to +60 °C
Video Input Interface:	SDI (SDI1)
Average brightness in the area:	> 25° x 25°
Brightness:	> 3500 fL
Contrast:	1,21 : 1 at 10000 fL
Display resolution:	1920 X 1080 pixels (FullHD), active area is a circle within 1000 x1000 pixels square
Angular resolution:	0.420 + 0.450 > mrad per pixel
Eye Motion Box (w/h/l):	115 x 65 x 150 (mm)
Accuracy 0-10° from centre:	1 mrad
Accuracy 10° or more from the centre:	1.5 mrad
MTBF:	> 10 000 hours