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sales@simbol.ca 1-866-396-6248



Simbol Test Systems is the one-stop shop for all your fiber optic test equipment and measurement needs. As we are exclusively focused on e-commerce and international distribution of photonic products since 2000, our customers rely on the [AssetRelay](#) catalog to browse through our stock listing of thousands of used and refurbished popular optical test products. They know they can get repair, customization and calibration services from our laboratory for their own fiber optic instruments from all renowned brand manufacturers.

If you wish to buy or sell an Agilent/HP/Keysight Tunable Laser Sources (TLS), visit our catalog [here](#) to see our current stock.

Agilent/HP 8167 and 8168 Tunable Laser Source (TLS)

With more than 25 years of expertise in repairing OSA, Tunable Lasers, Wavemeters, Attenuators, Power Meters and many more, the quality of our services is renowned amongst the service centers community and highly appreciated by our partners and customers. The 8167 and 8168 (A,B,C,D,E,F) are fairly old devices but very attractive when considering their resale price. Simbol has developed specific calibration procedures for these models. Don't settle for a one-page summary assessment with only one wavelength tested at only one power level to trust that a TLS is operating through its full range at all power levels; our report contains the complete table of all results, confirming it has **really** been tested. We have seen ISO 17025 certified labs incomplete reports making your operations at risk. So, a report from other labs with less data points than ours reflects a not completely calibrated unit. Also be careful of other sellers saying their equipment is "tested good", "powered on, self-tested", "pulled from a working environment". When you choose AssetRelay, you can be confident that we actually test everything we sell so you know it will work when it gets to your workplace. Optical equipment needs more than just power on to be proven working! Also to be noted, Simbol is likely the only repair lab worldwide with the capability to repair those older Tunable Laser sources.

Agilent/HP 8167 8168 series of TLS Large Tunable Laser Source (TLS) Repair and Calibration Services

The 8167 8168 series of TLS go through a premium calibration to ensure it meets or exceeds manufacturers published specifications. The equipment is shipped with a comprehensive 6 pages calibration certificate including all data (3 pages) and a calibration sticker. A report from other labs with less data points reflects a not completely calibrated unit.

Simbol Test Systems is the only North America independent lab with the capability of realigning Agilent/HP TLS optical sections including the attenuator when installed. If your unit does not pass calibration, we will quote to get your TLS repaired and back to perfect working condition.

List of specifications calibrated (for units with low SSE capabilities)

- Relative and Absolute Wavelength Accuracy
- Wavelength Repeatability
- Maximum Power Test
- Power Linearity
- Power Stability
- Signal-to-Source Spontaneous Emission

Traceability: Instrumentation used during this calibration is traceable to N.I.S.T (National Institute of Standards and Technology) or C.N.R.C. (Canadian National Research Council).

Specifications for HP Tunable Laser Sources (TLS) models 8167B, 8168D, 8168E and 8168F

