

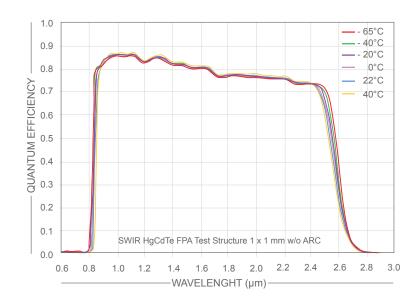
5795 DE GASPE AVENUE, #222 MONTREAL, QUEBEC, H2S 2X3 CANADA

# ZEPHIR<sup>™</sup> CAMERA



Continuing its push to extend the boundaries of industrial imaging, Photon etc. presents the first affordable, deep-cooled SWIR camera operational from 800 nm to 2.5 µm. Based on a sensitive HgCdTe (MCT) FPA, and integrating a four-stage TE cooler, ZEPHIR<sup>™</sup> delivers an astounding 346 frame-per-second rate while reaching unrivalled low noise levels. First designed for demanding faint-flux applications such as hyperspectral imaging, this latest offering in the SWIR domain is perfectly adapted to industrial applications in quality control and sorting.

TECHNICAL SPECIFICATIONS	
Cooling	TEC 4 Stages, forced air, -80°C ( $\Delta T < 110^\circ C)$
Focal Plane Array (FPA)	HgCdTe
FPA Size	320 x 256 MCT pixels
Pixel Size	30 µm
Spectral Range	0.8 - 2.6 µm
Peak Responsivity	1.8 A/W @ 2550 nm
Gain Setting	2 (low, high)
Full-Well Capacity (e <sup>-</sup> )	168Ke <sup>-</sup> (high gain), 3,5Me <sup>-</sup> (low gain)
Quantum Efficiency	> 70%
Operability (typical)	> 98%
Readout Noise (e-)	57 @ 346 FPS (high gain)
S/N Ratio	65 dB
Dynamic Range	14 bits
Cold Shield	N/A
Frame Rate (FPS)	Up to 346, full frame
Integration Time	1 µs to 100 ms
Computer Interface	Camera Link™
Trigger	IN/OUT TTL
FPA Operating Temperature	188 K
Cool Down Time	3 minutes
Power Supply Requirement	12 VDC @ 5 A
Ambient Temperature Range	0°C to 40°C
Other Features	Dust Filters
Physical Dimensions	165 mm x 120 mm x 140 mm (L x W x H)





# HYPERSPECTRAL IMAG NG & SPECTROSCOPIC NSTRUMENTS

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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