



# **Prosilica GT**



2050

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

## Description

## 4.2 Megapixel camera for Extreme environments - fast frame rates

Prosilica GT2050/GT2050C is a 4.2 Megapixel camera with a GigE Vision compliant Gigabit Ethernet interface. This camera incorporates the high quality CMOSIS CMV4000 sensor. 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:

#### options.

• Various optical filters and lens mounts

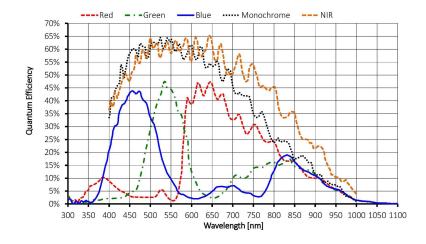
See the #Modular Concept #for lens mount and optical filter options.

## Specifications

Prosilica GT	2050
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE)
Resolution	2048 (H) × 2048 (V)
Sensor	CMOSIS CMV4000
Sensor type	CMOS Progressive
Cell size	5.5 μm x 5.5 μm
Lens mount	C-Mount
Max frame rate at full resolution	28.6 fps
ADC	12 bit
Image buffer (RAM)	128 MByte
Output	
Bit depth	8/12 bit



Prosilica GT	2050
Mono modes	Mono8, Mono12, Mono12Packed
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed
Raw modes	BayerGB8, BayerGB12, BayerGB12Packed
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 +65 °C ambient (without condensation)
Power requirements (DC)	7 to 25 VDC; PoE
Power consumption (@12 V)	3.5 W @ 12 VDC; 4.3 W PoE
Mass	210 g
Body dimensions (L × W × H in mm)	86 × 53.3 × 33 (including connectors)
Regulations	CE, RoHS, REACH, WEEE, FCC, ICES



## Features

## Image optimization features:

- Auto gain (manual gain control: 0 to 26 dB)
- Auto exposure (manual exposure control:#34 #s to 126.2 s)



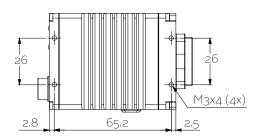
- Auto white balance
- BlackLevel (offset)
- Color correction, hue, saturation
- Gamma
- Look-up tables (LUTs)
- Region of interest (ROI), separate ROI for auto features

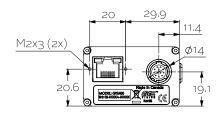
#### Camera control features:

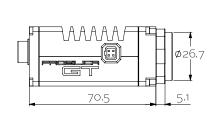
- P-Iris and DC-Iris lens control
- Event channel
- Image chunk data
- IEEE 1588 precision time protocol (PTP)
- RS232
- Storable user sets
- StreamBytesPerSecond (easy bandwidth control)
- StreamHold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO#
- Temperature monitoring (main board only)

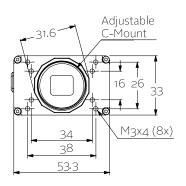


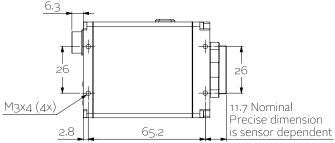
# Technical drawing











# **Applications**

Prosilica GT2050/GT2050C 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