

## Transmitter (Type 2)

### T-Ray® 5000 HTS40n2

The HTS40n2 Transmitter Type 2 for the T-Ray® 5000 balances high output power with high spectral bandwidth and minimizes features following the pulse to allow high quality images and detection of multiple layers in reflection with less need for post processing of the waveform.

Coupled with an HRS40n1 receiver, the HTS40n2 provides bandwidth over 3.5THz and signal to noise ratio above 70 dB. By balancing bandwidth and power, the HTS40n2 is ideal for applications where both high resolution imaging and broad spectral range are desired.

### APPLICATIONS

- Terahertz Time Domain Spectroscopy; solid, liquid, gas phase; polymorph discrimination; explosive detection
- Nondestructive materials inspection: aircraft; packaged goods; radome inspection; spacecraft; pipeline repairs
- Converting applications: paper coating; multilayer films; tire

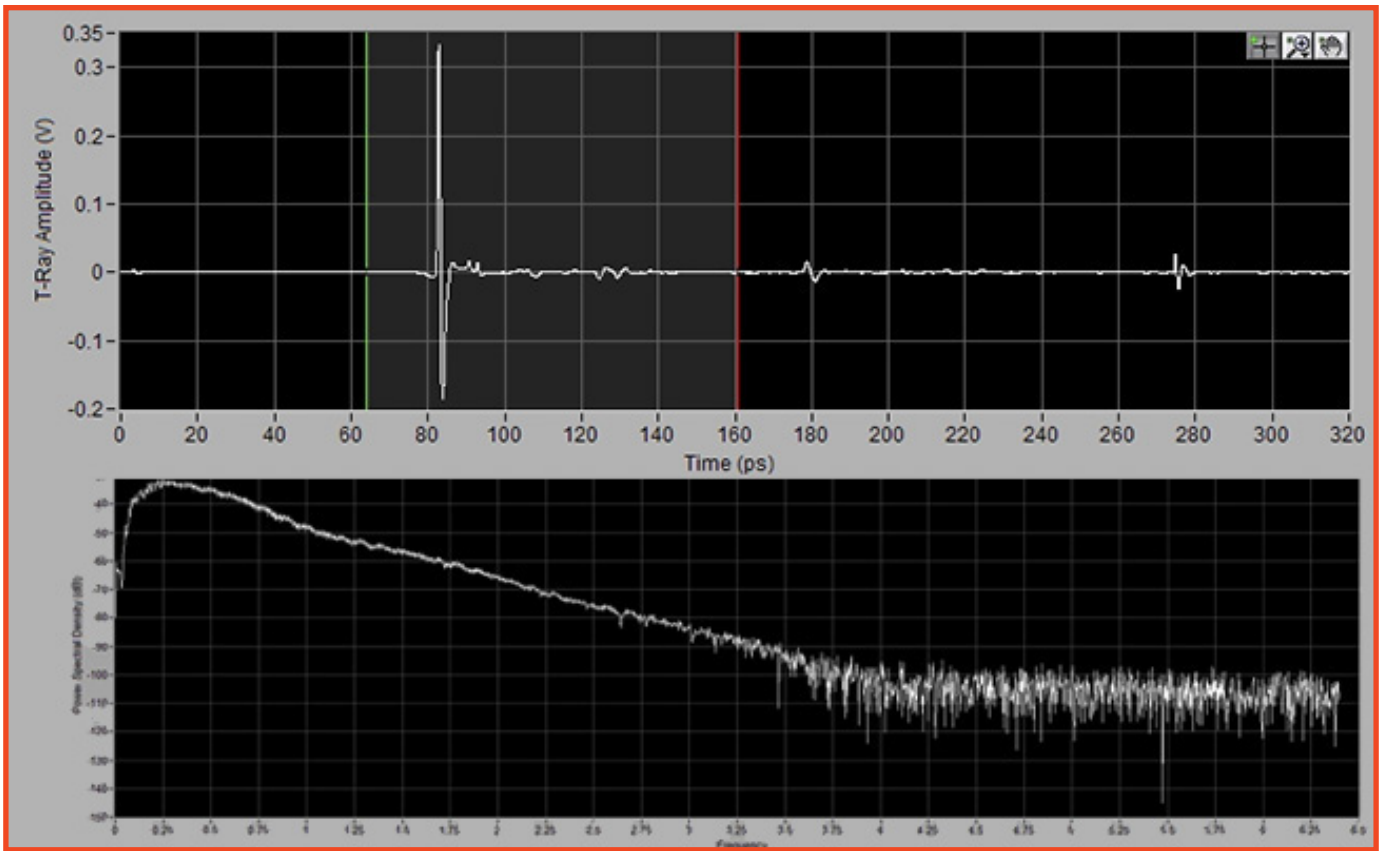


### KEY FEATURES

- Fiber coupled to allow easy movement
- Ultra-broadband measurement
- Transmitted or reflected data collection
- Mates with collinear adapter (AXA40n1)
- High signal to noise ratio
- Hot swappable with other transmitters
- Low noise to enable rapid data collection
- Adjustable lens tube for focusing
- Multiple lenses available

### BENEFITS

- Rapid configuration of measurement
- Perform transmission or reflection spectroscopy
- No need for multiple transmitters
- Easy collinear reflection configuration
- Speed data collection, less averaging
- Quickly optimize performance
- Use for high speed imaging
- Easily obtain maximum bandwidth
- Save money by changing lenses, not transmitters



Parameter	Specification	Units	Comments
Polarization Extinction Ratio	< 20:1		Horizontal
Standard Lens	25, 75, 150	mm	Collimating lens also available
Beam Diameter	38	mm	
Mounting Hardware	1/4-20		Threaded mounting holes
Size (W x H x D)	7.5 x 7.5 x 15	in	
Weight	275	gm	

## ORDERING INFORMATION

### Included

- 1.5 in. diameter lens (1, 3, or 6 in. working distance)
- Adjustable lens tube

### Typical Configuration

- Terahertz Controller
- Umbilical pair (5, 10, or 30 m)
- Umbilical adapter
- Receiver
- T-Ray® Basic and T-Gauge® Software

### 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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