

For Sales and Service MachineVisionDirect.com +1 (800) 834-5588 Support@MachineVisionDirect.com











JAI's Sweep Series includes both monochrome and trilinear color line scan cameras with line rates that are among the fastest available for their type and resolution.

The Sweep SW-4000TL trilinear models deliver outstanding color line scan images for applications that don't require the ultimate image precision provided by the Sweep+ Series.

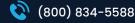
SENSOR:	N/A	
FORMAT:	28.67 mm	
PIXEL SIZE:	14.0 x 14.0 µm	
LENS MOUNT:	F-Mount	
SPECTRUM:	Color (Visible)	

Specification Highlights

SHUTTER: FRAME RATE: 30 kHz **INTERFACE: RESOLUTION MP:** N/A **RESOLUTION WxH:** 2048 x 1 px

Global Shutter Camera Link

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For Sales and Service

Dimensions

Front view (M52 mount)

4 ° × 6 depth3.5 (depth0.14)

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SpecifiesInteract ColorScanning sytemUine sensor with internal clockPixel clocy86.00 MHzUine rateStandard22.91s foll resolution/bining/internal trigger)32.91s foll resolution/bining/internal trigger)Sensor3.CMOS line sensorsSensor sum9.86.72 mCell size14.0 (n) x14.0 (v) µmActive pixersor)8.adiometric 27n.1/cm²Sensitivity (sensor)8.adiometric 27n.1/cm²Sensitivity (sensor)8.adiometric 27n.1/cm²Sensitivity (sensor)57.48 on green with gain = 0.48Video utrut57.48 on green with gain = 0.48Video utrut24.bit (3x.8) in CL base configurationSolit (3x.10) in CL medium configurationGainMaster O dato +8 dBRef. setAnalog gain=Low (0dB) or High (+6dB) Master 0 db to +8 dBIndividual modeR/s/E -2 dB to +14 dBWhite balanceNalot Exact on any singShading currectionIndividual RGB flat or RB to GShading currectionIndividual RGB flat or RB to GShading currectionIndividual RGB flat or RB to GShading currectionSalger and size size and pulse width controlSiger modes, scan rate, exposure15.8 just 13.209 mec. In 12.5 is incrementsSiger modes, scan rate, exposure dimension16.9 context, shutter-select and pulse width controlSiger modes, scan rate, exposure dimension16.9 context, shutter-select and pulse width controlSiger modes, scan rate, exposure dimension16.9 context, shutter-select and pulse width controlSiger			
Pikel cloc-' 80.00 MHz Line rate in rate Standard Programmable 32.9µs (Full resolution/binning/internal trigger) 32.9µs to 18.844ms, ESns increments Sensor script ScMOS line sensors mounted on ROB beam splitter prism Sensor script 8.602 MHz Sensor script 8.602 MHz Cell size 14.0 (h) x14.0 (v) µm Active pixel 8.x024 (h) 3 x 1024 (h) with 21 binning Sensitivity Rediometric: 27n.Jcm ² Sensitivity Rodiometric: 27n.Jcm ² Sensitivity:	Specifications	LT-200 CL	
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Operating temperature-5°C to +45°C/20 - 80% non-condensingStorage temp./humidity-25°C to +60°C/20 - 80% non-condensingVibration3G (20Hz to 200Hz, XYZ direction)Shock50GRegulationsEmission: CE CISPR Pub. 22 (EN55022) Immunity: CISPR Pub. 24 IEC61000-4-2 Conforming level 4 FCC Part15 Class B RoHSPower12V DC -10% to 24V DC +10% 450 mA (Typical) - 480 mA (Max.)Dimensions90 mm (H) x 90 mm (W) x 90 mm (D) (without connector and lens mount protrusion)Weight830 gLT-200 CL-M523 CMOS RGB Line Scan Camera. M52-mount (Standard) 3 CMOS RGB Line Scan Camera. F-mount	Lens mount		
Storage temp./humidity-25°C to +60°C/20 - 80% non-condensingVibration3G (20Hz to 200Hz, XYZ direction)Shock50GRegulationsEmission: CE CISPR Pub. 22 (EN55022) Immunity: CISPR Pub. 24 IEC61000-4-2 Conforming level 4 FCC Part15 Class B RoHSPower12V DC -10% to 24V DC +10% 450 mA (Typical) - 480 mA (Max.)Dimensions90 mm (H) x 90 mm (W) x 90 mm (D) (without connector and lens mount protrusion)Weight830 gOrdering Information3 CMOS RGB Line Scan Camera. M52-mount (Standard) 3 CMOS RGB Line Scan Camera. F-mount	Sensor alignment	Better than ±0.1 mm	
Vibration3G (20Hz to 200Hz, XYZ direction)Shock50GRegulationsEmission: CE CISPR Pub. 22 (EN55022) Immunity: CISPR Pub. 24 IEC61000-4-2 Conforming level 4 FCC Part15 Class B RoHSPower12V DC -10% to 24V DC +10% 450 mA (Typical) - 480 mA (Max.)Dimensions90 mm (H) x 90 mm (W) x 90 mm (D) (without connector and lens mount protrusion)Weight830 gOrdering Information1LT-200 CL-M523 CMOS RGB Line Scan Camera. M52-mount (Standard) 3 CMOS RGB Line Scan Camera. F-mount	Operating temperature	-5°C to +45°C/20 - 80% non-condensing	
Shock50GRegulationsEmission: CE CISPR Pub. 22 (EN55022) Immunity: CISPR Pub. 24 IEC61000-4-2 Conforming level 4 FCC Part15 Class B RoHSPower12V DC -10% to 24V DC +10% 450 mA (Typical) - 480 mA (Max.)Dimensions90 mm (H) x 90 mm (W) x 90 mm (D) (without connector and lens mount protrusion)Weight830 gOrdering InformationIT-200 CL-M52LT-200 CL -F3 CMOS RGB Line Scan Camera. F-mount	Storage temp./humidity	-25°C to +60°C/20 – 80% non-condensing	
RegulationsEmission: CE CISPR Pub. 22 (EN55022) Immunity: CISPR Pub. 24 IEC61000-4-2 Conforming level 4 FCC Part15 Class B RoHSPower12V DC -10% to 24V DC +10% 450 mA (Typical) - 480 mA (Max.)Dimensions90 mm (H) x 90 mm (W) x 90 mm (D) (without connector and lens mount protrusion)Weight830 gOrdering Information12V DC RGB Line Scan Camera. M52-mount (Standard) 3 CMOS RGB Line Scan Camera. F-mount	Vibration	3G (20Hz to 200Hz, XYZ direction)	
Immunity: CISPR Pub. 24 IEC61000-4-2 Conforming level 4 FCC Part15 Class B RoHSPower12V DC -10% to 24V DC +10% 450 mA (Typical) - 480 mA (Max.)Dimensions90 mm (H) x 90 mm (W) x 90 mm (D) (without connector and lens mount protrusion)Weight830 gOrdering InformationLT-200 CL-M523 CMOS RGB Line Scan Camera. M52-mount (Standard) 3 CMOS RGB Line Scan Camera. F-mount	Shock	50G	
450 mA (Typical) – 480 mA (Max.)Dimensions90 mm (H) x 90 mm (W) x 90 mm (D) (without connector and lens mount protrusion)Weight830 gOrdering InformationLT-200 CL-M523 CMOS RGB Line Scan Camera. M52-mount (Standard) 3 CMOS RGB Line Scan Camera. F-mount	Regulations	Immunity: CISPR Pub. 24 IEC61000-4-2 Conforming level 4 FCC Part15 Class B	
(without connector and lens mount protrusion) Weight 830 g Ordering Information LT-200 CL-M52 3 CMOS RGB Line Scan Camera. M52-mount (Standard) LT-200 CL -F 3 CMOS RGB Line Scan Camera. F-mount	Power		
Ordering Information LT-200 CL-M52 3 CMOS RGB Line Scan Camera. M52-mount (Standard) LT-200 CL -F 3 CMOS RGB Line Scan Camera. F-mount	Dimensions		
LT-200 CL-M52 3 CMOS RGB Line Scan Camera. M52-mount (Standard) LT-200 CL -F 3 CMOS RGB Line Scan Camera. F-mount	Weight	830 g	
M52-mount (Standard) LT-200 CL -F 3 CMOS RGB Line Scan Camera. F-mount	Ordering Information		
LT-200 CL -F 3 CMOS RGB Line Scan Camera. F-mount	LT-200 CL-M52		
	LT-200 CL -F	3 CMOS RGB Line Scan Camera. F-mount	



