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## Fiber-Coupled SLD Benchtop Sources

The S5FC Series of Benchtop SLD Sources contain a broadband SLD pigtailed to either SM or PM fiber. The SLD is driven with a high-precision, low-noise constant current source, and the temperature of the SLD is independently controlled with an internal TEC element.

The front panel LCD display and controls allow the user to view and set the current and temperature parameters. While the SLD is enabled, the display will show the wavelength (not measured), operating power (calculated from the SLD monitoring diode), and the actual temperature of the SLD.

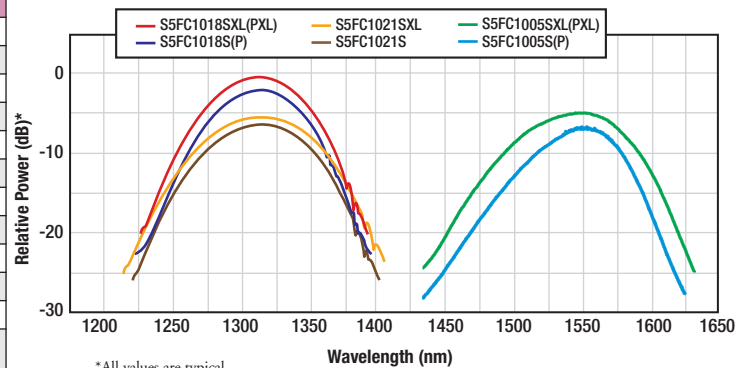
The system's microcontroller actively regulates the drive current and temperature of the SLD as well as monitors the system for fault conditions. The microcontroller has a USB interface that allows for remote adjustment of the output power and temperature of the SLD as well as the enabling of the SLD output.

An analog input is provided on the rear panel; it allows the user to modulate the output of the SLD using an external signal. To prevent damage, the microcontroller will disable the output if the analog input plus the internal setpoint exceeds the SLDs limits.

There is an interlock located on the rear panel that can be used to disable the SLD output when an unsafe condition exists. This interlock must be shorted to enable the SLD output. The SLD output can be easily amplified, thereby increasing the output power using a benchtop semiconductor optical amplifier.



CONTROLLER CHARACTERISTICS	
Current Set Point Resolution	0.1 mA
Adjustment Range	-0 - Full Power
Noise (Typical, Source Dependent)	<0.5%
Modulation Input	0 - 5 V Scaled to Current Limit
Modulation Bandwidth	250 kHz
Rise Time/Fall Time	1.4 μs/1.6 μs
Temperature Control	Integrated TEC
Temperature Adjustment Range	20 - 30 °C
Temperature Stability	<0.01 °C
Connector Type	FC/APC
AC Input	100 - 240 VAC, 50 - 60 Hz
Dimensions (L x W x H)	5.8" x 11.4" x 2.6" (146 mm x 290 mm x 66 mm)



ITEM #	S5FC1021S(P)			S5FC1018S(P)			S5FC1018SXL(PXL)		
	Min	Typical	Max	Min	Typical	Max	Min	Typical	Max
Optical Characteristics									
Wavelength (nm)	1290	-	1330	1290	-	1330	1290	-	1330
Output Power (mW)	10	12.5	-	22	30	-	30	-	-
Optical Bandwidth (nm)	80	85	-	40	45	-	45	-	-
RMS Gain Ripple (dB)	-	0.1	0.35	-	0.1	0.35	-	0.1	0.35

ITEM #	S5FC1550S(P)-A2			S5FC1005S(P)			S5FC1005SXL(PXL)		
	Min	Typical	Max	Min	Typical	Max	Min	Typical	Max
Parameter									
Wavelength (nm)	1530	1550	1570	1530	1550	1570	1535	1550	1565
Output Power (mW)	2	2.5	-	20	22	-	22	-	-
Optical Bandwidth (nm)	85	90	-	45	50	-	55	-	-
RMS Gain Ripple (dB)	-	-	0.25	-	0.2	0.35	-	0.2	0.35

### SLD Sources: SM Fiber

ITEM #	\$	£	€	RMB	DESCRIPTION*
S5FC1021S	\$ 2,704.00	£ 1,946.88	€ 2,352.48	¥ 21,550.88	SM Benchtop SLD Source, 1310 nm, 12.5 mW (Typical)
S5FC1018S	\$ 2,954.00	£ 2,126.88	€ 2,569.98	¥ 23,543.38	SM Benchtop SLD Source, 1310 nm, 30 mW (Typical)
S5FC1018SXL	\$ 4,676.00	£ 3,366.72	€ 4,068.12	¥ 37,267.72	SM Benchtop SLD Source, 1310 nm, 30 mW (Minimum)
S5FC1550S-A2	\$ 2,384.00	£ 1,716.48	€ 2,074.08	¥ 19,000.48	SM Benchtop SLD Source, 1550 nm, 2.5 mW (Typical)
S5FC1005S	\$ 2,566.00	£ 1,847.52	€ 2,232.42	¥ 20,451.02	SM Benchtop SLD Source, 1550 nm, 22 mW (Typical)
S5FC1005SXL	\$ 3,908.00	£ 2,813.76	€ 3,399.96	¥ 31,146.76	SM Benchtop SLD Source, 1550 nm, 22 mW (Minimum)

\*Typical values, see the specifications table for more information.

### SLD Sources: PM Fiber

ITEM #	\$	£	€	RMB	DESCRIPTION*
<b>NEW</b> S5FC1021P	\$ 2,854.00	£ 2,054.88	€ 2,482.98	¥ 22,746.38	PM Benchtop SLD Source, 1310 nm, 12.5 mW (Typical)
<b>NEW</b> S5FC1018P	\$ 3,900.00	£ 2,808.00	€ 3,393.00	¥ 31,083.00	PM Benchtop SLD Source, 1310 nm, 30 mW (Typical)
<b>NEW</b> S5FC1018PXL	\$ 6,967.00	£ 5,016.24	€ 6,061.29	¥ 55,526.99	PM Benchtop SLD Source, 1310 nm, 30 mW (Minimum)
<b>NEW</b> S5FC1005P	\$ 3,236.00	£ 2,329.92	€ 2,815.32	¥ 25,790.92	PM Benchtop SLD Source, 1550 nm, 22 mW (Typical)
<b>NEW</b> S5FC1005PXL	\$ 5,640.00	£ 4,060.80	€ 4,906.80	¥ 44,950.80	PM Benchtop SLD Source, 1550 nm, 22 mW (Minimum)
<b>NEW</b> S5FC1550P-A2	\$ 2,534.00	£ 1,824.48	€ 2,204.58	¥ 20,195.98	PM Benchtop SLD Source, 1550 nm, 2.5 mW (Typical)

\*Typical values, see the specifications table for more information.