

Model 1101-XX-LP-YYYY-INT

Low Duty Cycle Pulsed QCL System

Specifications



Model 1101-XX-LP-YYYY-INT quantum cascade laser system is a low duty cycle pulsed QCL system designed for bench top use. Pulse shaping and power conditioning electronics are enclosed inside along with the hermetically sealed package that includes optics for collimating the output laser beam. The system requires no adjustments in the field and is designed to be stable over long periods of time when operating in a stable temperature environment. Model 1101-XX-LP-YYYY-INT is a basic pulsed QCL system that provides a fixed laser pulse width and a fixed pulse repetition frequency, both of which are preset at the factory at user specified values. A synch pulse is available for synchronizing user electronics.

Model 1101-XX-LP-YYYY-INT

Peak optical power (YYYY)	<ul style="list-style-type: none">• > 1 W (wavelength dependent)
Mode of operation	<ul style="list-style-type: none">• Pulsed, internally triggered at 1 kHz to 100 kHz (user specified and set at the factory)
Output pulse width	<ul style="list-style-type: none">• 50 nsec to 200 nsec (user specified and set at the factory)
Pulse rise/fall times	<ul style="list-style-type: none">• ~5 nsec (< 5 nsec optional)
Sync output	<ul style="list-style-type: none">• Available for synchronizing user electronics
Wavelength (XX)	<ul style="list-style-type: none">• ~4.6 μm, 8.2 μm, 9.5 μm• Other wavelengths between 4.5 μm and 12 μm may be custom ordered
Beam Divergence	<ul style="list-style-type: none">• 3 mrad vertical

Beam quality

Output beam

QCL package

Laser head size

Laser head weight

Power supply

- 2 mrad horizontal
- Excellent
- Nearly collimated with a lens internal to the QCL package
- Hermetically sealed for high reliability in all environments
- 8.6" (L) x 6" (W) x 2.5" (T)
- 3.5 lbs
- 24 V dc external (included)

All specifications are for room temperature ambient operation.

