

ALIZÉ 1.7

INFRARED CAMERA



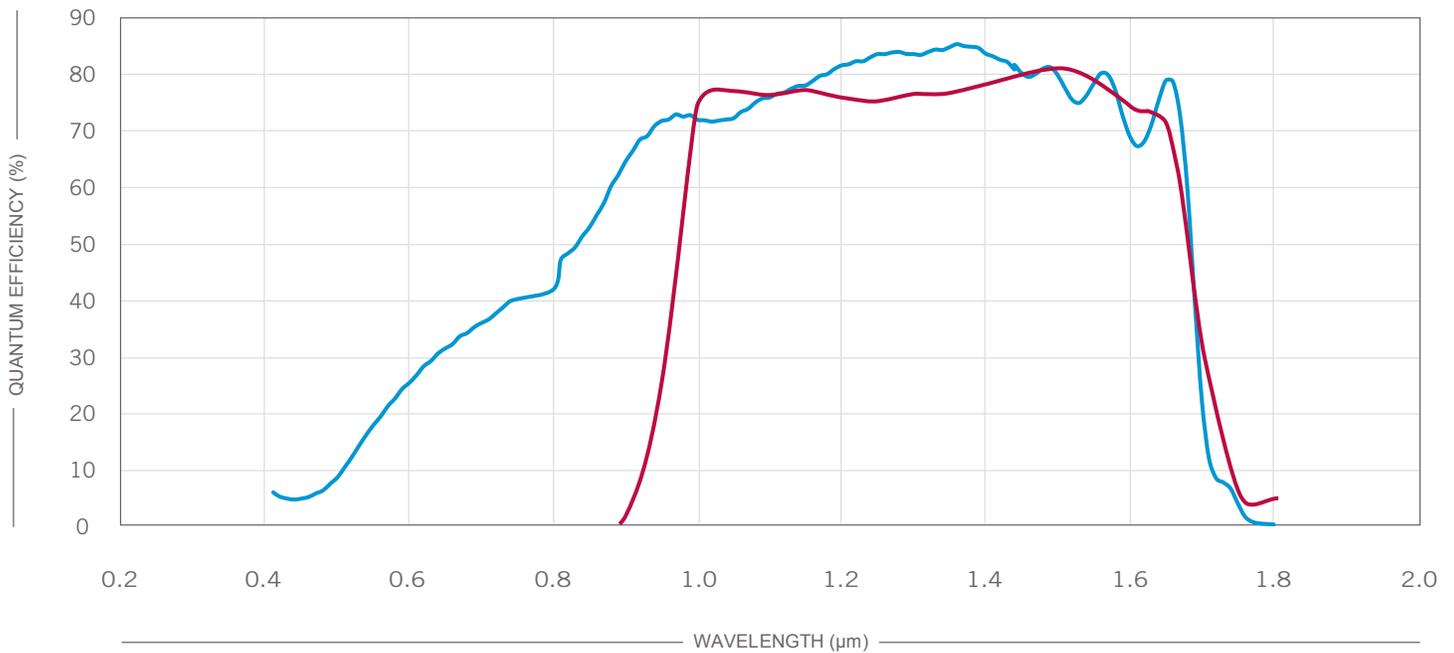
Continuing its push to extend the boundaries of scientific and industrial imaging, Photon etc. presents its high performance, quality for value, air-cooled SWIR camera line. Based on a sensitive InGaAs FPA and integrating a four-stage TE cooler, Alizé™ 1.7 delivers an astounding 190 frame-per-second rate while reaching very low noise levels. First designed for demanding faint-flux applications such as small animal imaging in the second biological window, these cameras also bring new capabilities for industrial applications in quality control and sorting.

* Export licence may be required for this item.

