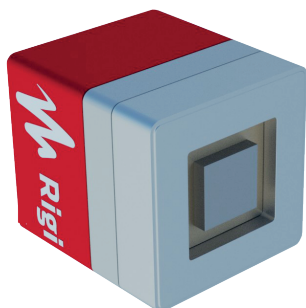


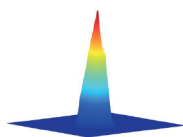


DATASHEET  
RIGI DTMS2021

## RIGI- S2 Camera



### Uncooled real-time THz imager



- Beam profiling
- Non-destructive testing
- Imaging systems
- Quality control
- Security and surveillance
- Optical alignment

### Image using QCL THz source

- **Frequency:** 4.6 THz
- **Power:** 0.6  $\mu$  W
- **Integration time:** 50  $\mu$ s
- **Acquisition:** Single shot

### Compatible with most terahertz sources

#### 1. Broadband terahertz sources

- Broadband plasma based source
- Organic crystal high power spectrometer
- Lithium Niobate crystal high power spectrometer
- ZnTe crystal based linear spectrometer
- Photoconductive switch oscillator based source
- Commercial time domain spectrometer

Item	General Specifications
Detector	Uncooled FPA THz micro-bolometer array
Pitch	25 $\mu$ m
Array size	160 x 120 pixels
Active area	4 x 3 mm
Operating frequency	0.1 - 20 THz
Pixel NEP	< 1.5 pW/ $\sqrt$ Hz at 4.6 THz
Operating temperature	-40 °C to 65 °C
Software	Included and adaptable upon request

#### 2. Narrowband terahertz sources

- QCL based source
- Solid state sources
- Crystal based DFG source
- CO<sub>2</sub>-based DFG source