



# TWL-P-HS



## DEVICE

# High Speed Tunable Wavelength Laser – Phoenix Series

## OVERVIEW

The Optilab TWL-P-HS is a high speed, innovative, all-in-one tunable and programmable laser source with high spectral purity. Based on laser crystal technology, the TWL-P-HS can operate in three distinct modes: CW mode, continuous scan mode, and programmable scan mode over the entire C-band range. It also features variable scan speed up to 4000 nm/s. Its lightweight and compact design allow it to be easily utilized both in laboratory and field engineering applications. A built-in 7" touchscreen with intuitive graphical interface gives the user full control over the operation of the device. In addition, the TWL-P-HS can be controlled via remote software through USB. Its polarization maintaining output and high wavelength and power stability make it a perfect solution as a seed laser for optical modulation and other test and measurement applications. Contact Optilab Sales for more information.

## FEATURES

- Wavelength Scan up to 100 Hz
- 50 GHz (0.4 nm) Tuning Resolution
- Scan Rate up to 4000 nm/s
- Excellent Side Mode Suppression Ratio
- Light Weight: < 5.5 lbs. (2.5kgs)
- 7" LCD touchscreen
- Wireless Control (Optional)

## SOFTWARE

- Touchscreen Control – No PC Required
- Built-in Intuitive GUI
- Remote Control via USB or Z-Link

## APPLICATIONS

- Laboratory Testing and Measurement
- In-Field Testing and Measurement
- DWDM Component Testing
- Seed Lasers for Modulators
- Fiber Optics Components
- Fiber Sensors





# TWL-P-HS

## SPECIFICATIONS

### OPTICAL

Wavelength Range	1525 nm to 1564 nm typ.
Wavelength Tuning Step	50 GHz
Wavelength Scan Period	10 ms to 1000 ms
Scan Period Resolution	1 ms
Wavelength Scan Rate	4000 nm/s max.
Output Power	+13 dBm typ.
Side Mode Suppression Ratio	50 dB typ.
Relative Intensity Noise	-150 dB/Hz typ.
Frequency Stability	± 1 GHz typ.
Fiber Type	PM-1550
Optical Connector	FC/APC, Field Serviceable

### MECHANICAL

Operating Temperature	0 °C to +40 °C
Storage Temperature	-20 °C to +70 °C
Cooling	Passive
Dimensions (LxWxH)	290mm x 45 mm x 170 mm
Weight	< 2.5 kg
Housing	Injection Molded Aluminum

### ELECTRICAL

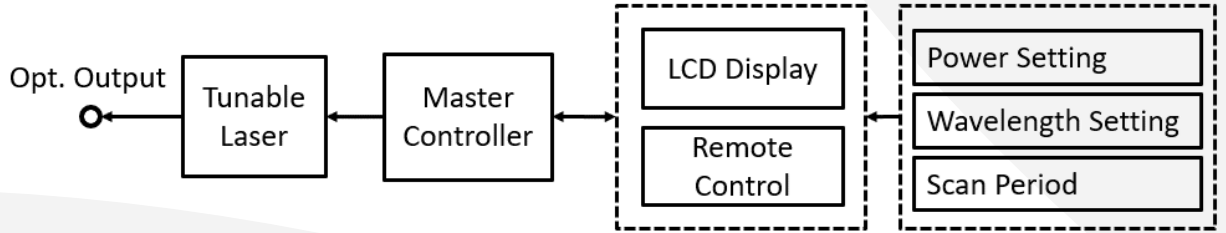
Power Supply	+5V DC External Power Adapter
Backup Battery	Lithium Ion
Display	7" LCD Touchscreen
Battery Life	3 hours Operation
Software	GUI Interface



