

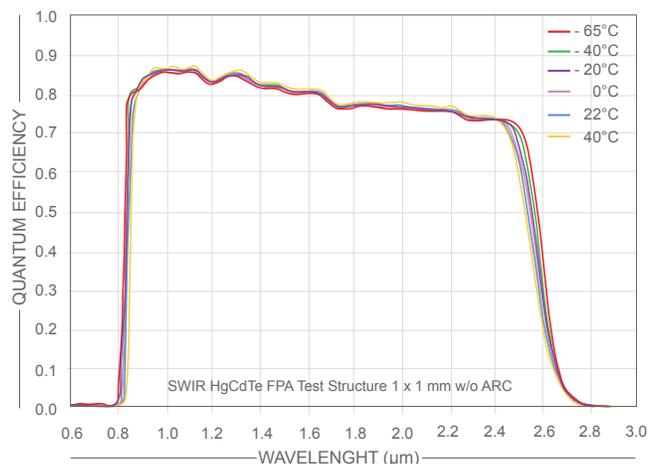
# BOREA™ CAMERA



Photon etc is developing a new, affordable SWIR camera sensitive from 800 nm to 2.6  $\mu\text{m}$ . Using a stirling micro cooler, our BOREA™ Camera reaches noise levels lower than its TE cooled competitors. First designed to increase the signal-to-noise ratio for faint flux applications such as hyperspectral imaging, this camera is also perfectly suited for spectroscopy, astronomy, or industrial applications.

## TECHNICAL SPECIFICATIONS

Cooling	Rotary Stirling micro cooler, forced air
Focal Plane Array (FPA)	HgCdTe
FPA Size	320 x 256 MCT pixels
Pixel Size	30 $\mu\text{m}$
Spectral Range	0.8 - 2.6 $\mu\text{m}$
Peak Responsivity	1.8 A/W @ 2550 nm
Gain Setting	2 (low, high)
Full-Well Capacity (e <sup>-</sup> )	168Ke (high gain), 3,5Me (low gain)
Quantum Efficiency	> 70%
Operability (typical)	> 98%
Readout Noise (ADU)	8 ADU
Readout Noise (e <sup>-</sup> )	82 @ 346 FPS, high gain
Dark Curre (A)	1,46 E-12
S/N Ratio	66 dB
Dynamic Range	14 bits
Cold Shield	square: $f1.25$ diagonal, $f1.76$ side
Frame Rate (FPS)	Up to 346, full frame
Integration Time	1 $\mu\text{s}$ to 250ms (80% of dynamic range)
Computer Interface	Camera Link™
Trigger	IN/OUT TTL
FPA Operating Temperature	77 K
Cool Down Time	16 minutes (ambient air 25°C)
Weight	2.3 Kg
Power Supply Requirement	24 VDC @ 1 A
Physical Dimensions	190 mm (including 60 mm tube) x 115 mm x 150 mm (L x W x H)
Ambient Temperature Range	0°C to 40°C
Other Features	Dust Filters



# HYPERSPPECTRAL IMAGING & SPECTROSCOPIC INSTRUMENTS

Photon etc is a specialized manufacturer of unique optical instruments. From UV to NIR, our spectroscopic and hyperspectral imaging technologies based on Bragg tunable filters offer the highest performance in the field. Founded in 2002 to offer astronomy the most advanced filtering technology, Photon etc continues to develop innovative instruments for the most demanding applications from material analysis to medical imaging.

Whether you need standard or custom products, our scientists and engineers will work to create an instrument that meets your specifications. Photon etc's main products include Hyperspectral Imaging System, Tunable Laser Source, Laser Line Tunable Filter and Tunable Top Notch Filter.

## DISTRIBUTORS

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