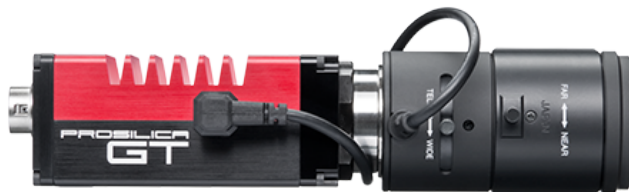# Prosilica GT

1920

- Versatile temperature range for extreme environments
- IEEE 1588 PTP
- PoE
- P-Iris and DC-Iris lens control

Description

2.8 Megapixel industrial camera for extreme environments - fast frame rates

Prosilica GT1920/GT1920C is a 2.8 Megapixel camera with a GigE Vision Gigabit Ethernet interface. This camera incorporates a high quality Sony ICX674 CCD sensor with EXview HAD II technology that provides high sensitivity, near IR response, low noise, anti-blooming, and excellent image quality. It is a rugged camera designed to operate in extreme environments and fluctuating lighting conditions. This camera offers Precise iris lens control allowing users to fix the aperture size to optimize depth of field, exposure and gain without the need for additional control elements.

Options:

- Various IR cut/pass filters and lens mounts

See the#Modular Concept#for lens mount and optical filters.

Specifications

Prosilica GT	1920
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
Resolution	1936 (H) × 1456 (V)
Sensor	Sony ICX674
Sensor type	CCD Progressive
Cell size	4.54 µm x 4.54 µm
Lens mount	C-Mount
Max frame rate at full resolution	40.7 fps
ADC	14 bit
Image buffer (RAM)	128 MByte
Output	

Prosilica GT	1920
Bit depth	14 (monochrome); 12 (color) bit
Mono modes	Mono8, Mono12, Mono12Packed, Mono14
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed
Raw modes	BayerGR8, BayerGR12, BayerRG12Packed
General purpose inputs/outputs (GPIOs)	
TTL I/Os	1 input, 2 outputs
Opto-isolated I/Os	1 input, 2 outputs
RS-232	1
Operating conditions/dimensions	
Operating temperature	-20 °C to +60 °C ambient (without condensation)
Power requirements (DC)	7 to 25 VDC; PoE
Power consumption (@12 V)	4.9 W @ 12 VDC; 6.0 W PoE
Mass	224 g
Body dimensions (L × W × H in mm)	92 × 53.3 × 33 (including connectors)
Regulations	CE, RoHS, REACH, WEEE, FCC, ICES
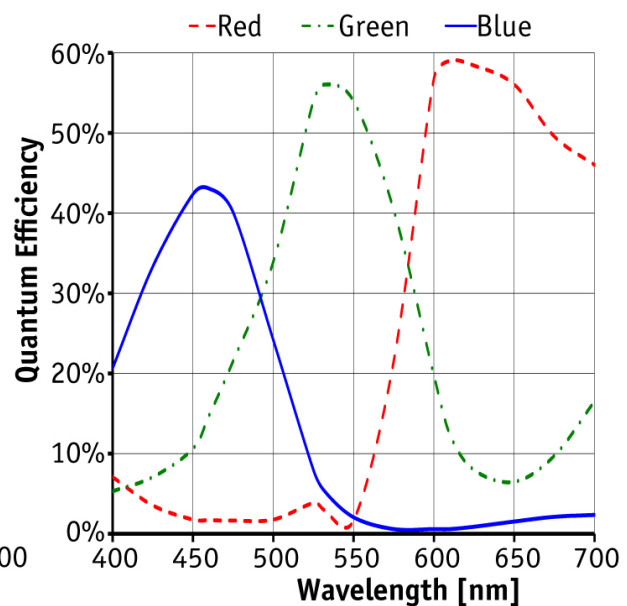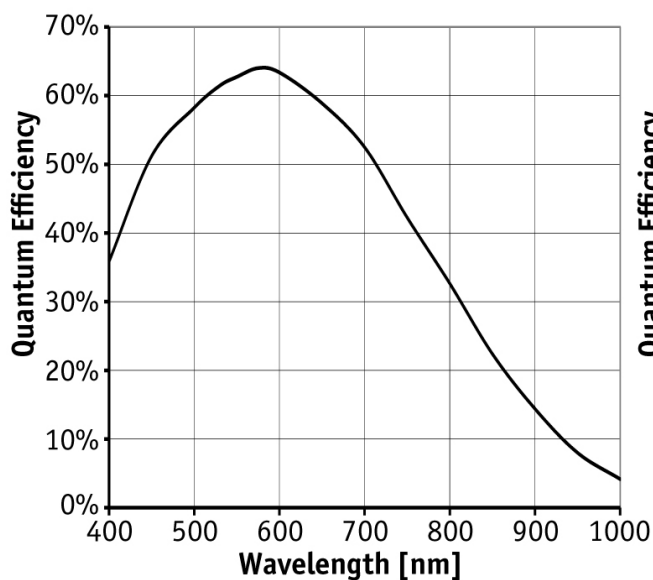
Features

Image optimization features:

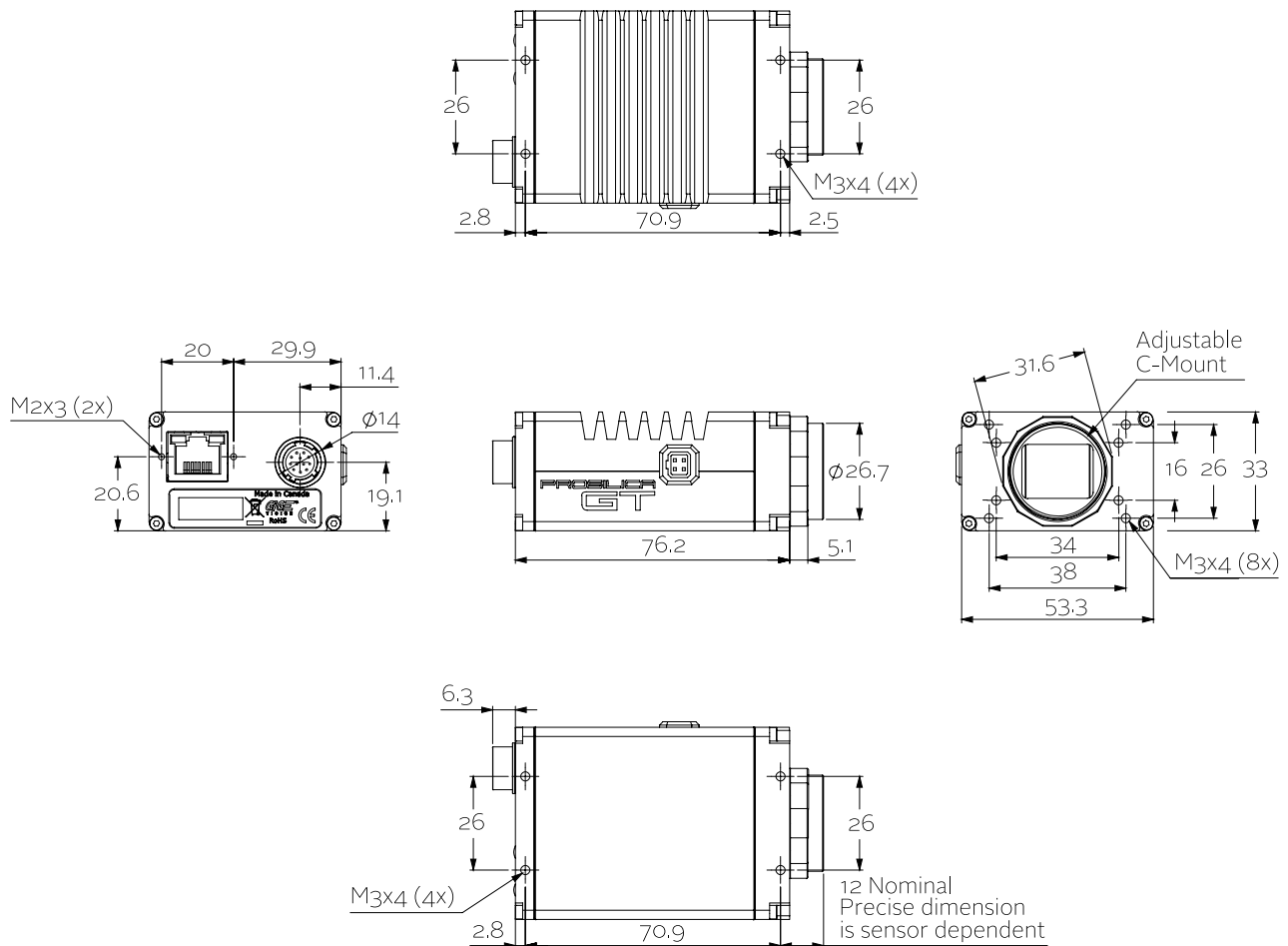- Auto gain (manual gain control: 0 to 33 dB)

- Auto exposure (manual exposure control: 10 #s to 26.8 s)
- Auto white balance
- Binning (horizontal and vertical)
- Color correction, hue, saturation
- Column defect masking
- Decimation X/Y
- Gamma
- Look-up tables (LUTs)
- Region of interest (ROI), separate ROI for auto features
- Reverse X/Y

Camera control features:

- P-Iris and DC-Iris lens control
- Event channel
- Image chunk data
- IEEE 1588 precision time protocol (PTP)
- RS232
- Storable user sets
- StreamBytesPerSecond (easy bandwidth control)
- StreamHold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Tap mode switchable in Vimba Viewer 2.0 or later (four-tap, one-tap)
- Temperature monitoring (main board and sensor board)

Technical drawing

26

26

M3x4 (4x)

2.8

70.9

2.5

M2x3 (2x)

20

29.9

11.4

Ø14

20.6

Made In Canada

19.1

Adjustable
C-Mount

31.6

Ø26.7

16 26 33

PROSILICA
GT

76.2

5.1

34

38

M3x4 (8x)

53.3

6.3

26

26

M3x4 (4x)

2.8

70.9

12 Nominal
Precise dimension
is sensor dependent

Applications

Prosilica GT1920/GT1920C is ideal for a wide range of applications including:

- Outdoor imaging
- Traffic imaging / Intelligent Traffic Systems (ITS)
- Public security and surveillance
- Industrial inspection
- Machine vision
- Military and space applications