



General Description

The PULNiX TM-7EG is a miniature, cylindrical monochrome camera with external sync capability. Although measuring only 17mm in diameter, it uses a 1/2" high resolution (768 x 494) circular CCD. Features include gamma selection, AGC or manual gain control, external sync capability, and variable shutter control (option).

Designed for self-contained miniature camera applications, the TM-7EG provides a low cost and robust solution that replaces remote head cameras. The cylindrical housing makes adjusting optical orientation very easy. The TM-7EG is ideal for machine vision, robot vision, helmet cameras, pipe inspection, underwater cameras, microscopy, military applications, etc.

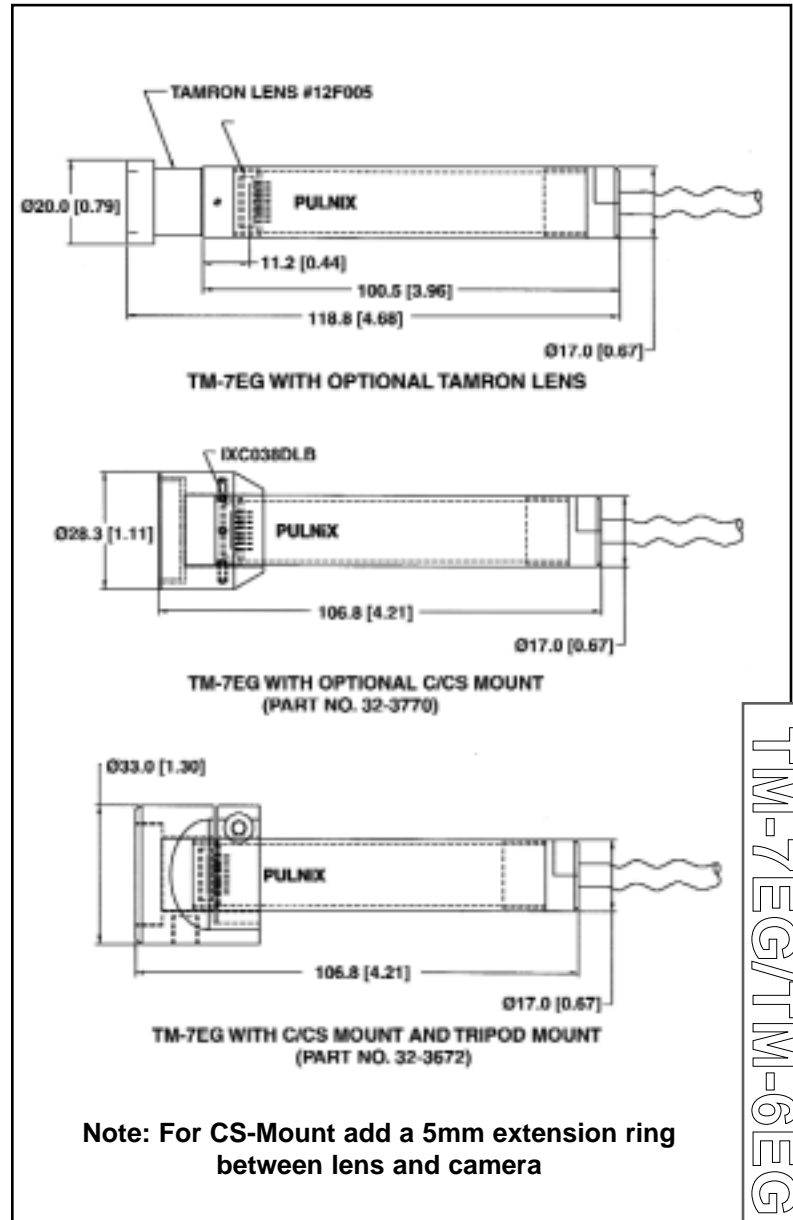
Optics

Various types of lens mounts are available as an option. The TM-7EG cylindrical enclosure has an M14 x 0.5 thread which is compatible with the Tamron aspherical lenses. Additionally, a C/CS-mount lens can be used with the optical adapters. The optics are designed for OEM applications.

Product Features

- Complete Miniature Camera, no control box required
- Low light Sensitivity (0.5 lux)
- 1/2" High Resolution CCD
- 17mm Dia and 100.5mm Long, Robust Design
- Optical Design for OEM Applications
- AGC on/off, Gamma 1 or 0.45, Ext/Int Sync
- Replaces Remote Head Cameras

Physical Dimensions

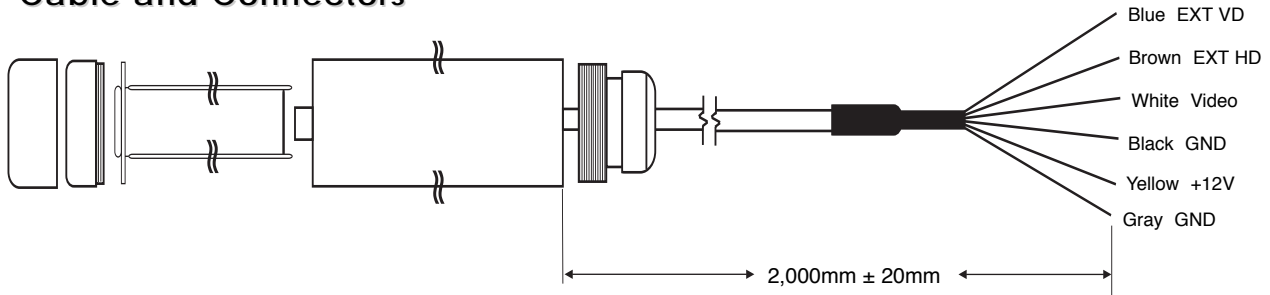


TM-7EG/TM-6EG

Specifications

Model	TM-7EG Series	TM-6EG Series
Imager	1/2 inch interline transfer CCD	
Pixels	768 (H) x 494 (V)	752 (H) x 582 (V)
Cell size	8.4 μm x 9.8 μm	8.6 μm x 8.3 μm
Scanning	525 lines EIA	625 lines CCIR
Sync	fH = 15.734 KHz \pm 5% fV = 59.94 Hz \pm 5%	fH = 15.725 KHz \pm 5% fV = 50 Hz \pm 5%
TV resolution	570 (H) x 350 (V)	560 (H) x 420 (V)
S/N Ratio	50 dB min., 56dB typical	
Min. illumination	.5 lux (F=1.4) without IR cut filter	
Video output	1.0V p-p composite video, 75 Ω	
AGC	On / Off (Off is factory default)	
Gamma	0.45 or 1 (1 is factory default)	
Lens mount	M14 x 0.5 Tamron, C/CS-mount	
Power requirement	DC 12V, 2.5W	
Operating temp.	-10 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$	
Random Vibration	7 Grms @ 10-2000 Hz	
Shock	70 G	
Size (Dia. x L)	17mm (Dia.) x 101.9 mm (L) 0.67" (Dia.) x 4.0" (L)	
Weight	34.0g (1.2 oz.)	
Power Cable	Flying lead (Power, Video, Sync)	
Power Supply	K25-12V or PD-12 (For 110V mains)	
Auto iris connector	None	
Accessories	C/CS-mount lens adapter (PN 32-3770) or C/CS-mount lens adapter with tripod mount (PN 32-3672)	

Cable and Connectors



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