

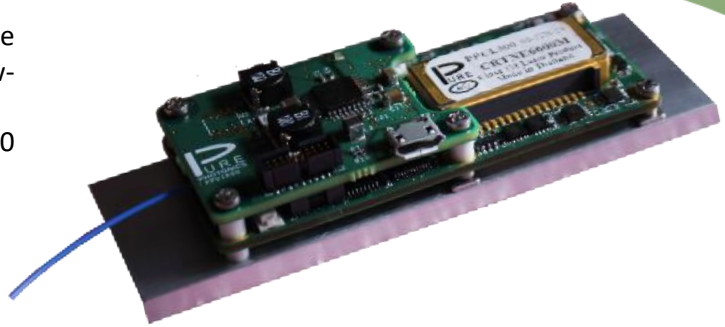
ITLA Quick Start Guide

GENERAL

The Pure Photonics tunable laser is a high performance ITLA with narrow intrinsic linewidth, ultra-low low-frequency noise and special performance features.

Proper operation of the PPCL100, PPCL200 or PPCL300 ITLA product requires :

- Mechanical interface / heatsink
- Electrical interface / power supplies
- Communications interface



ELECTRICAL INTERFACE

14- or 20-pin Samtec connector for power supplies, hardware lines and communications interface (if there is no micro-USB connector)

2	14	20
DIS	SRQ	MS
TX	R X	RST
AM	CM1	FM
+3.3V	GND	-5.2V
1	13	19
		CM2

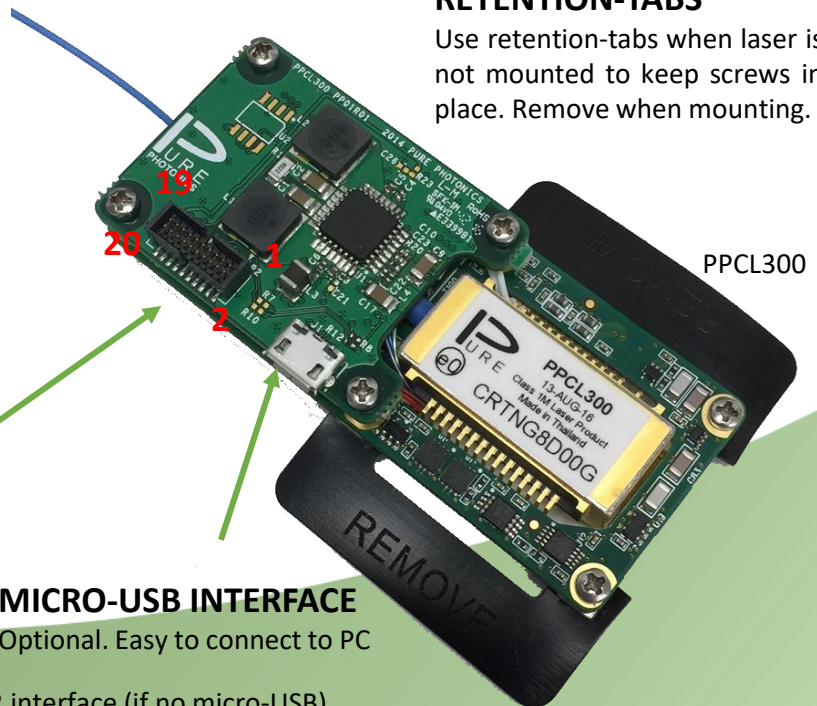
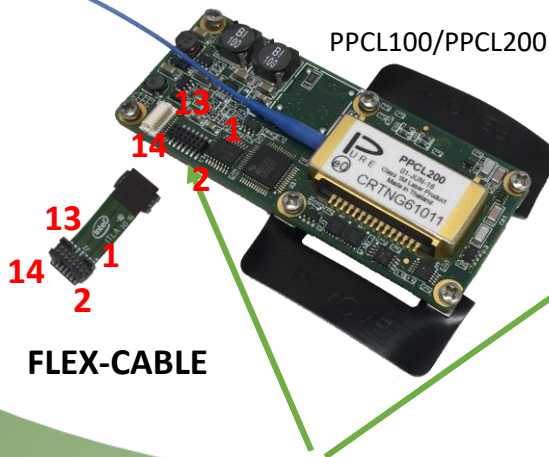
MECHANICAL INTERFACE

Mount the laser with 6 M2 screws to heatsink. **Do not operate the laser without a proper heatsink.**

Monitor heatsinking by the temperature of the goldbox.

