

LONGWAVE PHOTONICS

LWP-PS3: Pulsed Quantum Cascade Laser Driver



Description

The LWP-PS3 power supply is designed to be a simple-to-use quantum cascade laser (QCL) driver. The front panel has a 4.3" touch sensitive display and scroll wheel to adjust the pulse width, frequency and amplitude. The high, 100 V, maximum voltage allows driving of QCL devices, which typically require higher voltages than other semiconductor lasers.

The LWP-PS3 has been designed for ease of use, and includes an integrated current monitoring output, a 5 V TTL output synchronization signal, and a TTL compatible gating input signal. The LWP-PS3 is programmable via standard USB virtual serial port. This architecture allows any software capable of using a serial port, to address the LWP-PS3.

AC Voltage Range	100 - 125 / 200 - 240 V
Rated Frequency	50 - 60 Hz
Rated Current	120 V/5 A – 240 V/ 2.5 A
Interface/Control	Manual or USB/Virtual Serial Port
Pulse Output Amplitude	8 to 100 V
Duty Cycle	Up to 50%
Pulse Width	400ns to 5 ms
Pulse Repetition Rate	100 Hz to 500 kHz
Output Impedance	Switchable 1 Ω /25 Ω
Gate Input	TTL (0 to 5 V) input, output enabled when high
Sync Output	Synchronous with output pulse, 0 to 5 V
Current Monitor	Conversion factor is 1 A/V
Connectors	BNC female