

■ 2048 x 1 pixels

■ 40 kHz

Wave Series



➤ WAL-2001-GE

High performance SWIR line scan camera

GIG
VISION

Preliminary Version



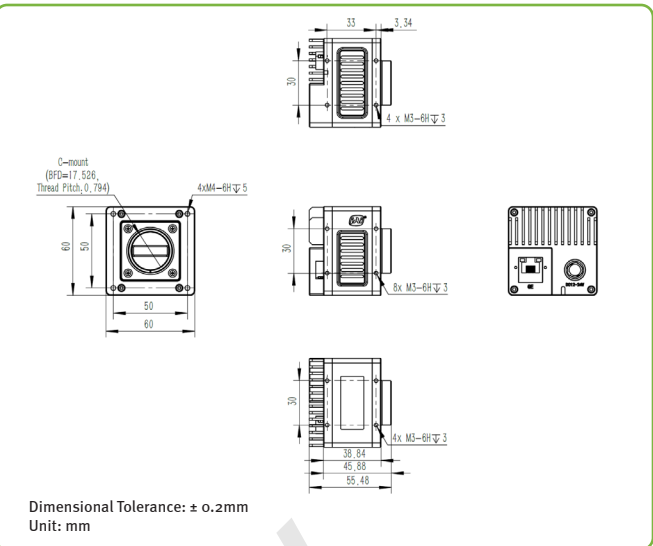
- **High-performance SWIR line scan camera with GigE Vision interface**
- **2048 x 1 pixel output up to 40kHz**
- **12.8mm wide sensor with 12.5 μm square pixels**
- **Supports horizontal image flip**
- **Video output: Mono8/10/12/14-bit**
- **Gain control includes digital gain and analog gain**
- **Supports FFC (Flat Field Correction), DPC (Defective Pixel Correction), Spatial Correction, Destripe, black level control and LUT**
- **Lens mount: C-Mount**

Specifications for WAL-2001-GE

Wave Series

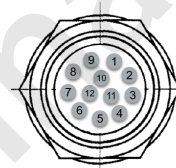
Specifications	WAL-2001-GE
Sensor	InGaAs global shutter
Spectral range	900nm to 1700nm
Effective Pixels	2048 x 1 (pixel shift)
Line rate	up to 40kHz
Sensor width	12.8mm
Pixel size	12.5 μm x 12.5 μm
Quantum Efficiency	83.25%@1435nm (typical peak value)
Dynamic Range	65dB (TBD)
Signal-to-Noise Ratio	54dB (TBD)
Interface	GigE Vision
Video output	Mono8, Mono10, Mono10p, Mono12, Mono12p, Mono14
Gain	Digital Gain (1 to 32) Analog Gain (Level_High / Level_Low)
Trigger source	Software, Opto, Multiplexed I/O, RS422 Differential trigger
Frame Trigger Divider	1 to 8
Exposure Mode	Timed
Exposure Time	2 μs ~ 9992 μs
ISP	FFC (Flat Field Correction), DPC (Defective Pixel Correction), Spatial Correction, Destripe, black level control and LUT
LUT	3 preset options
Lens mount	C-Mount (BFD: 17.526mm)
Operating temp. (ambient)	-20°C to +55°C (20 to 80% non-condensing)
Storage temp. (ambient)	-40°C to +60°C (20 to 80% non-condensing)
Vibration	10G (20 Hz to 200 Hz, XYZ directions)
Shock	80G
Regulations	CE (EN 55032:2015+A1+A11, EN 55035:2017+A11, EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019), FCC Part 15 Subpart A, RoHS, KC (TBD)
Power supply	12-pin: 12 to 24V DC +/-15% PoE: not supported
Power consumption	4.3W Typ @ 12V DC (TBD)
Dimensions (H x W x D)	60.0 mm x 60.0 mm x 55.5 mm
Weight	309g (TBD)

Dimensions



Connector pin-out

12-pin Connector (Power) HR10A-10R-12PB (71)

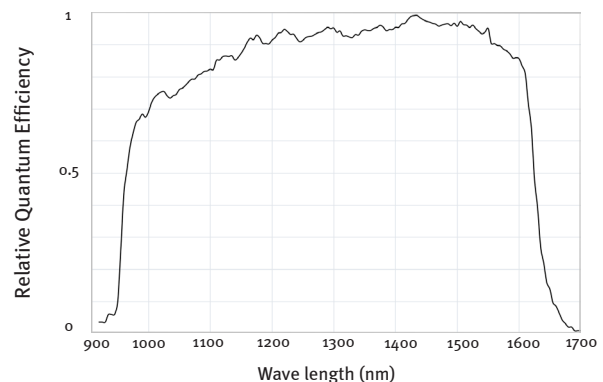


Pin	Signal
1	GND
2	DC_PWR
3	RS422_0_RX_A
4	RS422_0_RX_B
5	RS422_1_RX_A
6	RS422_1_RX_B
7	OPT_IN
8	OPT_IN_GND
9	OPT_OUT
10	OPT_OUT_GND
11	GPIO_A
12	GPIO_B

Spectral Response

WAL-2001-GE Quantum Efficiency

QE=83.25%@1435nm (typical peak value)



Ordering Information

WAL-2001-GE	zK High performance SWIR line scan camera
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