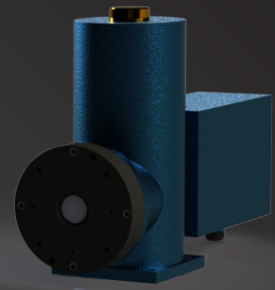


2DMCT

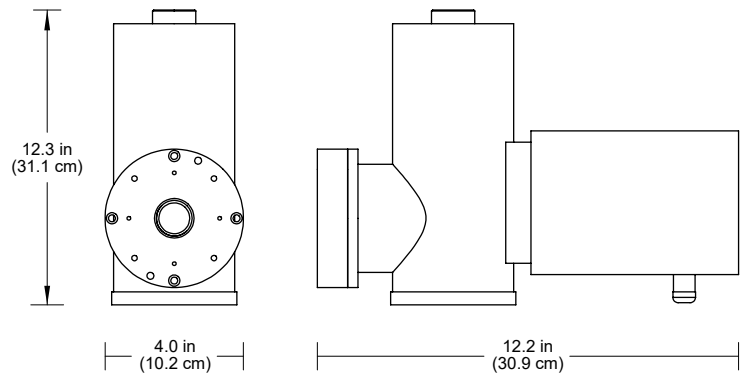
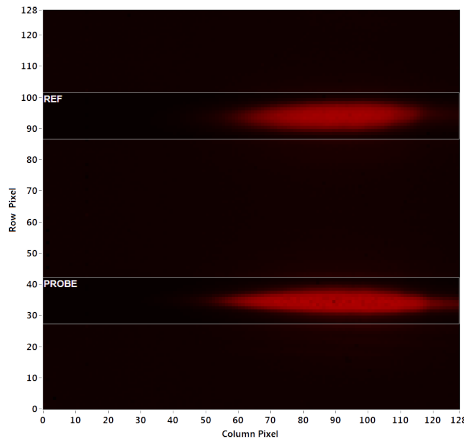
NEXT-GENERATION MID-IR DETECTOR



2DMCT is a next-generation mercury cadmium telluride (MCT) detector for the mid-IR. Featuring 128 rows of 128 pixels, high sensitivity and very low noise electronics.

CAPABILITIES & FEATURES

- 16,384 High quality MCT pixels
- Programmable gain level
- Very low dark noise
- Dewar temperature readout
- Electronics for QuickShape rapid-scanning
- Control software & LabVIEW™ drivers



SPECIFICATIONS

Pixels	128x128 or 64x64
Spectral Range	2 - 12.3 μm
Pixel Size	40 x 40 μm
Max. Full Frame Rate	> 1.5 kHz
Max. Windowed Frame Rate	> 7 kHz (contact PhaseTech about 10 kHz frame rates)
Specific Detectivity (D^*)	4 x 10 ¹¹ cm Hz ^{1/2} W ⁻¹
Vertical Resolution	14-bit
Dynamic Range	~13,000:1
Typical Dark Noise (1σ)*	< 10 counts over 1000 shots
Approximate Size	8.5 x 4 x 12.2 in (21.6 x 10.2 x 30.9 cm)

* Vertical averaging over multiple pixels reduces noise even further!

APPLICATIONS

- Transient IR Spectroscopy
- 2D IR Spectroscopy
- Mid-IR Imaging
- 2D IR Imaging

INCLUDES

- Detector with built-in digital electronics
- Frame grabber
- User Manual
- LabView™ Control VIs
- QuickControl Software Package

ADD-ONS

- Monochromator with matched gratings and mounting hardware
- External channel detection

DARK NOISE