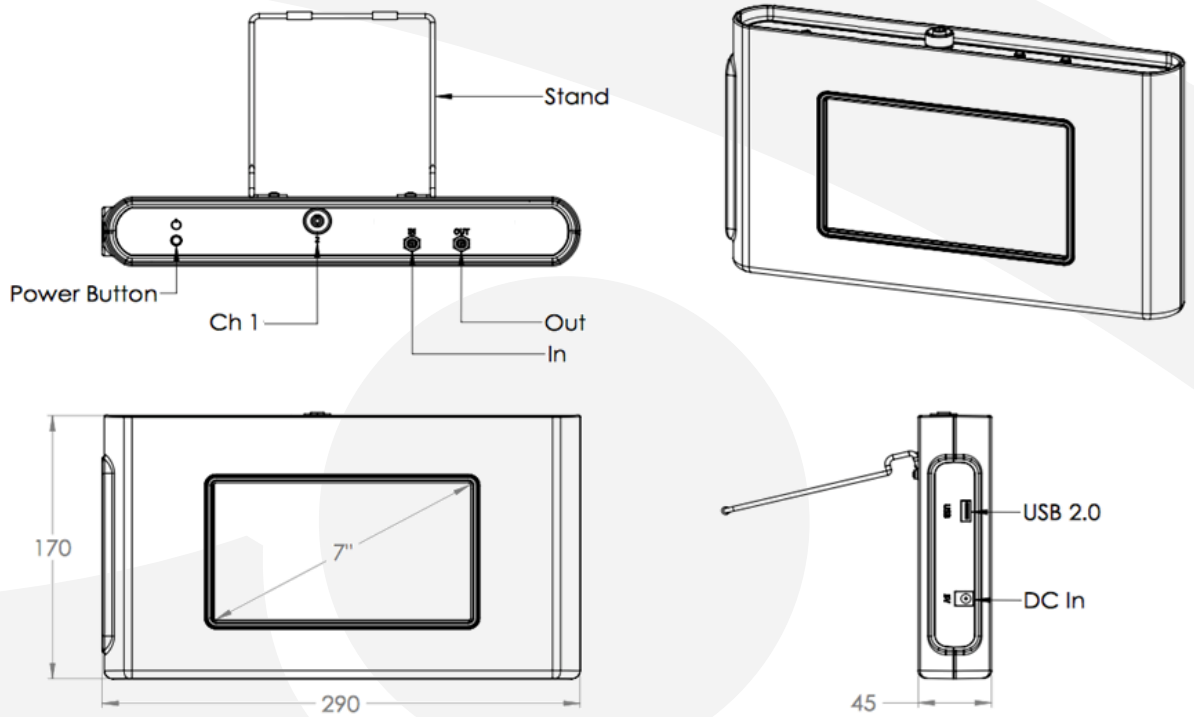


# TWL-P-HS

## FUNCTION DIAGRAM



## MECHANICAL DRAWINGS



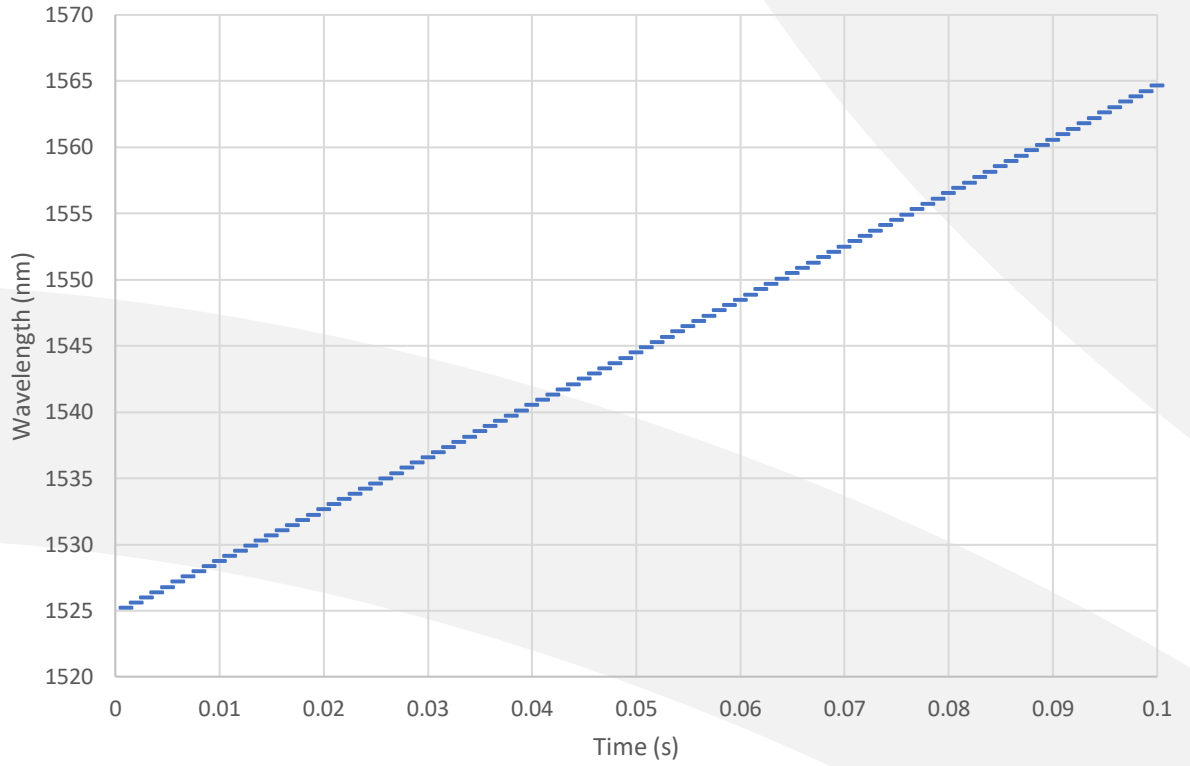


# TWL-P-HS

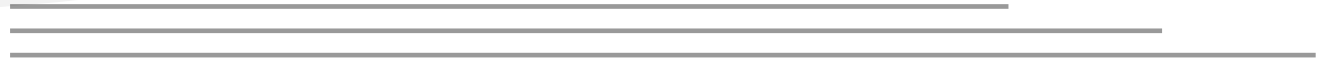
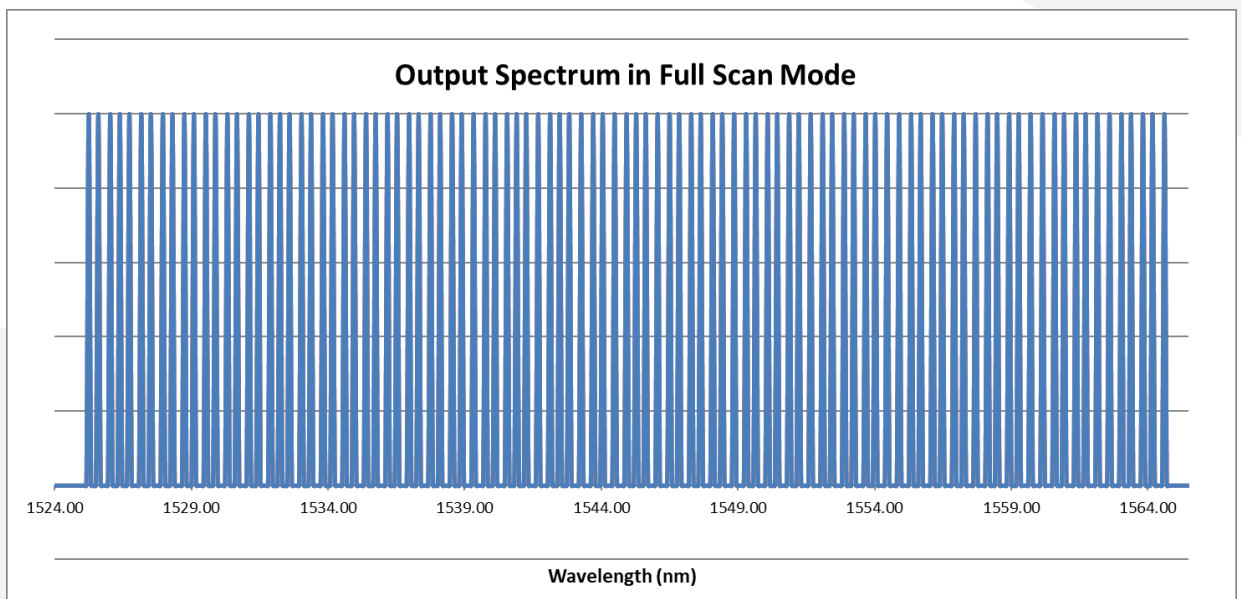


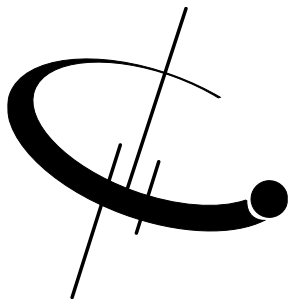
TEST DATA

### Scan Result



### Output Spectrum in Full Scan Mode





# TWL-P-HS

SCREENSHOT

**TWL-HS CW Mode** Back

**LD Current:** 200 mA

**Power:** 13.20 dBm

**Channel Number:** 095 **ITU:** C11

**Wave length:** 1568.77 nm

**Fine Tuning:**

Internal **TWL-HS Sweep Mode** Back

**Start Channel:** 00 **H58**

**Wave length:** 1530.72 nm

**Stop Channel:** 99 **C09**

**Wave length:** 1570.42 nm

**Sweep Time:** 100 ms

**LD Current:** 200 mA

**Power Output:** 12.75 dBm

