WORLD'S FASTEST INGAAS AREA-SCAN CAMERA



Cheetah Series





WORLD'S FASTEST INGAAS AREA-SCAN CAMERA WITH HIGH IMAGE RESOLUTION

KEY FEATURES



WORLD'S FASTEST SWIR AREA-SCAN IMAGING UP TO 1700 Hz



HIGH-QUALITY IMAGE



STATE-OF-THE-ART SWIR PERFORMANCE

The Cheetah series is based on an in-house developed, temperature stabilized InGaAs detector with a 640 x 512 pixel resolution. The Cheetah 640 camera with single-stage TE-cooled detector offers high frame rates of either 400 Hz, 800 Hz or 1700 Hz while the version with three-stage TE-cooled detector offers a frame rate of up to 110 Hz.

A visible short-wave infrared (vSWIR) option is available for extension into the visible wavelength band.



Cheetah Series



KEY PERFORMANCES

| Image format / Pixel pitch | 640 x 512 pixels/ 20 μm |
|-----------------------------|--|
| Detector type | InGaAs photodiode array with CTIA ROIC |
| Sensor cooling | TE-cooled |
| Integration type | Snapshot - global shutter |
| Spectral range | 900 - 1700 nm (SWIR); 500 - 1700 nm (vSWIR) |
| Max frame rate (full frame) | 111 Hz / 444 Hz / 865 Hz / 1730 Hz |
| Power consumption | Up to 25 W or 60 W |
| Power supply voltage | DC 12 V |

FUNCTIONS & INTERFACES

| Command and control | CameraLink |
|---|-------------------------|
| Connector trigger | SMA |
| Camera dimensions (width x height x length) | 143 mm x 137 mm x 95 mm |
| Optical interface | C-mount |
| Camera weight | 2000 gr |

PRODUCT SELECTOR GUIDE

| XEN-000175 (Cheetah 640 TE1 400) | XEN-000045 (Cheetah 640 TE1 400 vSWIR) |
|-----------------------------------|---|
| XEN-000577 (Cheetah 640 TE1 800) | XEN-000578 (Cheetah 640 TE1 800 vSWIR) |
| XEN-000176 (Cheetah 640 TE1 1700) | XEN-000046 (Cheetah 640 TE1 1700 vSWIR) |
| XEN-000271 (Cheetah 640 TE3) | |

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