SW-4000Q-SFP

4-CMOS prism line scan camera







- 4 x 4096 pixel prism-based line scan camera
- Provides 10GBASE-R (fiber optic) output over SFP+ interface
- Max. line rate of 72 kHz for RGB8 + NIR dual-stream output
- Prism technology for superior color quality and alignment of visible + NIR channels
- Optimized for applications with fixed and varying object speeds
- Newly developed "state of the art" CMOS sensors
- Selectable pixel size 7.5 x 7.5 µm or 7.5 x 10.5 µm
- Supports vertical dual-line binning, 2x horizontal binning, or both
- Flat field correction and color shading correction
- **HSI** and **XYZ** color space conversion
- Supports direct connection to rotary encoders plus large variety of trigger options
- GigE Vision 2.0 interface with choice of single-stream or dual-stream output
- Output formats include 3 x 8-bit or 3 x 10-bit RGB, 8-bit YUV, and 8-bit/10-bit NIR
- Excellent shock and vibration resistance



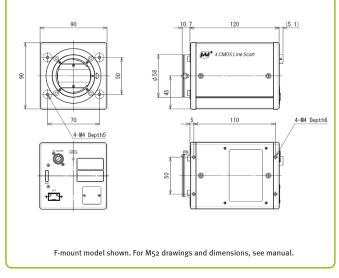
Sweep+ Series

Active pixels Line rate (full width) Line rate (full width) Pixel size Sensor width Pixel size Mode Ethernet speed Video output Sing Two streams: RGE YUV422_8 Mono8, Object illuminance (min.) Gain 18 dB, 5: Responsivity RGB: 118 DN/r NIR: 64 (Mode S/N ratio S/S dB on gi Inputs (Trigger) 1 Opto In + 1 TTL v Generator (4), NAN Outputs 2 TTL via Gain Analog Base Digital Master: o t Digital I White balance Manual/one-pi Gamma 0.45 to 1.0 Image processing PRNU/DSNU, color shading co adjustme Color space conversion RGB or R sRGB, Adobe Exposure modes No shutter, tim Electronic shutter 3 µs to 13889 µs Exposure time ca Pulse width control Time synchronization Lens mount M52 mc (46.5 mm fla Operating temp. (ambient) -5°C to +45°C Storage temp. (ambient) -25°C to +60°C Vibration 3G (20 Hz t Shock Regulations CE (EN61 FCC Part Power 12-pin PoE Dimensions (H x W x L) (without connect	N-4000Q-SFP
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Electronic shutter 3 µs to 13889 µs Exposure time can exposure ti	RGBa8 to HSI, XYZ (CIE), pe RGB, or User Custom RGB
Exposure time ca Pulse width control Time synchronization Support for Prec Lens mount M52 mc (46.5 mm fla Operating temp. (ambient) -5°C to +45°C Storage temp. (ambient) -25°C to +60°C Vibration 3G (20 Hz t Shock Regulations CE (EN61 FCC Part Power 12-pin PoE Dimensions (H x W x L) (without connect 90 mm	med, and trigger width control
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Vibration 3G (20 Hz t) Shock CE (EN61 FCC Part) Power 12-pin PoE +10V to +25 FCC Part Dimensions (H x W x L) (without connect 90 mm)	(20 to 80% non-condensing)
Shock Regulations CE (EN61 FCC Part Power 12-pin +10V to +25 PoE Dimensions (H x W x L) (without connect 90 mm	C (20 to 80% non condensing)
Regulations CE (EN61 FCC Part Power 12-pin PoE	to 200 Hz, XYZ directions)
Power 12-pin +10V to +25 PoE Dimensions (H x W x L) (without connect 90 mm	50G
PoE I Dimensions (H x W x L) (without connect 90 mm	1000-6-2, EN61000-6-3) t 15 Class B, RoHS/WEEE
90 mr	5V DC. 17.4 W typical @ 12V Not supported.
Weight	ctor and lens mount protrusions) m x 90 mm x 120 mm
j l	980 g

Ordering Information

SW-4000Q-SFP-F 4-CMOS prism line scan camera with F-mount 4-CMOS prism line scan camera with M52 mount

Dimensions (F-mount)



Connector pin-out

DC In / Trigger

HIROSE HR10A-10R-12PB(71)

Pin 1 Ground

- 2 DC in +10V to +25V
- 3 Ground
- 4 Reserved
- 5 Opto in 1-
- 6 Opto in 1+
- 7 TTL out 4
- 8 NC 9 TTL out 1
- 10 TTLin 1
- 11 DC in +10V to +25V 12 Ground

SFP+ Interface



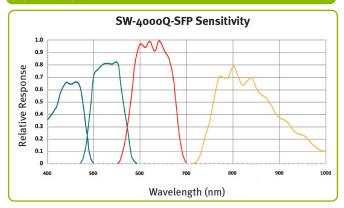
SFP+ transceiver module must support:

- 10GBASE-R
- Power level 1

Maximum fiber optic cable lengths

- » 1oGBASE-SR: 300m (cable type OM3) » 1oGBASE-SR: 400m (cable type OM4) » 1oGBASE-LR: 10km (cable type OS2) » 1oGBASE-ER: 40km (cable type OS2)

Spectral response



Europe, Middle East & Africa

Phone +45 4457 8888 Fax +45 4491 8880 Asia Pacific

Phone +81 45 440 0154 Fax +81 45 440 0166 Americas

Phone (Toll-Free) 1 800 445 5444 Phone +1 408 383 0300

