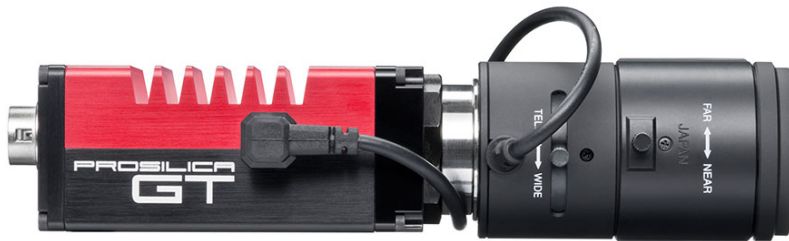# GT2050 NIR

Description

NEW: 4 Megapixel CMOS NIR enhanced camera for extreme environments - fast frame rates
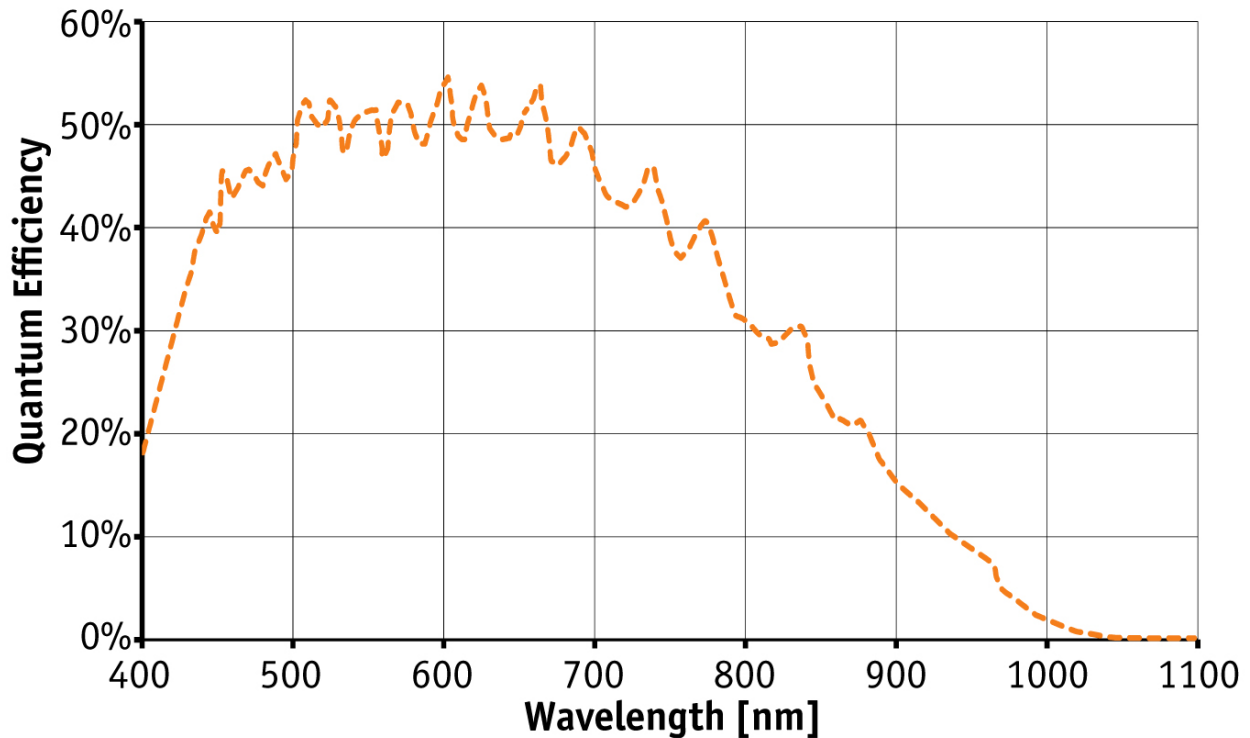
The Prosilica GT2050 NIR is a 4 Megapixel camera equipped with a NIR optimized variant of the CMOSIS CMV4000 sensor. At 900 nm this sensor offers double the quantum efficiency, an increase from 8% to 16% absolute. The GT2050 NIR is a rugged camera designed to operate in extreme environments and fluctuating lighting conditions. It 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.

- CMOSIS CMV4000 sensor: NIR variant
- Auto Iris (P-Iris and DC)
- Power over Ethernet (PoE)
- Ethernet surge suppression
- Gamma, multiple LUT, color correction
- Metadata (Chunk data), clock synchronization (IEEE1588)
- Wide operating temperature range
- Global shutter (digital shutter)
- **Model**:
    - GT2050 NIR, 2048 x 2048, 28 fps, CMOSIS mono - NIR enhanced

Specifications

Prosilica GT	2050 NIR
Interface	IEEE 802.3 1000baseT
Resolution	2048 x 2048
Sensor	CMOSIS CMV4000 NIR enhanced
Sensor type	CMOS Progressive
Sensor size	Type 1
Cell size	5.5 µm
Lens mount	C (adjustable)
Max frame rate at full resolution	28.6 fps
A/D	12 bit
On-board FIFO	128 MB
	Output
Bit depth	8/12 bit
Mono modes	Mono8, Mono12, Mono12Packed
Color modes YUV	n/a
Color modes RGB	n/a
Raw modes	n/a
	General purpose inputs/outputs (GPIOs)
TTL I/Os	1 input, 2 outputs
Opto-coupled I/Os	1 input, 2 outputs
RS-232	1
	Operating conditions/Dimensions
Operating temperature	-20°C ... +65°C
Power requirements (DC)	PoE, or 7–25 VDC
Power consumption (12 V)	3.5 W @ 12 VDC
Mass	210 g
Body Dimensions (L x W x H in mm)	86 x 53.3 x 33 mm including connectors, w/o tripod and lens
Regulations	CE, FCC Class A, RoHS (2011/65/EU)

Download the Prosilica GT2050 NIR technical drawing

Smart features

The Prosilica GT2050 NIR features include:

- Auto exposure
- Auto gain
- Auto white balance
- Region of Interest (ROI) readout
- DSP subregion (selectable ROI for auto features)
- StreamBytesPerSecond (easy bandwidth control)
- Stream hold
- Asynchronous external trigger and sync I/O
- Auto Iris (P-Iris and DC)
- Power over Ethernet (PoE)
- Ethernet surge suppression
- Gamma
- Multiple LUT
- Color correction
- Metadata (Chunk data)
- Clock synchronization (IEEE1588)
- Recorder and multiframe acquisition modes

Applications

The Prosilica GT2050 NIR is ideal for a wide range of applications including:

- Outdoor imaging
- Traffic imaging / ITS
- Public security and surveillance
- Industrial inspection
- Machine vision
- Microscopy
- Medical and healthcare
- ... and many more