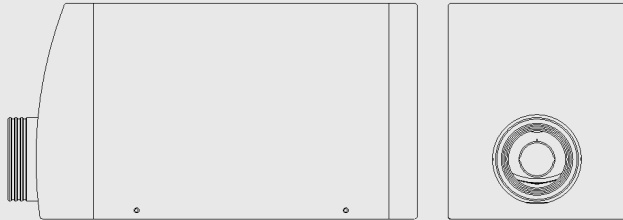


ICAM - 3FW, 1.2 M Pixels

Dimensions and weight

Length: 285 mm
 Width: 125 mm
 Height: 155 mm



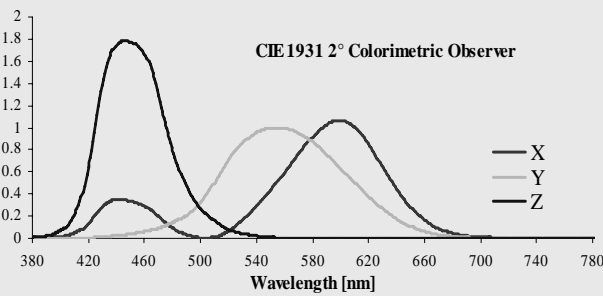
Weight: 3.7 kg

CCD

Size of CCD: 2/3"
 Pixel size: 6.45 μm × 6.45 μm
 Number of pixels: 1280 × 960
 Dynamic range ¹⁾: 1350:1
 Exposure time: 35 μs to 2 s

Lens system

F# range: 3.5 - 28
 Focus: 225 mm – ∞
 Field of view
 Vertical: ±5.1°
 Horizontal: ±6.7°
 Object dimension: 37 mm × 28 mm at minimum object distance (Pixel: 0.03 mm)
 Object dimension: 1.3 m × 0.94 m at 5 m object distance (Pixel: 0.92 mm)
 Acceptance angle: 0.01° per pixel



Notes

- 1) Based on full well capacity and readout noise.
- 2) Probability of 95%. Found as average of 12 different coloured matt ceramic tiles illuminated by Illuminant A. Averaged over 10×10 pixels.
- 3) Found as average of 12 different coloured matt ceramic tiles illuminated by Illuminant D65. Averaged over 10×10 pixels.
- 4) Probability of 95%. Found by 25 measurements during 10 minutes of a white tile illuminated by D65. Averaged over 10×10 pixels.

System

Response: Tristimulus values according to CIE 1931 2° photometric and colorimetric observers
 f₁ errors⁵⁾: < 2% of system Y and Z responses < 3% of system X response
 Output: CIE Tristimulus Values X, Y and Z per pixel.
 Measurement time: < 2 sec. (Typically)

Performance

Trueness⁶⁾:
 Luminance ²⁾: ΔL/L < 1.5%
 Chromaticity ²⁾: ΔCab < 1.0
 Chromatic x ³⁾: Δx < 0.0020
 Chromatic y ³⁾: Δy < 0.0015
 Repeatability⁷⁾:
 Luminance ⁴⁾: ±0.035%
 Chromatic xy⁴⁾: ±0.0002 (±0.025%)

Measurement range:

Min. luminance at 0.5° ⁶⁾: 0.00005 cd×m⁻²
 Min. luminance at 0.25° ⁶⁾: 0.0002 cd×m⁻²
 Min. luminance at 0.1° ⁶⁾: 0.0005 cd×m⁻²
 Max. luminance ⁷⁾: 3 × 10⁶ cd×m⁻²

Interface

Computer: Recommended PC, Min. 1 GHz, 512 MB.
 Digital: IEEE 1394; DCAM 1.3 FireWire.
 Control: USB 1.0 or RS232.
 Power: FireWire or external 12 V supply.

Electrical

EMC: EN 61 000-6-1:2002
 EN 61 000-6-3:2002
 EN 61 326-1 :2003

Environmental

Temperature: 10°C to 40°C
 Humidity: 15 – 80% relative

- 5) According to CIE, Pub. No 53, 1982.
 - 6) With the use of optional low luminance filter.
 - 7) Without the use of ND filter. By using ND filter the value will be increased substantially.
- *) See ICAM Technical note "I101 Definitions".

DISCLAIMER: The information contained in this document is subject to change without notice.

