



Made in EU



## Datasheet

# Giganetix Plus Series

**SMARTEK Vision**  
**Business Class Products at Economy Prices**

The Giganetix Plus series constitutes the technological flagship of our Industrial GigE Vision Camera portfolio. It is designed for industrial imaging applications which benefit from Sony's latest advances in CCD imaging sensors, like the EXview HAD CCD II™ technology.

Especially the new sensors with three, six, and nine megapixels show unbeaten light sensitivity. Thanks to our long-standing experience of camera design, the Giganetix Plus series offers optimal image contrast in applications with very short exposure times, e.g. in high-speed automation. In outdoor surveillance and border control applications, the high NIR sensitivity and resolution of our cameras allow for new system designs and higher performance.

### Key Benefits & Features:

- Three Sony high-end 4-tap CCD sensor models with factory-calibrated taps
- Power over Ethernet (PoE)
- Heat optimized footprint with 50x50x48mm
- Exposure time programmable from 10µs to 10s
- Trigger latency of just ~2µs, jitter <0.5µs
- Fully GigE Vision and Gen<i>Cam compliant hardware and software
- Comprehensive C/C++ SDK, Windows and Linux

Besides the fine selection of image sensors and the superior picture quality, the Giganetix Plus cameras provide a rich feature set comprising Power over Ethernet (PoE), two input and output control channels plus a robust and compact enclosure of 50x50x48mm.

The fully GigE Vision compliant hardware and driver interface, the comprehensive Windows and Linux compatible Giganetix GigE Vision SDK as well as the utilization of industrial connectivity standards ensure the seamless integration also in existing cost-sensitive systems – without any compromise in quality!

- Plug & Play, attach the camera to your Ethernet network and start working
- Standard C-Mount lens adapter
- Precise mount to image sensor alignment
- Sealed image sensor
- 2 inputs and 2 outputs, opto-isolated
- 3 years warranty



## Model Overview:

Model	Sensor	Sensor Technology	Resolution	Frame Rate [fps] 8 / 16 bit	Sensor Size [inch]	Pixel Size [µm]	Exposure Time	Analog Gain Abs. [dB]	Power Cons. (PoE) [W]	ADC [bit]
<b>GCP1941M</b> <b>GCP1941C</b>	Sony ICX674	4 Tap CCD, Progressive Scan	1936x1456 2.8 MP	36 / 17	2/3"	4.54	10µs - 10s	12 - 24	3.7 (4.6)	8, 14
<b>GCP2751M</b> <b>GCP2751C</b>	Sony ICX694	4 Tap CCD, Progressive Scan	2752x2208 6.1 MP	18 / 9	1"	4.54	10µs - 10s	12 - 24	4.0 (4.8)	8, 14
<b>GCP3381M</b> <b>GCP3381C</b>	Sony ICX814	4 Tap CCD, Progressive Scan	3376x2704 9.1 MP	12 / 6	1"	3.69	10µs - 10s	12 - 24	4.1 (4.9)	8, 14

The platform concept of this camera series and its powerful on-board FPGA allows for flexible, fast, and cost-efficient customization of the mechanics, electronics, and the embedded camera software tailored to customer needs – also for low quantities.

## Further Specifications:

Video interface:	Gigabit Ethernet 1000BASE-T
Video format:	Mono 8/16, Bayer 8/16
Synchronization:	Via external trigger, single shot or free run
Exposure control:	Freely programmable via GigE Vision interface
Optical filters:	IR-cut default for color models
Digital input:	2 input channels, opto-isolated
Digital output:	2 output channels, opto-isolated
Power supply:	10-24V DC (via GPIO) or Power over Ethernet (PoE)
Mount:	C-Mount
Operating temp.:	from 0°C/+32°F up to +50°C/+122°F
Dimensions:	50x50x48mm
Weight:	ca. 150g

## Software Environment:

Firmware update:	via Ethernet
Client software:	SMARTEK Vision GigEVisionClient Camera stream display and image capturing, intuitive graphical user interface for the adjustment of all available settings, GigE Vision and Gen<i>Cam compliant
Driver:	GigE Vision compliant Giganetix IP filter driver for all Windows™ and Linux platforms
SDK:	SMARTEK Vision GigEVisionSDK with documented API, freely applicable for most GigE Vision compliant cameras
Interoperability:	Validated with Halcon™, VisionPro™, Matrox Imaging Library™, LabView™, Scorpion Vision™ and others

