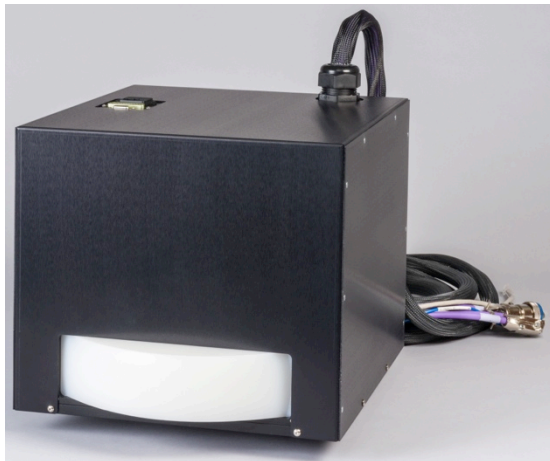


T-Ray® 5000 HXT5552 T-Scanner

The T-Scanner (HXT5552) provides high speed imaging not attainable with standard motion control stages. Reflection measurements are easily acquired because the transmitter and receiver are



enclosed in the same housing. Spatial resolution down to 2 mm has been obtained using this arrangement with up to a 150 mm scan width.

The full scan range can be covered at up to 60 sweeps per second. When used with a TCU5201 Terahertz Control Unit, that has a 1000 Hz waveform acquisition rate, the HXT5552 can produce a full cross sectional image of the object under test at near real time rates.

While the Terahertz Control Unit and the embedded Transmitter and Receiver are capable of producing over 3.5 THz bandwidth, the optical configuration of the HXT5552, with its large lens, limit the obtainable bandwidth to approximately 1.5 THz. This is sufficient for many imaging applications.

APPLICATIONS

- Terahertz Time Domain Spectroscopy; solid, liquid, gas phase
- Terahertz Imaging; high speed (800 pixels per second)
- Art Conservation: identify construction; image through pottery; view previous repairs; non-destructive
- Security Research: baggage screening; personnel screening; shoe screening; anomaly detection

FEATURES

- Full transceiver functionality
- Can be used with a translation stage
- Maximum 150mm line scan
- Scan rate up to 30 Hz
- Single lightweight umbilical
- Variable scan width

BENEFITS

- Single scanner for reflection measurements
- Create 2D images
- Examine larger objects in less time
- Create real-time cross-sectional images
- Ease of connection
- Optimize scan to sample

T-Ray[®] 5000 HXT5552 T-Scanner

INCLUDED

Single HDPE lens
Single umbilical (5m)

REQUIRED EQUIPMENT

Terahertz Controller
T-Image Platform

SPECIFICATIONS

Polarization extinction ratio	>20:1		Horizontal
Lens focal length	150	mm	
Beam diameter at the lens	50	mm	
Bandwidth	1.5	THz	
Umbilical length	5	m	
Mounting configuration	1/4-20	in	threaded mounting holes
Size (W x H x D)	31x 34x 27	cm	
Weight	32	lbs	

QUALITY VISION

As a leader in terahertz instrumentation, Advanced Photonix, Inc is committed to providing the highest quality ultrafast products on the market. This quality vision commits us to continually improving our product designs and manufacturing processes in order to ensure the highest level of customer satisfaction. The company maintains a stringent quality control program to ensure that all products meet or surpass customer requirements



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