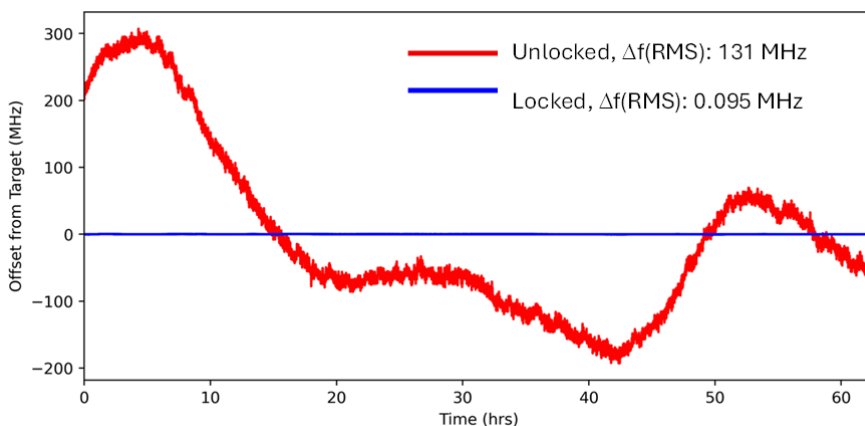


Device Specification

version: 2/2025

Locked Laser System

The **Radiantis Locked Laser System** is a turnkey solution that automatically provides highly stable, narrow linewidth, locked frequency output.



Locked versus unlocked frequency stability at 780nm

Key Features

- Turnkey operation
- Flexible platform enabling customization
- Built on core Covision wavelength conversion technology

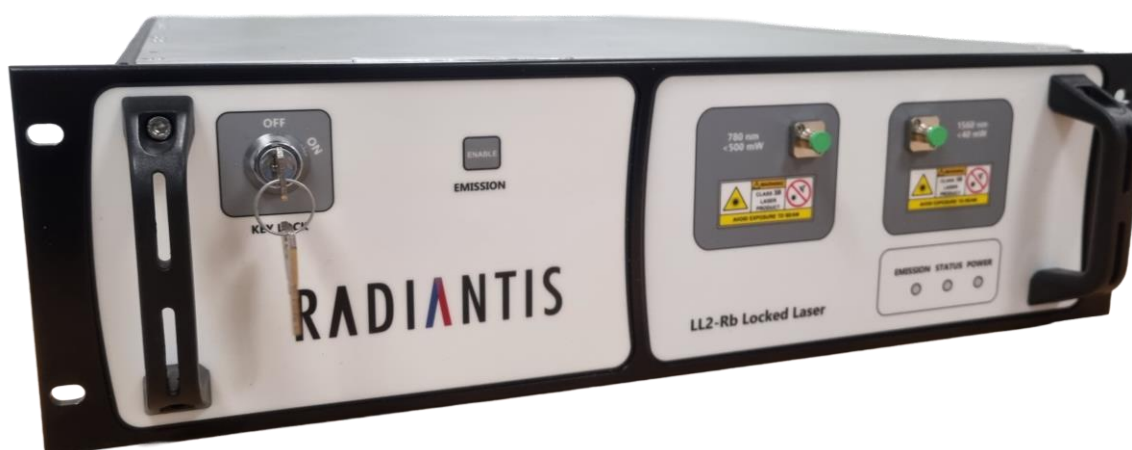
1560nm/780nm Locked Laser System

System Features

- Target market – **Rb atom** applications (quantum computing, sensing, timing)
- **Turnkey** locked laser system providing absolute frequency stability of an atomic lock with accurate output frequency tuning
- Utilises Covision fiber coupled **waveguide** technology to bridge gap from robust telecoms laser technology to 780nm applications
- **Dual** 1560nm and 780nm output available
- User controlled narrow-band **frequency tuning** of 780nm output
- Option for **fast switching** of output power

Guidline Specifications

Parameter		
Output wavelength	1560nm and/or 780nm	
Output power	up to 1W	dependent on output wavelength
Reference frequency	384.22799THz	87Rb F=2 to F'=2/3
Frequency offset	$\pm 24\text{kHz}$ to 12.8GHz	at 780 nm
Linewidth	<10kHz	RMS over 100ms at 780nm
Frequency stability	<100kHz	RMS over 12hrs at 780nm
Output power stability	<1%	RMS over 12hrs
Form factor	19" rack mount unit with 3U/4U height	dependent on configuration



For more information, please contact us at:

E: info@radiantis.com T: +34 936 38 97 63

www.radiantis.com

Carrer Esteve Terradas, 1 Edificio RDIT, Parc Mediterrani de la Tecnologia
08860 Castelldefels, Barcelona, Spain

RADIANTIS
A Hawthorn Photonics Company