## Ordering Information:

<b>GCP&lt;XXX&gt;&lt;N&gt;&lt;Y&gt;-&lt;G&gt;</b>	
	<b>IRC</b> with IR-cut filter (default for color models)
	<b>CLG</b> clear glass (default for monochrome models)
	<b>M</b> monochrome
	<b>C</b> color
	Model index
	Horizontal resolution without last digit

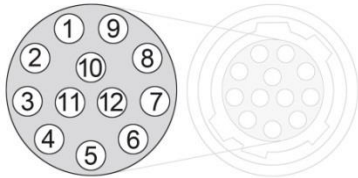
## Accessories (sold separately):

Our team assists you in finding the optimal accessories (lenses etc.) for your camera.

Cabling:	Standard I/O cables with flying leads and end ferrules Ethernet CAT5e/6 with straight RJ45 plugs and screw lock All cables are also available with angled plugs and in chain / hi-flex versions
Power supply:	12V wall mount power supply
Strobe controller:	SMARTEK Vision IP Strobe Controller with 1, 2 and 4 channels (up to 200V@20A)
Mounting plates:	Tripod mount adapter for standard 1/4" tripod mounts

## General Purpose IO Interface (GPIO):

EIAJ (Hirose compatible) 12 pin



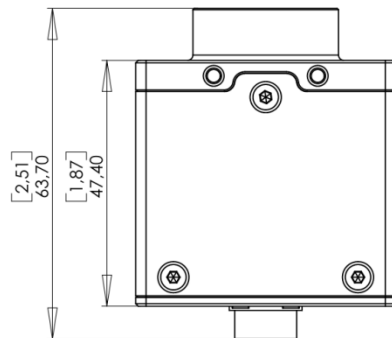
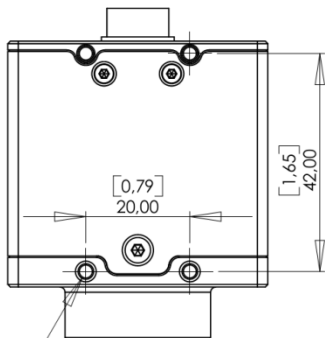
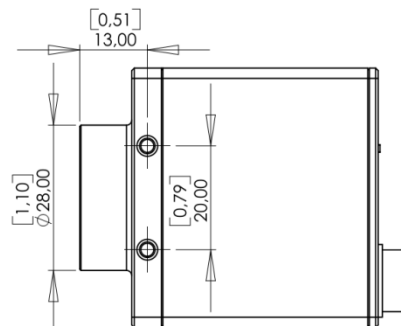
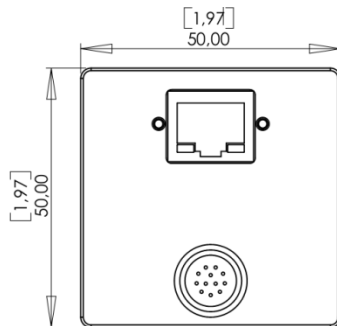
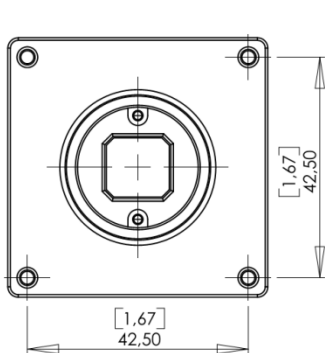
1 – Power GND  
 2 – 10-24V DC input  
 3 – Output 1 -  
 4 – Output 1 +

5 – Input 2 -  
 6 – Input 2 +  
 7 – Input 1 +  
 8 – Input 1 -

9 – Output 2 -  
 10 – Output 2 +  
 11 – Input 1 +  
 12 – Input 1 -

## Dimensions in mm / [inch]:

Housing (without mount and plugs): 50x50x48mm



M3x0.5 - 6H ∇ 5.00 [0.20]