



## FEATURES

- Fiber coupled to allow easy movement
- Ultra-broadband measurement
- Transmitted or reflected data collection
- Mates with collinear adapter (AXA4001)
- High signal to noise ratio
- Hot swappable with other transmitters
- Low noise to enable rapid data collection
- Adjustable lens tube for focusing
- Multiple lens configurable available

## T-Ray<sup>®</sup> 5000 HTS40n1 Transmitter (Type 1)

The T-Gauge<sup>®</sup> 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-Gauge<sup>®</sup> can be configured to fit your specific application.



Operating in either reflection or transmission mode, the fiber coupled sensor heads deliver a picosecond duration time-domain terahertz pulse, allowing high speed, scanned images to be easily produced.

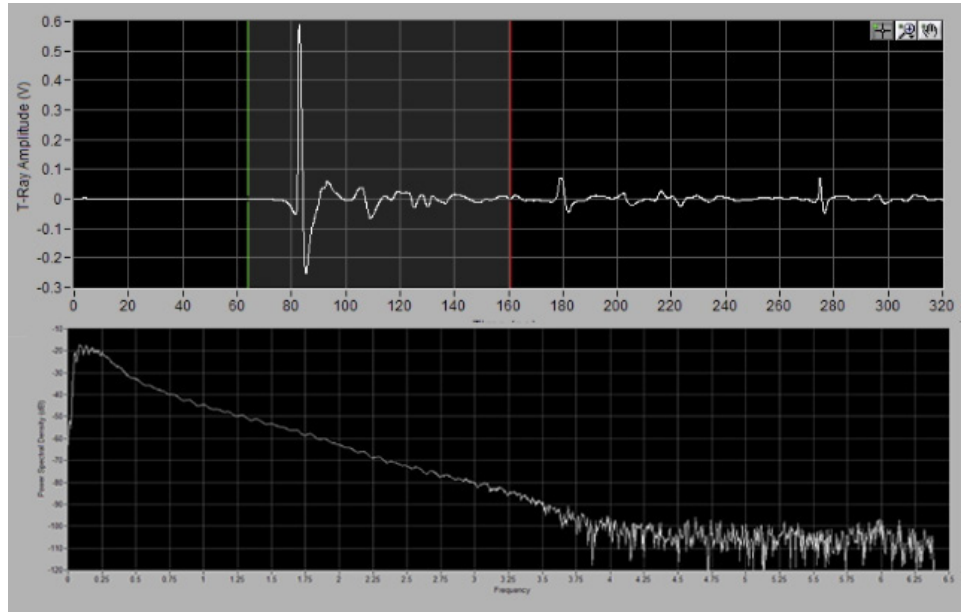
The HTS40n1 Transmitter Type 1 for the T-Ray<sup>®</sup> 5000 provides high output power with high spectral bandwidth. The enhanced low frequencies provide higher material penetration for imaging voids and disbonds in high frequency scattering media. Coupled with an HRS40n1 receiver, the HTS40n1 transmitter provides bandwidth above 3.5 THz and signal to noise ratio above 70 dB. By maximizing low frequency power, the HTS40n1 is ideal for applications where high material penetration is required for imaging, particularly in scattering materials.

## APPLICATIONS

- Gas, liquid and solid spectroscopy
- Nondestructive materials inspection
- Package inspection
- Semiconductor wafer inspection
- Reaction kinetics monitoring
- Medical and biological imaging research
- Remote threat detection
- Sub-surface corrosion detection
- Homeland Security capabilities



# T-Ray<sup>®</sup> 5000 HTS40n1 Transmitter (Type 1)



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 Configuration	1/4-20		threaded mounting hole
Size	7.5 x 7.5 x 15		
Weight	275	gm	