

STA-CAC

Laser Crystal Absorption Coefficient Measurement

Measure crystal transmission and derive absorption behaviour by monitoring optical power before and after the sample. A dual-path layout tracks laser-power changes during the measurement, with wavelength and sample mounting selected for the crystal.

Measurement method

Monitor incident and transmitted laser power in real time while rotating the sample to the required test orientation. Store the resulting data for absorption analysis and assessment of crystal uniformity.

Features

- Dual optical paths for real-time reference monitoring
- Laser wavelength selected for the sample
- Custom sample fixtures
- Stored results for later analysis

Applications

- Laser-crystal absorption characterisation
- Crystal uniformity assessment
- Investigation of absorption-related heating and optical efficiency

System configuration

Parameter	Specification
Model	STA-CAC
Measurement channels	Incident/reference and transmitted optical power
Sample positioning	Rotatable sample holder; custom fixtures available
Excitation wavelength	Selected to suit the crystal
Data	Real-time measurement with stored results

Conditions and configuration notes

Confirm the absorption calculation, optical-path length and surface-reflection correction. A transmission reading alone does not distinguish bulk absorption from all other losses.

No fixed accuracy, spectral range or minimum absorption coefficient is specified for every configuration.

Specify your measurement

- Crystal material, dimensions and thickness
- Wavelength, expected transmission and power
- Sample orientation, surface coatings and reflection corrections

Prepared by Precisometer. Technical review: 24 October 2026. Confirm the supplied configuration, measurement conditions, accessories and warranty with the quotation.

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