



**TELEDYNE PHOTOMETRICS**  
Everywhereyoulook™

Long Exposure Optimized CMOS Camera

**E7**  
**RETIGA**

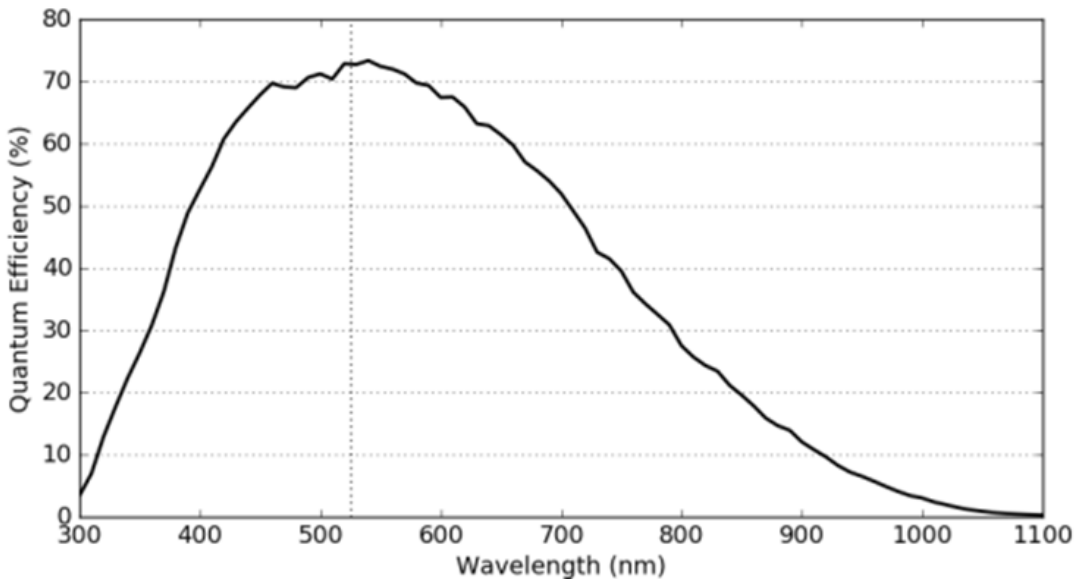


7 Megapixel cooled CMOS  
Low readout and thermal noise  
Optimized for long exposures  
Capable of up to 51 fps

Specifications	Camera Performance
Sensor	CMOS Sensor
Active Array Size	3200 x 2200 (7.1 Megapixel)
Pixel Area	4.5 $\mu\text{m}$ x 4.5 $\mu\text{m}$
Sensor Area	14.4 mm x 10 mm 17.6 mm diagonal
Peak QE%	>73%
Readout Mode	Global Shutter
Digital Binning	2x2 on chip binning, 4x4 digital binning
Linearity	>99%
Cooling Options	Air Cooled to -20 Celsius

Camera Modes			
Specifications	Long Exposure	Fast Capture	HDR
Bit-Depth	12-bit	12-bit	16-bit
Full Frame Rate	3.2 fps	51 fps	TBD
Read Noise	Sensitivity Mode: 2.1 $e^-$ Full-Well Mode: 4.8 $e^-$		TBD
Dark current	0.02 $e^-/\text{pixel}/\text{sec}$	0.1 $e^-/\text{pixel}/\text{sec}$	0.02 $e^-/\text{pixel}/\text{sec}$
Conversion Gain	Sensitivity Mode: 2.2 $e^-/\text{count}$ Full-Well Mode: 4.9 $e^-/\text{count}$		TBD
Full well capacity	19,000 $e^-$		TBD

Specification	Camera Interface
Digital Interface	USB 3.2 (10 Gbps)
Lens Interface	C-Mount
Mounting Points	2x 1/4"-20 TPI mounting points per side



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- Accessories (Included)**
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- USB 3.2 Cable and Card
  - Trigger Cable
  - Power Supply
  - Quickstart Guide
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**Frame Rate**

	Long Exposure	Fast Capture	HDR mode
Bit Depth	12	12	16
Full FPS	3.2	51.4	TBD

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Specifications in this datasheet are subject to change. Refer to the Teledyne Photometrics website for most current specifications.



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**TELEDYNE IMAGING**  
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