

PlasmaD-TS

PlasmaD-TS Thomson-Scattering Diagnostics

A configurable optical diagnostic system measures laser light scattered by plasma electrons. Spectral filtering and gated detection support extraction of electron density and temperature.

1. Laser-plasma scattering

2. Stray-light rejection

3. Electron diagnostics

Best suited to

Laboratory plasma studies requiring a non-contact electron diagnostic.

Configuration

Provide the density and temperature range, probe wavelength, collection angle and background-light level. Elastic-scatter rejection, alignment and intensity calibration are central to the system design.

Specifications

Published parameters	
Technique	Laser Thomson scattering
Measured quantities	Electron temperature and density, with analysis model
Spectrograph examples	Omni-500i / Omni-750i
Grating examples	1200 or 1800 lines/mm
Detector choices	IsCMOS / ICCD or IIM-coupled camera
Configuration	Experiment-specific optical and timing design

Measurement features

- Configured high-resolution spectrograph collection.
- Intensified camera or intensifier-module detection.
- Matched collection optics, synchronisation and calibration workflow.

Configuration note

Density range, temperature accuracy and complete-system resolution require an experiment-specific configuration. Specify laser and timing requirements with the collection geometry.

Full configuration: www.precisometer.com/spectroscopy/spectral-imaging/plasmad-ts