▸ **SW-2000M-CXP-80**
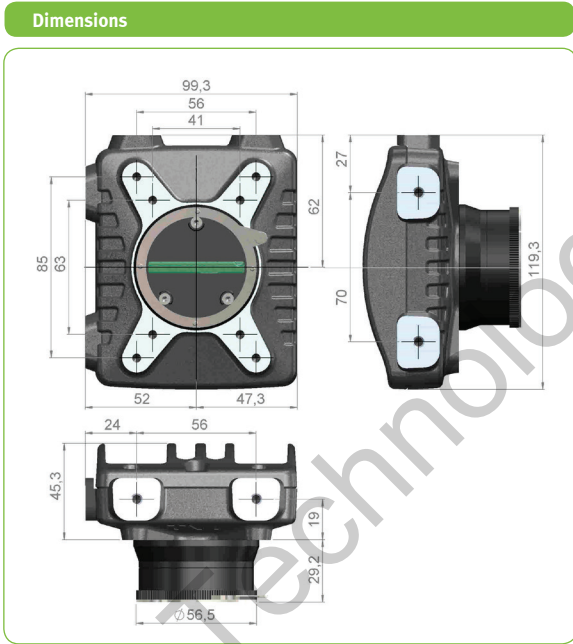## Monochrome CMOS line scan camera

CoaXPress

- *Monochrome CMOS line scan camera with CoaXPress (CXP) interface*
- *Large 20 µm square pixels for high line rates with less light*
- *Resolution: 2048 pixels*
- *Maximum scan rate: 80,000 full lines per second*
- *Selectable sensor mode: high responsivity or high dynamic range*
- *8/10/12-bit output*
- *CXP link: One link up to 3 Gbps*
- *DSNU correction as factory default*
- *Flat field correction (FFC)*
- *ROI and binning modes*
- *Normal and reversed output*
- *Test pattern generator for set-up and troubleshooting*
- *Ethernet port for control and monitoring, FW updates, and download of files from camera*
- *Short ASCII commands for set-up via Camera Link or Ethernet port using the Telnet protocol*
  -Windows user interface
- *GENiCAM compatible*

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Specifications for SW-2000M-CXP-80

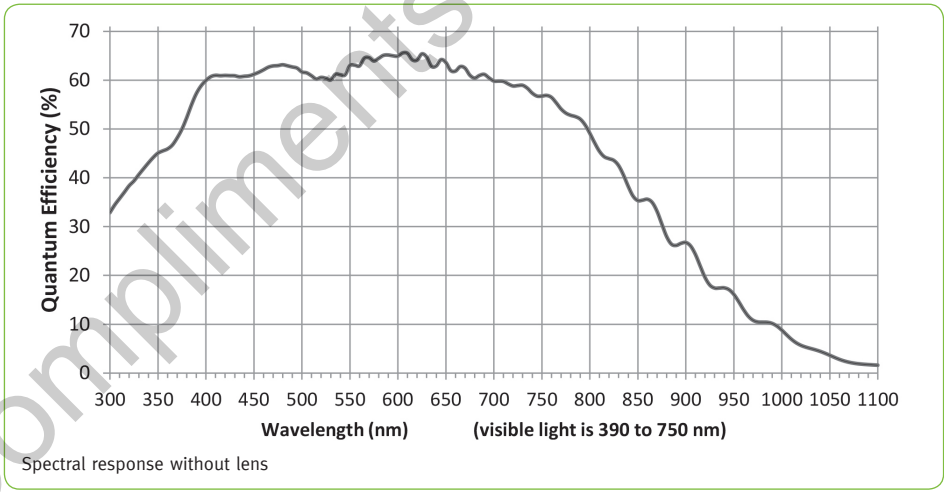| Specifications	SW-2000M-CXP-80
Imager	Custom CMOS line scan sensor
Sensor resolution	2048 pixels
Cell size	20.0 µm x 20.0 µm
Imager length	40.96 mm
Line scan period	12.5 µs to 100,000 µs
Line rate	10 Hz to 80 kHz
Bit depths	8, 10 or 12
CXP link speeds	1.25G, 2.5G and 3.125G
Quantum well size	60 or 360 ke⁻
Responsivity	480 DN/nJ/cm² (DN as 12-bits, small well, gain = 1x, λ = 625 nm) @ 60 kHz
Maximum SNR	55 dB (large well, EMVA 1288) @ 60 kHz
Temporal dark noise	1.9 DN (DN as 12-bits, large well, gains=1x)
Dynamic range	66dB
Analog gain	1x, 2x, 6x or 12x
Digital gain	0.1x to 32x
Operating modes	Internal (internal trigger/shutter), Mixed (external trigger, internal shutter) Pulse width control (external trigger/shutter)
Programmable exposure	2 µs to 0.1 s (internal shutter)
Camera control	CoaXPress or 10/100 Mbps Ethernet
Lens mount	Nikon F-mount
Lens protrusion	27 mm, max
Flange back distance	46.5 mm
Input window	1 mm BK7 glass, AR coated
Sensor alignment	± 0.2 mm (± 0.1 mm typical)
Operating temperature	+5 °C to +50 °C
Storage temperature	-10 °C to +60 °C
Humidity	5 - 80% relative, non-condensing
Vibration	3G (IEC 60068-2-6)
Shock	25G (IEC 60068-2-27)
Regulations	EMC emissions: EN 61000-6-4. EMC immunity: EN 61000-6-2. FCC part 15, subpart B
Power	5 W max.
Dimensions (H x W x L)	99.3 mm x 119.3 mm x 45.3 mm
Weight	620 g

Dimensions

CoaXPress interface CXP-3

Coaxial BNC Connector
75 Ω, socket
For 75 Ω cable.

Ordering Information

SW-2000M-CXP-80 Monochrome camera with CoaXPress 80 kHz

Spectral Response

Spectral response without lens

CE   FC

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