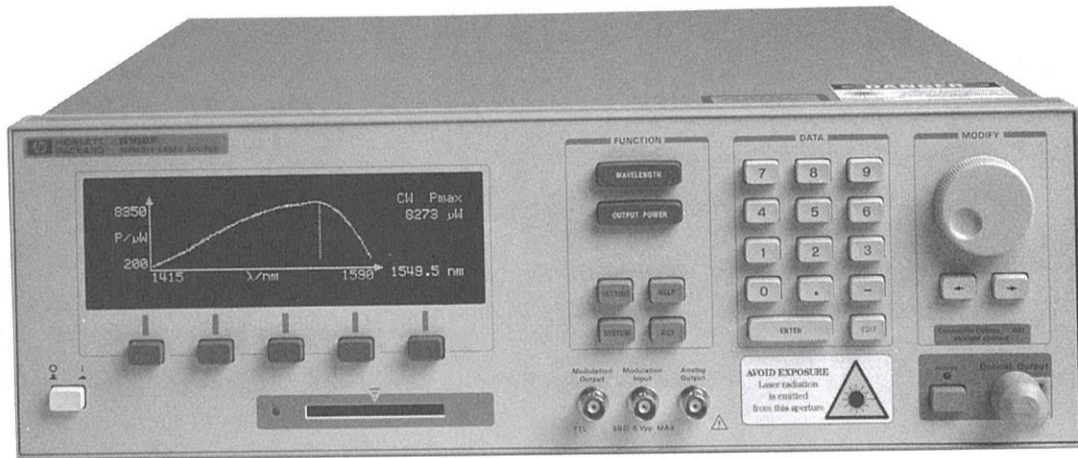


OPTICAL COMPONENT TEST

Tunable Laser Sources

HP 8167A/8168D/E/F

- Output power up to +8 dBm
- Tuning linearity ± 1 pm possible
- Up to 3 year full warranty
- Auto-realignment of laser cavity for even better reliability



HP 8167A and HP 8168D/E/F Tunable Laser Sources

Turnable laser sources are basic tools for characterizing and testing optical amplifiers and components. The HP 8167A addresses the 1300 nm transmission window; the HP 8168D/E/F operate in the 1550 nm window. A built-in side mode filter ensures that a true single-mode laser line is generated for every wavelength point, eliminating any possible multimoding. All tunable lasers provide independent control of output power and wavelength. The user does not need to monitor values with additional instruments. Wavelength scans, which require an output power that is stable over time and flat across all wavelengths, can be performed reliably, accurately and quickly. In manufacturing applications, the instrument can be integrated into a fully-automated production-test environment for precise, repeatable high-speed testing. In a manual set-up, built-in application software supports all those measurements. In a manual set-up, built-in application software supports single or dual channel loss, return loss, and coupling ratio measurements of around 1300 nm or 1550 nm on pigtailed or connectorized devices, depending on the configuration selected.

For more information, refer to the *Lightwave Test and Measurement Catalog* and the data sheet, p/n 5964-9000E.

Specifications

	HP 8167A	HP 8168D	HP 8168E	HP 8168F
Wavelength range	1280 nm to 1330 nm	1490 nm to 1565 nm	1475 nm to 1575 nm	1450 nm to 1590 nm
Absolute wavelength accuracy, typical	± 0.1 nm	± 0.2 nm	± 0.1 nm	± 0.1 nm
Relative wavelength accuracy	± 0.035 nm, typical ± 0.001 nm*	± 0.1 nm	± 0.035 nm, typical ± 0.001 nm*	± 0.035 nm, typical ± 0.001 nm*
Wavelength resolution	0.001 nm	0.1 nm	0.001 nm	0.001 nm
Wavelength stability	$< \pm 100$ MHz	$< \pm 1$ GHz	$< \pm 100$ MHz	$< \pm 100$ MHz
Wavelength repeatability	± 0.035 nm, typical ± 0.001 nm*	± 0.1 nm	± 0.035 nm, typical ± 0.001 nm*	± 0.035 nm, typical ± 0.001 nm*
Linewidth (typical) broadened (effective, typical)	100 kHz 50 to 500 MHz	100 kHz 30 to 500 MHz	100 kHz 50 to 500 MHz	100 kHz 50 to 500 MHz
Source spontaneous emission	< -40 dB/0.1 nm	< -40 dB/0.1 nm	< -45 dB/0.1 nm	< -55 dB/0.1 nm
Sidemode suppression ratio	> 40 dB		> 40 dB	> 50 dB
Maximum output power	-4 dBm	-4 dBm	0 dBm	7 dBm
Minimum output power	-10 dBm (-50 dBm with #003)	-10 dBm	-10 dBm (-50 dBm with #003)	-7 dBm (-47 dBm with #003)

* Performance when controlled with appropriate wavelength meter

Ordering Information

- HP 8167A Tunable Laser Source
- HP 8168D Tunable Laser Source
- HP 8168E Tunable Laser Source
- HP 8168F Tunable Laser Source

Options (not available for all instruments and in all combinations)

- Opt 021 Straight Contact Output Connector
- Opt 022 Angled Contact Output Connector
- Opt 023 Angled Non-Contact Output Connector (Diamond HMS-10/HP/HRL)
- Opt 003 Built-in Variable Attenuator
- Opt 007 Polarization Maintaining Fiber

Price

\$64,250
\$28,900
\$49,900
\$63,000

\$0
\$0
\$0

+\$5,800
+\$5,250

HP81600 Series 200 EDFA Test System

Please refer to *Lightwave Test and Measurement Catalog*.