

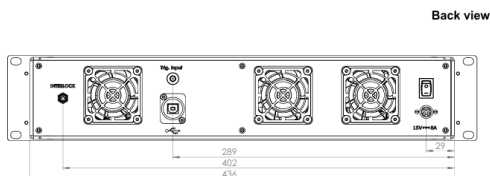
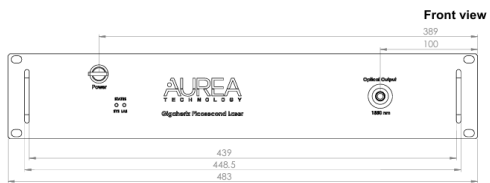
GIGAHERTZ LASER

1550 nm Picosecond Laser for Quantum Photonic Sources

Laser source for Q-bits and Q-dots photon source

The GigaHertz 1550 nm Picosecond Laser from AUREA Technology is a low-noise, high-stability, synchronizable, and robust pulsed excitation source engineered for single-photon generation with semiconductor quantum dots and telecom-band silicon nitride (SiN) photonic integrated circuits.

Designed for advanced photonic applications, it meets the key requirements of scalable photonic processors, including high single-photon purity, low timing jitter, and low relative intensity noise (RIN).



SPECIFICATIONS

Optical Specifications

Wavelength*	1310 nm (O band)	1550 nm (C and L band)
Average Power	100 mW	3 W
Emission linewidth	700 – 3000 MHz	
Adjustable Repetition Rate -> Pas ?	100 MHz – 1 GHz	
Timing Jitter	< 5 ps	
Pulse Width	50 ps – 500 ps	
Max Pulse Energy	2 nJ	
RIN (Ratio Intensity Noise)	< 1 %	

Electrical Specifications

Trigger port	Sine or square wave analog output 0.3–0.5 V _{pp} , SMA
Power Supply	15 V
Safety	Interlock + key + ON/OFF switch
External PC Remote Control	USB port and UART port

Parameter Value

Dimensions	Rack 2U: 483 × 365 × 88 mm ³
Cooling System	Fan cooling
Operating Temperature	15°C – 35°C
Storage Temperature	0°C – 65°C

* Wavelength can be tuned and finely adjusted to meet specific application requirements

WARRANTY

Any warranty is void if the Product has been damaged, disassembled, modified, misused, used in applications which exceed the Product specifications or rating, neglected, improperly installed or otherwise abused or is used in hazardous activities.

DISCLAIMER

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