TECHNICAL SPECIFICATIONS	ALIZÉ 1.7-V			ALIZÉ 1.7-S		
Focal Plane Array (FPA)	InGaAs			InGaAs		
FPA size	640 x 512			640 x 512		
Pixel size	15 µm			15 µm		
Spectral range	0.5 - 1.7 µm (-0.5 - 1.65 µm @-50°C)			0.9 - 1.7 µm (-0.9 - 1.65 µm @-50°C)		
Dark Current	< 600 - Typ. ~500 e ⁻ /px/s (Target at 21°C and sensor at -50°C)			< 600 e ⁻ /px/s (To be measured soon with a target at 21°C and sensor at -50°C)		
	<i>High Gain</i>	<i>Med Gain</i>	<i>Low Gain</i>	<i>High Gain</i>	<i>Med Gain</i>	<i>Low Gain</i>
Gain Setting (e ⁻ /ADU)	2.8	28	130	2.1	7.4	89
Readout Noise (e ⁻)	50	150	800	30	75	350
Full Well Capacity	12 ke	800 ke	3.5 Me	27 ke	110 ke	1.4 Me
Readout Modes	CDS	ITR	ITR	ITR, IWR, CDS, IMRO		
Digitization	13 bits	15 bits	15 bits	14 bits		
Full Frame Rate	90	190	190	220		
Peak responsivity	1.1 A/W @ 1660 nm			1.0 A/W @ 1550 nm		
Quantum Efficiency	> 70% from 0.9 to 1.69 µm			> 75% from 1.0 to 1.6 µm		
Operability (typical)	> 99%			> 99%		
Integration Time Range	1 µs to 19 minutes (low gain)			1 µs to 19 minutes (low gain)		
Cooling	TEC 4 stages, forced air			TEC 4 stages, forced air		
FPA Operating Temperature	-50 °C			-50 °C		
Cool Down Time	< 10 minutes			< 10 minutes		
Ambient Temperature Range	10 °C to 35 °C			10 °C to 30 °C		
Cold Shield	f#/1.4			f#/1.4		
Software	PhySpec™ control and analysis software included					
Computer Interface	CameraLink™ or USB 3.0			CameraLink™ or USB 3.0		
External Control	On demand			On demand		
Power Supply Requirement	12 VDC @ 5A			12 VDC @ 5A		
Physical Dimensions	169 x 130 x 97.25 mm			169 x 130 x 97.25 mm		
Weight	2.6 kg			2.6 kg		
Certification	CE			CE		

MAIN ADVANTAGES OF TE COOLED AIR SYSTEM

- › Compact
- › Highly reliable
- › Long lifetime
- › No maintenance
- › Low dark current
- › Low readout noise



● **ALIZÉ 1.7-V**

● **ALIZÉ 1.7-S**

Quantum efficiency presented at 25°C.

The cut-off wavelength shifts towards the blue by ~7nm for every 10°C of cooling.

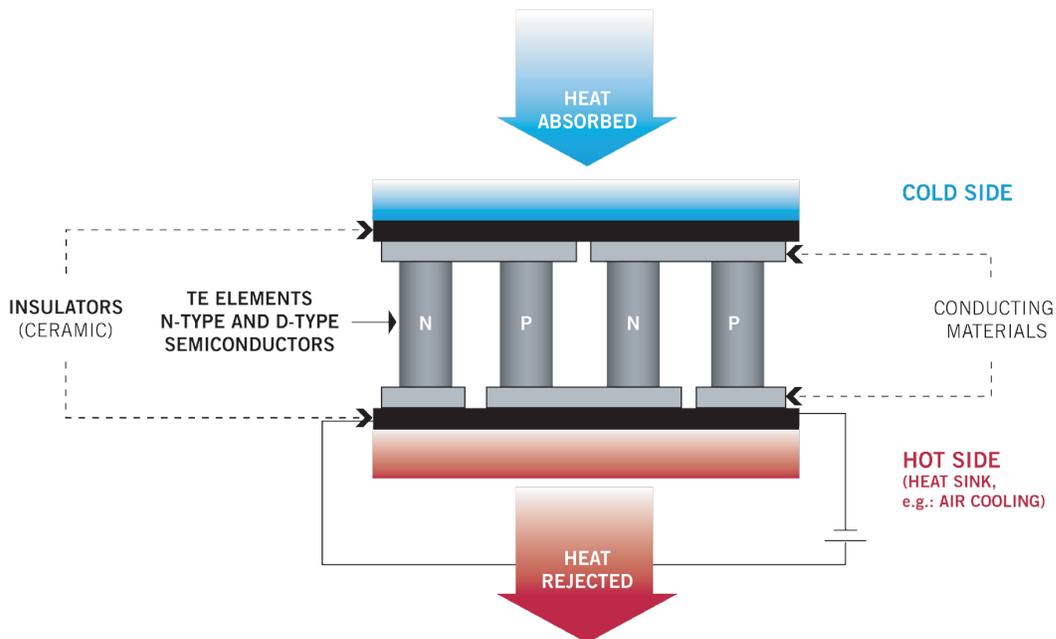


FIG. 1. Schematic of a thermoelectric device where the Peltier effect is used to generate heat flow between two materials.