RETENTION-TABS

Use retention-tabs when laser is not mounted to keep screws in place. Remove when mounting.



FLEX-CABLE

MICRO-USB INTERFACE

Optional. Easy to connect to PC

RS-232 INTERFACE

The ITLA comes with a low-voltage RS-232 interface (if no micro-USB)

- Connect direct, through e.g. a micro-processor
- Use High-voltage RS-232 with a conversion chip (like MAX3221)
- Use USB interface through a conversion chip (like FT234XD)

Pure-Photonics.com

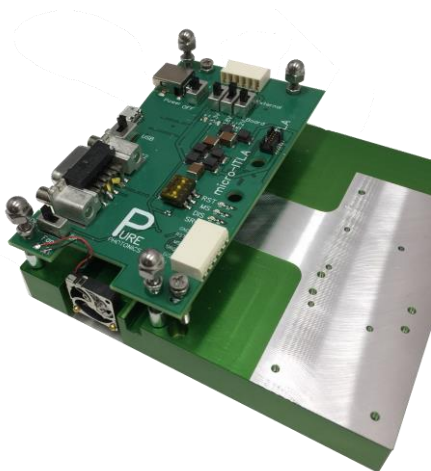
+1 (510) 497 0815

Customer_Service@pure-photonics.com

EVALUATION SOLUTIONS

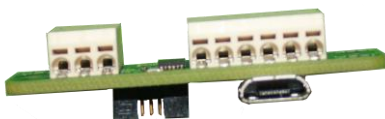
PPEB700

The PPEB700 (as well as the legacy PPEB200) provides a built-in power supply, mechanical interface and communications interface, as well as access to the other hardware pins.



PPEB280

The PPEB280 is a plug-on board onto a PPCL100 or PPCL200 that converts the RS-232 to a micro-USB connector. PPCL300 can be custom configured with a built in micro-USB.



PPEB250

A mechanical interface plate with mounting holes. It provides a first level heatsink and makes it easier to connect to a larger heatsink.



PPEB310-20 / PPEB220-14

This is a 14-pin (PPEB220-14) or 20-pin (PPEB310-20) conversion from the custom Samtec connector to a more generic IDC connector/ribbon cable. With hardware for a permanent install.

MICRO-USB INTERFACES

For optimal operation of any USB-interface (on PPCL300, PPEB280 or on an RS-232 dongle), set the latency time of the interface to 1ms (see instructions in section 4 of the feature guide). This is critical for firmware upgrade.

The micro-USB interface should be recognized and installed as a virtual COM port. If the interface is not recognized, you may need to install the VCP driver from FTDI.

FIRMWARE UPGRADE

Firmware upgrade can be done through the GUI software or through the CLI. An application note on the upgrade process is available on our website (support section). **Make sure that the upgrade process is not interrupted.**

In case the firmware upgrade fails, in most cases it can be corrected through the 'GUI – restore' application.

RESOURCES

Software (GUI and CLI): www.pure-photonics.com/downloads1/

MSA: www.oiforum.com/wp-content/uploads/OIF-ITLA-MSA-01.3.pdf

FTDI VCP drivers: www.ftdichip.com/Drivers/VCP.htm

Application notes: www.pure-photonics.com/downloads1/

Connectors: www.samtec.com/products/clm and [/products/ftmh](http://www.samtec.com/products/ftmh)

Pure-Photonics.com

+1 (510) 497 0815

Customer_Service@pure-photonics.com