

NANEYE MODULE

IMAGE SENSOR MODULES



The NanEye 2D sensor provides a true system on chip camera head with fully self timed readout sequencing, AD

conversion to 10 bit and bit serial data transmission over LVDS. AWAIBA's proprietary data interface technology permits cable length's up to 3m with out any additional components at the distal end. Due to the low energy dissipation on the interface no complicated shielding is required to meet EMC norms. With it's 250 x 250 pixels at 3um pitch the sensors provide clear and sharp images with outstanding MTF in a very compact size. A frame rate of 44FPS permit synchronization to any type of display. The NanEye sensor provides delay free, smooth video operation resulting in a safe operation and a clear diagnosis. The sensors are connected to minimal diameter cabling solutions. A small lens is assembled to the chip, this option does not increase the total diameter of the sensor, making it the world most compact digital camera.

It is also possible under request the following options: No Black Paint, No Cable and No Bended Cable.

For pricing and lead time please contact cis_orders@ams.com.

SPECIFICATIONS

Part status	Production
Resolution	0.0625MP - 250 (H) x 250 (V)
Pixel size	3 x 3
Optical format	1/15"
Shutter type	Electronic rolling shutter
Frame rate	42 - 55 FPS
Output interface	10 bit digital LVDS
Sensitivity	11.5 DN/nJ/cm ² at maximum gain
Full well charge	15 ke-
Dark noise	1.1 DN rms
Dynamic range	58 dB
SNR max	41
Fixed pattern noise	DSNU: 2.8 [DN] PRNU: 4.8%
Chroma	Mono and RGB
Supply voltage	1.8V - 2.4V
Power	4.2 mW at nominal supply 2.1V
Operating temperature range	0°C - 60°C
RoHS compliance	Yes
Package	Chip + Lens + Cable

ORDERING INFO - NANEYE MODULE

Part Number	Version	Chroma	Microlens	Package	Glass
NanEye-B&W-F2.7-FOV90-Painted-CableBended	Black Painted, Cable (15cm, 1m, 2m, 3m)	Mono	No	Chip + Lens + Cable	N/A
NanEye-RGB-F2.7-FOV90-Painted-CableBended	Black Painted, Cable (15cm, 1m, 2m, 3m)	RGB Bayer	No	Chip + Lens + Cable	N/A
NanEye-B&W-F4.0-FOV90-Painted-CableBended	Black Painted, Cable (15cm, 1m, 2m, 3m)	Mono	No	Chip + Lens + Cable	N/A
NanEye-RGB-F4.0-FOV90-Painted-CableBended	Black Painted, Cable (15cm, 1m, 2m, 3m)	RGB Bayer	No	Chip + Lens + Cable	N/A
NanEye-B&W-F6.0-FOV90-Painted-CableBended	Black Painted, Cable (15cm, 1m, 2m, 3m)	Mono	No	Chip + Lens + Cable	N/A
NanEye-RGB-F6.0-FOV90-Painted-CableBended	Black Painted, Cable (15cm, 1m, 2m, 3m)	RGB Bayer	No	Chip + Lens + Cable	N/A
NanEye-B&W-F2.8-FOV120-Painted-CableBended	Black Painted, Cable (15cm, 1m, 2m, 3m)	Mono	No	Chip + Lens + Cable	N/A
NanEye-RGB-F2.8-FOV120-Painted-CableBended	Black Painted, Cable (15cm, 1m, 2m, 3m)	RGB Bayer	No	Chip + Lens + Cable	N/A
NanEye-B&W-F2.4-FOV160-Painted-CableBended	Black Painted, Cable (15cm, 1m, 2m, 3m)	Mono	No	Chip + Lens + Cable	N/A
NanEye-RGB-F2.4-FOV160-Painted-CableBended	Black Painted, Cable (15cm, 1m, 2m, 3m)	RGB Bayer	No	Chip + Lens + Cable	N/A