	HP 8167B	HP 8168D	HP 8168E	HP 8168F
Wavelength Range	1255nm to 1365nm	1490nm to 1565nm	1475nm to 1575nm	1450nm to 1590nm
Absolute Wavelength Accuracy typ (1)	±0.1nm	±0.2nm	±0.1nm	±0.1nm
Relative Wavelength Accuracy	±0.035nm (1310-1350nm) ±0.050nm (1255-1365nm) typ ±0.001nm (2)	±0.1nm	±0.035nm, typ ±0.001nm (2)	±0.035nm (1475-1575nm) ±0.050nm (1450-1590nm), typ ±0.001nm (2)
Wavelength Resolution	0.001nm, 170MHz at 1300nm	0.1nm	0.001nm, 125MHz at 1550nm	0.001nm, 125MHz at 1550nm
Wavelength Stability (typ over 1 hour at constant temperature)	<±100MHz	±1GHz	<±100MHz	<±100MHz
Wavelength Repeatability	±0.035nm (1310-1350nm) ±0.050nm (1255-1365nm) typ ±0.001nm (2)	±0.1nm	±0.035nm typ ±0.001nm (2)	±0.035nm (1475-1575nm) ±0.050nm (1450-1590nm), typ ±0.001nm (2)
Sidemode Suppression Ratio, typ (3)	>40dB (1260-1360nm at -3dBm)	n/a	>40dB (1500-1570nm at 0dBm)	>50dB (1475-1575nm at 1dBm)
Source Spontaneous Emission (4)	<-45dB/0.1nm (1310-1350nm) <-40dB/0.1nm (1260-1360nm) <-35dB/0.1nm (1255-1365nm)	<-40dB/0.1nm (1500-1565nm) <-35dB/0.1nm (1490-1565nm)	<-45dB/0.1nm (1500-1570nm) <-35dB/0.1nm (1475-1575nm)	<-55dB/0.1nm (1520-1570nm) <-45dB/0.1nm (1475-1575nm) <-35dB/0.1nm (1450-1590nm)
Relative Intensity Noise (RIN), typ	<-145dB/Hz	<-145dB/Hz	<-145dB/Hz	<-145dB/Hz
Linewidth (typ), coherence control off	100kHz	100kHz	100kHz	100kHz
Effective Linewidth (typ), coherence control on (5)	10-500MHz (1260-1360nm)	30-500MHz (1500-1565nm)	50 to 500MHz (1500-1570nm)	50 to 500 MHz (1475-1575nm)
Tuning Speed (typ. for a 1/10/100nm step) (6) (7) with #003 (8)	200ms/300ms/2s 250ms/300ms/2s	200ms/300ms/2s n/a	200ms/300ms/2s 250ms/300ms/2s	200ms/300ms/2s 250ms/300ms/2s
Output Power for #023 (8) for #003 (8) for #007 (8) for #023 and #003 (8)	>+4dBm peak typ. >+3dBm (1310-1350nm) >-3dBm (1260-1360nm) >-7dBm (1255-1365nm) reduce by 1dB reduce by 1.5dB reduce by 1dB reduce by 2.5dB	>-3dBm peak typ. >-4dBm (1500-1565nm) >-10dBm (1490-1565nm) n/a n/a reduce by 1dB n/a	>+1dBm peak typ. >0dBm (1500-1570nm) >-10dBm (1475-1575nm) reduce by 1dB reduce by 1.5dB reduce by 1dB reduce by 2.5dB	>+8dBm peak typ. >+7dBm (1520-1570nm) >1dBm (1475-1575nm) >-7dBm (1450-1590nm) reduce by 1dB reduce by 1.5dB reduce by 1dB reduce by 2.5dB

Minimum Output Power with #003 (8)	-7dBm -47dBm	-10dBm n/a	-10dBm -50dBm	-7dBm -47dBm
Power Linearity with #003 (8)	± 0.1 dB ± 0.3 dB (11)	± 0.1 dB n/a	± 0.1 dB ± 0.3 dB	± 0.1 dB (10) ± 0.3 dB (10)
Power Stability (over 1 hour)	± 0.03 dB(12) (typ ± 0.01 dB)	± 0.03 dB (typ ± 0.01 dB)	± 0.03 dB (typ ± 0.01 dB)	± 0.03 dB (typ ± 0.01 dB)
Power Repeatability (typ)	± 0.04 dB (11)	± 0.04 dB	± 0.04 dB	± 0.04 dB (10)
Power Flatness versus Wavelength with #003 (8)	± 0.1 dB ± 0.2 dB (12)	± 0.2 dB typ ± 0.1 dB n/a	± 0.1 dB ± 0.2 dB	± 0.1 dB (10) (1475-1575nm) ± 0.2 dB (10) (1450-1590nm) ± 0.2 dB (10) (1475-1575nm) ± 0.3 dB (10) (1450-1590nm)

- 1- Measured with a wavelength meter in a vacuum.
2- Performance when controlled with appropriate wavelength meter.
3- Measured by heterodyning method. Reduce output power if options are attached.
4- Measured with optical spectrum analyzer at 0.1nm resolution bandwidth at maximum specified output power.
5- At power levels larger than CC uncal value.
6- Applicable for CW operation.
7- The Tuning Speed increases when Modulation is on.
8- Listed options are described in the Supplementary Performance Characteristics
9- The Maximum power is lower when Modulation is on.
10- For power settings below -3dBm (with option 003:PREF <-3dBm, independent of attenuator setting, or power setting below -43dBm), the values shown may increase by up to 5 times.
11- with option #003: at constant Relative Humidity (65%)
12- with option #003: at 1355.0nm and 1359.5nm, power may vary by up to ± 0.25 typically, depending on ambient relative humidity and related water absorption.