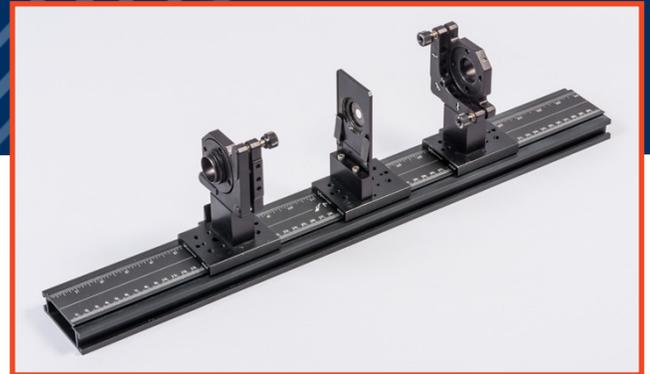


# Spectroscopy Rail

## T-Ray® ASR5001



The T-Ray® 5000 is ideally suited for spectroscopic investigations. With its exceptionally long high speed delay, the T-Ray® 5000 can provide spectral resolution down to 1.5 GHz at 100 Hz. The measurement system is robust enough to be deployed in an industrial environment, but flexible enough to be used for a wide variety of experimental tasks.

The transmitter (HTS40nm) and receiver (HRS40n1) can be mounted on the ASR5001 Spectroscopy Rail to perform transmission spectroscopy measurements. A standard mount is provided to hold accessories or standard sample cards. The rail can accommodate lenses up to 150mm working distance. An iris is provided on the sample holder to block any portions of the beam that may not be going through the sample.

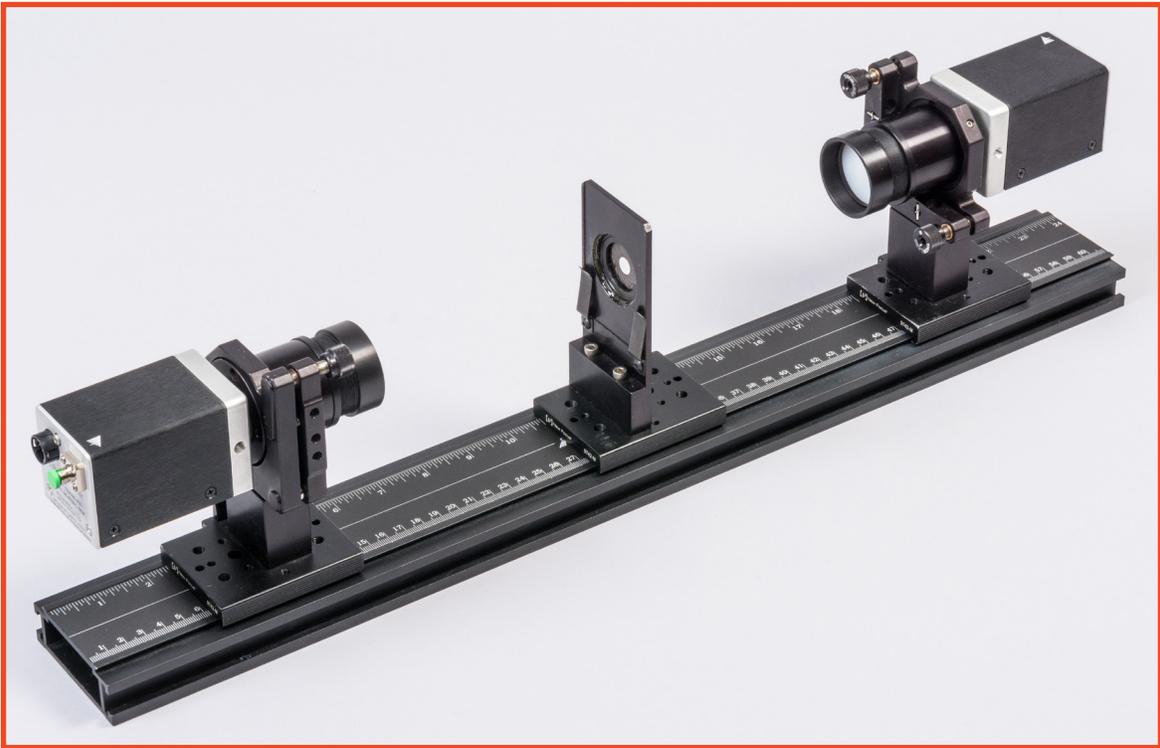
Tip-tilt stages provide easy optimization of the beam alignment to ensure maximum bandwidth. When used with an HTS40nm and an HRS40n1, the assembled collinear transceiver will provide over 3.5 THz of bandwidth and 70dB of S/N.

### KEY FEATURES

- Easy alignment without an optical table
- Sample mounting fixture with integrated iris
- No tool required to change lenses
- Accommodate various focal length lenses
- Use to measure transmission spectroscopy
- Compatible with HTS40nm and HRS40n1

### APPLICATIONS

- Time domain spectroscopy
- Defect detection
- Basis weight measurement
- System optimization and verification
- Reaction kinetics monitoring
- Medical and biological research



Parameter	Specification	Units
Rail Length	60	cm
Size (W x H x D)	60 x 15.5 x 7.5	cm
Weight	2.0	kg

**ORDERING INFORMATION**

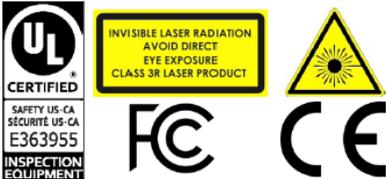
**Included**

- 60 cm rail
- 2 tip-tilt head mounts on sliders
- Sample holder on slider

**Typical Configuration**

- Terahertz Controller
- Umbilical pair (2, 5, 10, or 30 m)
- Umbilical Adapter
- Transmitter and 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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