

❖ SW-2000T-CPX2

❖ SW-2000Q-CPX2

3CMOS / 4CMOS color line scan cameras

▪ 3X 2048 pixels (RGB)

▪ 4X 2048 pixels (RGB/NIR) ▪ 80 kHz Sweep+ Series



CoaxPress



- **Industrial color line scan cameras based on beam splitter prism technology**
- **Selectable resolution with Region of Interest (ROI)**
- **Large, sensitive 20 μm x 20 μm pixels**
- **Large 400 μm^2 photon collection area and large quantum wells for high image quality**
- **Scan rate up to 80,000 lines/s**
- **Dual 6 Gbps CXP links (approved up to 3 Gbps)**
- **Binning function for increased sensitivity**
- **Normal and reversed readout**
- **Excellent sensor alignment accuracy**
- **Color switch to link sensors to output channels**
- **Real time optical calibrations: Flat Field Correction (FFC), White Balance and Chromatic Aberration**
- **Ethernet port for Control, monitoring, updates and Telnet communication**
- **Test pattern generation for interfacing**
- **Nikon F-mount or JAI Direct Mount with JAI designed lenses**
- **Supported by Windows user interface**
- **JAI SDK and GenICam compliant**

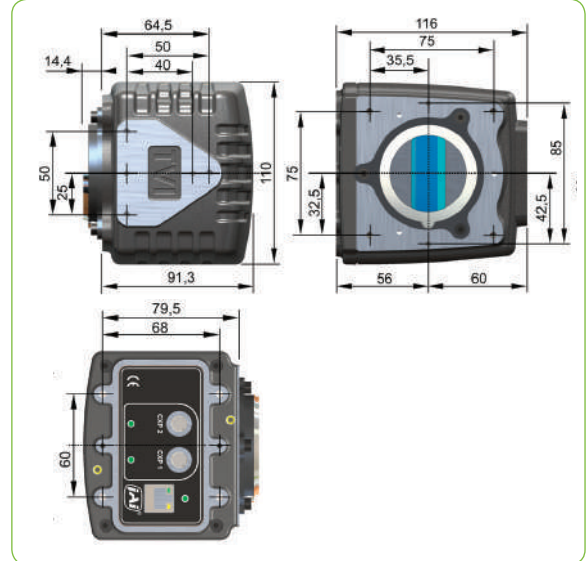


Specifications for Sweep+ SW-2000T-CPX2 and SW-2000Q-CPX2

Specifications

Scanning system	CMOS line scan sensors with a beam splitter prism
Sensors	SW-2000T-CPX2: 3 x CMOS (R-G-B) SW-2000Q-CPX2: 4 x CMOS (R-G-B / NIR)
Sensor resolution	2048 pixels on each sensor
Cell size	20.0 μm (h) x 20.0 μm (v)
Imager length	40.96 mm
Line scan period	12.5 μs to 0.1 s
Line rate	10 Hz to 80 kHz
Bit depths	8, 10 or 12
CXP link speeds	1.25G, 2.5G, 3.125G, 5G and 6.25G one or two links (Approved up to 3.125 Gbps, two links)
Quantum Well Size	60 or 360 ke ⁻²
Responsivity	480 DN/nl/cm ² (DN as 12-bits, small well, gains = 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 trigger/shutters, external trigger/internal shutters or Pulse Width Control
Programmable exposure	2 μs to 0.1 s (internal shutters)
Camera control	CoaXPress or 10/100 Mbps Ethernet
Lens mount	Nikon F-mount or JAI Direct Mount
Lens protrusion	15mm, max
Flange back distance	46.5 mm
Operating temperature	+5°C to +40°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. FFC part 15, subpart B
Power consumption	18 W, max. (via both CXP)
Dimensions (H x W x L)	116.0 mm x 110.0 mm x 91.3 mm

Dimensions

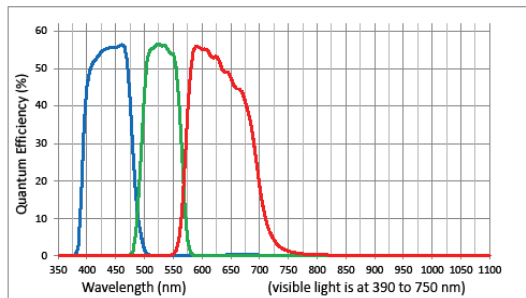


Ordering Information

SW-2000T-CPX2. (3-CMOS color line scan camera)
SW-2000Q-CPX2. (4-CMOS color line scan camera)

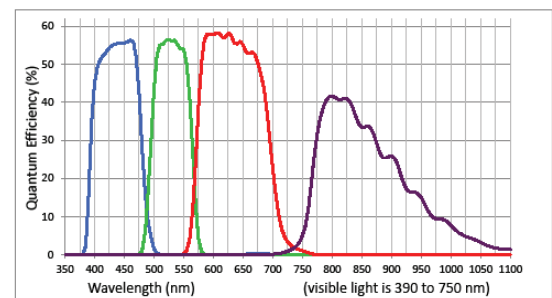
Spectral Response

Sweep+ SW-2000T-CPX2



Spectral response without lens

Sweep+ SW-2000Q-CPX2



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