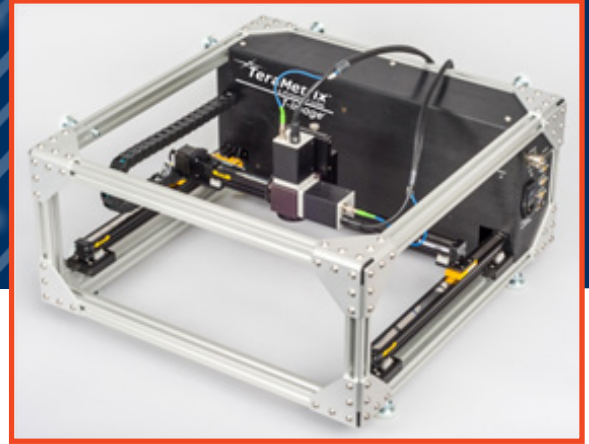


T-Image Platform

T-Ray® 5000 MSL5201



The T-Ray® 5000 is the first compact pulsed terahertz measurement system that is robust enough to be deployed in an industrial environment and has all of the flexibility provided by our fiber coupled sensor heads in a rack mount package. By having replaceable sensor heads, the T-Ray® 5000 can be configured to fit your specific application.

Operating in reflection mode, the fiber coupled sensor heads deliver a picosecond duration T-Ray® pulse, allowing high speed, scanned images to be easily produced. Mounting the heads in transmission, and the sample to the translation stage allows high quality transmission images as well.

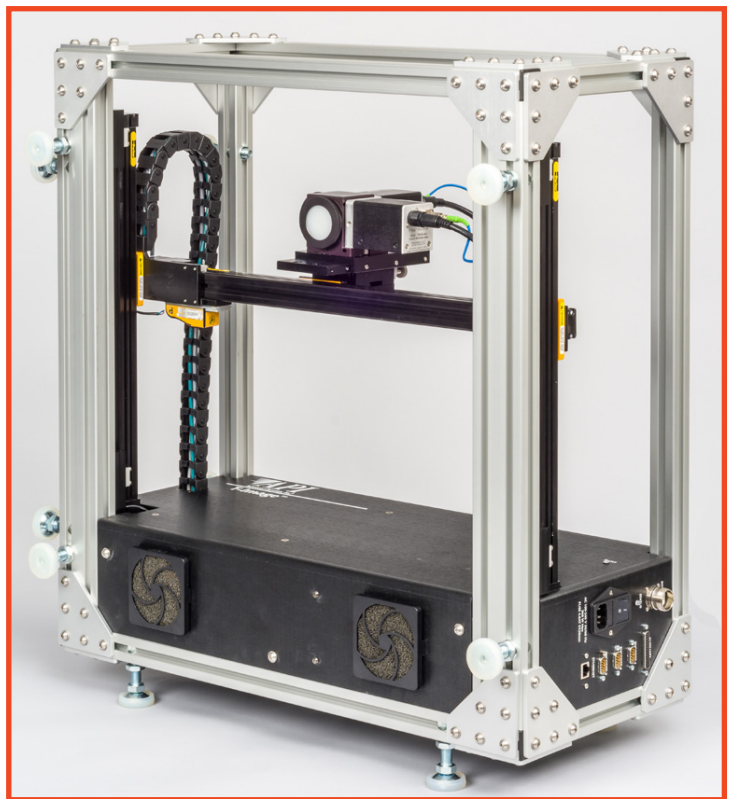
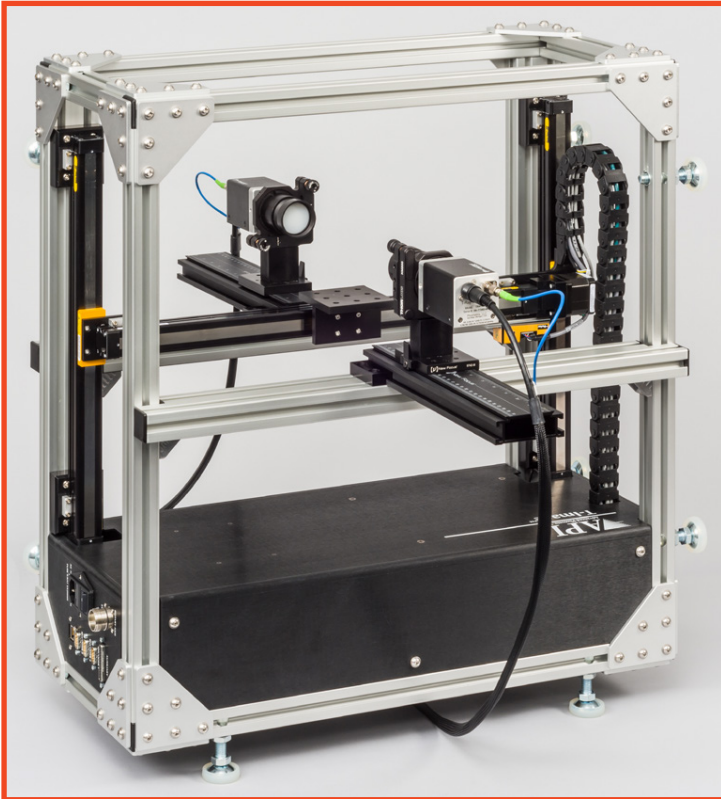
The MSL5201 T-Image Platform can be positioned for horizontal or vertical scanning. The transmitter and receiver can be configured in transmission, or collinear reflection geometry by using the Collinear Adapter. The MSL5201 can move at speeds up to 150 mm/sec and can provide step resolutions below 30 microns. The motors are integrated with the required amplifier and encoder to allow high quality images to be acquired at speeds up to 1000 pixels per second. The T-Image has an embedded motion controller that is configured by software running on the Terahertz Control Unit.

KEY FEATURES

- Fiber coupled to allow easy movement
- Image resolution to 100 microns
- Perfect for field work
- Built to operate upright or prone
- Easy to use imaging software available
- Transmission or reflection images
- Multiple lens configurations available

APPLICATIONS

- Time domain reflection tomography
- Nondestructive materials inspection
- Package inspection
- Semiconductor wafer inspection
- Medical and biological imaging research
- Remote threat detection
- Homeland Security research



Parameter	Specification	Units	Comments
Scan range	30	cm	
Minimum step	< 30	microns	20 - 90% RH non-condensing
Focal lengths	25, 75, 150	mm	
Voltage Requirements	110/240	VAC	50/60 Hz self-sensing
Size (W x H x D)	26 x 27.5 x 13	in	
Weight	47	lbs	Reflection configuration without sensor

ORDERING INFORMATION

Included

- Rails and motion controller mounted in frame
- Encoder and Ethernet cables
- Accessories for both transmission and reflection imaging

Typical Configuration

- Terahertz Controller
- Umbilical pair (2, 5, 10, or 30 m)
- Transmitter
- Receiver
- T-Ray® Basic, T-Gauge®, T-Ray® Imaging

Industry Leading Regulatory Compliance

The T-Ray 5000 intelligent TCU has been certified by Underwriters Laboratories has received the CE mark, is fully compliant with FDA CDRH laser safety regulations, and has been tested to meet FCC part 18 regulations.



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