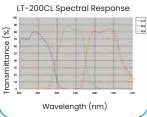
Camera Link Interface

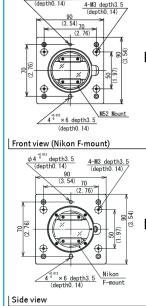
13 1				
	26		14	
Pin	-	Signal	Function	
1	14	GND	-	
2	15	Xo-/Xo+	CL Data	
3	16	X1-/X1+	CL Data	
4	17	X2-/X2+	CL Data	
5	18	Xclk-/Xclk+	CL Clk	
6	19	X3-/X3+	CL Data	
7	20	SerTC+/ SerTC-	Serial in*	
8	21	SerTFG-/ SerTFG+	Serial out*	
9	22	CCI-/CCI+	Trigger*	
10	23	CC2-/CC2+	Reserved	
11	24	CC3-/CC3+	Not used	
12	25	CC4-/CC4+	Not used	
13	26	GND	-	

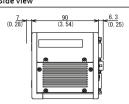
*) In Camera Link or 12 pin Hirose Note:

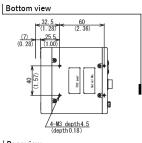
Camera Link base configuration shown. For medium configuration refer to Camera Link specifications or operation manual.

Spectral Response

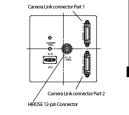








Rear view



Machine VISION DIRECT

Product Highlights

- 3 CMOS line scan camera with Camera Link output
- Dichroic RGB beam splitter prism with 3 sensors
- 3 sensors with 2048 pixels, 14.0 μm x 14.0 μm
- Low-noise operation (S/N: 57 dB) providing superior image quality
- 28.672 mm sensor scan width
- 3 x 8 bits or 3 x 10 bits output through Camera Link interface
- Line rate up to 30383 lines per second at 80 MHz pixel clock
- One-push auto white balance
- Flat field correction and color shading correction
- Knee and binning functions for extended dynamic range and sensivity
- Sub-sampling and windowing readout
- Set-up and installation aid with built-in test generator
- Available with M52 mount (standard) or Nikon F-mount
- Short ASCII commands for set-up via RS 232C or Camera Link
- Setup by Windows XP/Vista/Windows 7 software

Additional Product Images



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