PULNiX TMC-1327GE

Gigabit Ethernet Series

The TMC-1327GE is a miniature, high-resolution, (1.4 megapixels) color CCD camera. The imager resolution is 1392 x 1040 @ 30 fps. The progressive scan interline transfer (IT) CCD permits full vertical and horizontal resolution of high-speed shuttered images. Applications for the TMC-1327GE include machine vision, medical imaging, intelligent transportation systems, high-definition graphics, gauging, character recognition, robotics, and surveillance.

- 2/3" progressive scan IT CCD imager (ICX285AL)
- 1392(H) x 1040(V) @ 30 fps
- 6.45 µM square pixels
- Miniature 51 x 51 x 84 mm housing
- Monochrome version available as TM-1327GE
- High speed point-to-point connection, up to 1Gbps
- Gigabit Ethernet output (8-bit/10-bit), 100 m with CAT 5E or CAT 6 cable
- Maximum dynamic range control with PULNiX-exclusive, patent-pending built-in look-up table
- User-definable variable partial scan
- Full-frame shutter to 1/21,000 sec.
- Asynchronous reset, no-delay shutter
- High gain CCD output

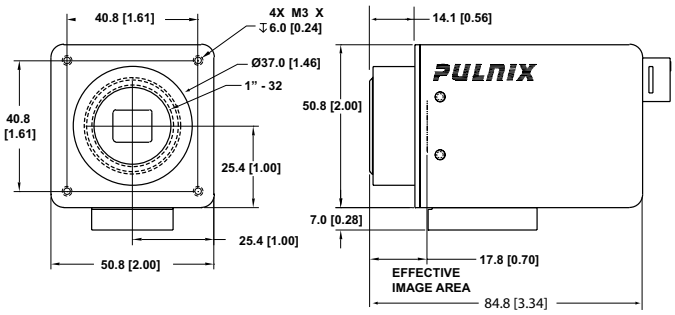
GiGE VISION™

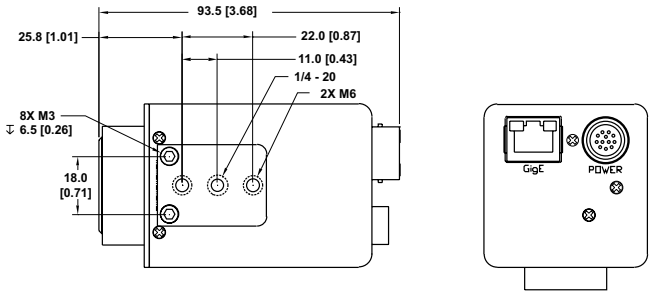
TMC-1327GE SPECIFICATIONS

Imager	*2/3" progressive scan IT CCD (IXC285AL)*
Active Area	*8.98mm x 6.71mm*
Active Pixels	*1392 (H) x 1040 (V)*
Cell Size	*6.45 µm x 6.45 µm*
Display Mode (Active Pixels)	*1392 (H) x 1040 (V) @ 30* *User-definable variable partial scan*
Sync	*Internal/External auto switch* *HD/VD, 4.0 Vp-p impedance 4.7K Ω* *VD= 30 Hz ± 5%, non-interlace* *HD=31.59 kHz ± 5%*
Data Clock Output	*55.00 MHz*
Resolution	*Digital: 1392 (H) x 1040 (V)*
S/N Ratio*	*52dB min.*
Min. Illumination	*0.6 lux, f=1.4 (no shutter) @ 30 fps*
Video Output	*Gigabit Ethernet (8- or 10-bit selectable)* *Analog: 714 mV, 75 Ω, (750 mV white clip)*
Gamma	*Programmable LUT (1.0 std)*
Lens Mount	*C-mount (use >2/3" format lenses)*
Power Requirement	*12V DC ± 10%, 430 mA (current measured at 25°)*
Operating Temp.	*-10° C to 50° C*
Vibration	*7 Grms (10 Hz to 2000 Hz) Random*
Shock	*70G, 11 ms, half-sine*
Size (W x H x L)	*51 mm x 51 mm x 85 mm*
Weight	*212 grams, 7.5 oz (without tripod)*

MUST BE ORDERED SEPARATELY	
Optional Functions	*Optical Filter Removal (OP3-2);*
Optional Accessories P/N **Power Cable** **Power Supply**	 *12P-02S* *PD-12UUP series (includes power connector)*

*** Image quality will degrade with increasing temperature**

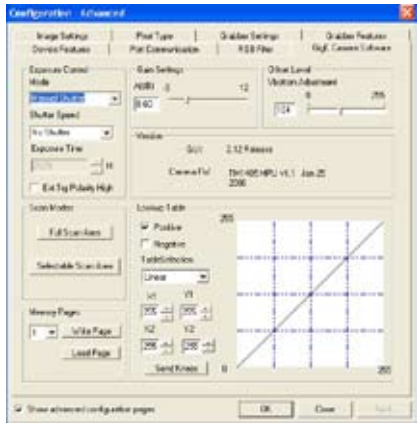




Graphical User Interface

A user-friendly graphical user interface (GUI), provided as part of the camera's extensive software development kit (SDK), allows users to control various camera functions, including:

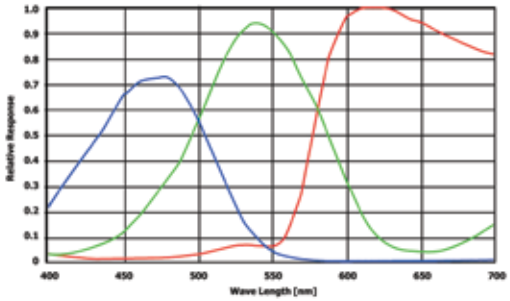
- Shutter control for manual async. and pulse width control
- Gain control
- A/D reference voltage control
- Save settings
- Load settings
- Report settings
- LUT setting and graphic display
- Scanning mode selection and Option selections



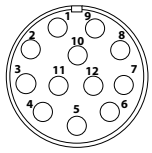
The SDK also provides functions for controlling the grabbing of images, and configuring local I/Os, by means of an integrated API and a set of powerful C++ classes. Changes in the camera's acquisition modes automatically update the API for easy image acquisition. CPU usage is only a few percent, thanks to the TCP/IP offload engine.

Software available for download at www.jai.com

Spectral Response



12-Pin Connector			
1	GND (power)	7	VD in
2	+12V	8	Strobe out
3	GND (analog)	9	HD in
4	Video out	10	Reserved
5	GND (digital)	11	Reserved
6	VINIT in	12	Reserved



10185 Rev A.06.09.2006

JAI A-S, Denmark
Phone: +45 4457 8888
www.jai.com

JAI UK Ltd., England
Phone: +44 (0) 189 582 1481
www.jai.com

JAI Corporation, Japan
Phone: +81 045 440 0154
www.jai-corp.co.jp

JAI PULNiX, Germany
Phone: +49-(0) 60 55-93 79-10
www.jaipulnix.com

JAI PULNiX Inc., USA
625 River Oaks Pkwy
San Jose
CA 95134
USA

Phone +1 408 383 0300
(toll-free) 1 800 445 5444
Fax +1 408 383 0301
www.jaipulnix.com

PULNiX
www.jaipulnix.com