



The TM-6740GE is a miniature, VGA format monochrome progressive scan CCD camera with gigabit ethernet output. The imager resolution is 640 x 480 pixels at a frame rate of 200 frames per second. Applications for the TM-6740GE include machine vision, medical imaging, intelligent transportation systems, high-definition graphics, gauging, character recognition, robotics, and surveillance.

- 1/3" progressive scan interline transfer CCD imager (KAI-0340)
- 640(H) x 480(V) @ 200 fps
- 7.4 μm square pixels
- Miniature 51 x 51 x 85 mm housing
- 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
- 200 frames per second in full frame. Partial scan & binning modes up to 3205 frames per second
- Maximum dynamic range control with PULNiX-exclusive, patent-pending built-in look-up table (8-bit only)
- Full-frame shutter to 1/64,000 sec.
- Asynchronous reset, no-delay shutter
- Built-in pattern generator
- Color version (RGB Bayer CFA) available as TMC-6740GE‡
- Extensive software developer's kit (SDK)

‡ For more information see the Color AccuPiXEL data sheet

TM-6740GE Specifications

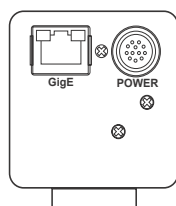
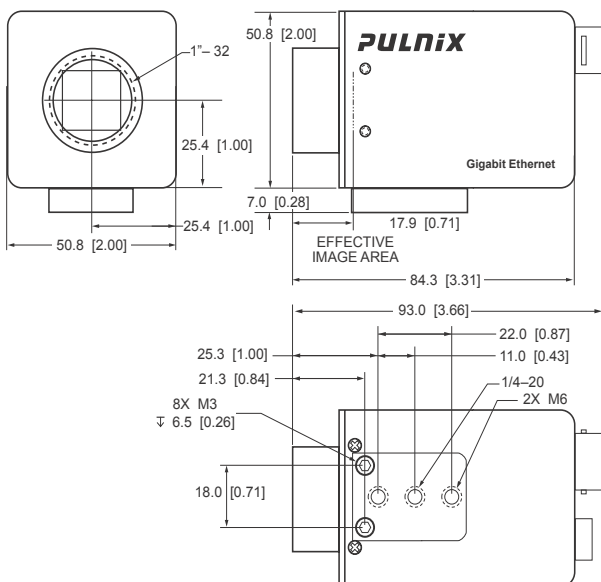
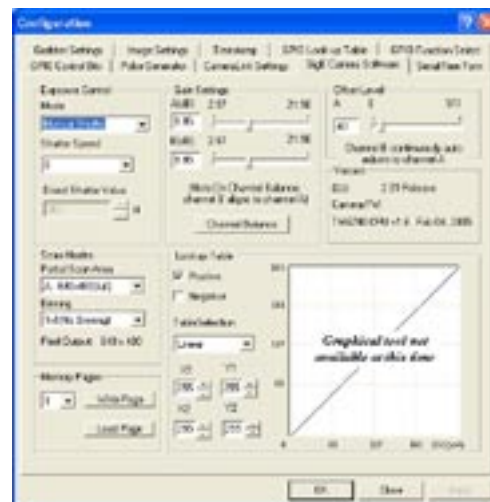
Imager	1/3" progressive scan interline transfer CCD
Active Area	5.87mm x 4.71mm
Active Pixels	640 (H) x 480 (V)
Cell Size	7.4µm x 7.4µm
Display Mode: (Active Pixels)	A 640 (H) x 480 (V) @ 200 Hz (full image) B 640 (H) x 160 (V) @ 540 Hz (partial scan) C 224 (H) x 480 (V) @ 500 Hz (partial scan) D 224 (H) x 160 (V) @ 1250 Hz (partial scan) Horizontal and vertical 2x and 4x binning independently selectable
Sync	Internal/external auto switch HD/VD, 4.0 Vp-p impedance 4.7 KΩ VD=frame rates ± 2%, non-interlace HD=100 kHz/250 kHz ± 2%
Data clock output	40.00 MHz
Resolution	Digital: 640 (H) x 480(V)
S/N ratio	50 dB min.
Min. illumination	1.0 lux, f=1.4 (no shutter) @ 200 fps Sensitivity: 30µ V/e-
Video output	Gigabit Ethernet
Gamma	Programmable LUT (1.0 std)
Lens mount	C-mount (use > 1/3" format lenses)
Power req	12V DC ± 10%, 500 mA max at 12V DC, 23° C
Operating temp	-10° C to 50° C
Vibration	7 Grms (10 Hz to 2000 Hz) Random
Shock	70G
Size (W x H x L)	51mm x 51mm x 85mm
Weight	194 grams, 6.84 oz (without tripod mount)
MUST BE ORDERED SEPARATELY	
Opt Accessories	
Power cable	12P-02S
Power supply	PD-12UUP series (includes power connector)

Graphical User Interface

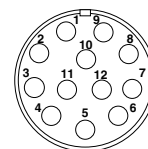
A user-friendly GUI (graphical user interface) is provided. This interface allows users to control the following functions of the TM-6740GE camera:

- Shutter control for manual async. and pulse-width control
- Gain control
- Offset Control
- Save settings
- Load settings
- LUT setting
- Scanning mode selection
- Channel Auto Balancing

Camera parameters can be uploaded from the PC to the camera. Once these parameters are stored in EEPROMs, an instantaneous change from one setting to another can be done with a delay of few frames in between.



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



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