

MERLIN

RAMAN INSTRUMENT

DESCRIPTION

MERLIN is our most sensitive – and enchanting – Raman system to date. MERLIN brings superior sensing capabilities to NASA Ames Research Center's most advanced astrobiology lab.

MERLIN is a scanning Raman spectroscopy instrument built to perform high-sensitivity measurements of trace organic compounds and biosignatures. Our innovative back-illuminated configuration is wizardly engineered to perform high-resolution chemical mapping with unprecedented sensitivity in Raman applications.

Impossible's MERLIN technology delivers precise, real-time data in support of cutting-edge astrobiology research and life-seeking missions.



FEATURES

- High Precision Mapping capabilities
- Back illuminated measurement technique
- High sensitivity readings
- Incorporated data analysis and visualization

SPECIFICATIONS

PARAMETER	UNIT	VALUE
LASER WAVELENGTH	nm	532
OUTPUT POWER	mW CW	350
SPECTRAL WINDOW	cm ⁻¹	280-3870
SPECTRAL RESOLUTION	>cm ⁻¹	14
MAPPING REGION	mm	5X5
SPOT SIZE AT SAMPLE	um	~200
EXPECTED SENSITIVITY	ppm to ppt	DEPENDENT ON SAMPLE