Superluminescent Diodes & turn-key solutions



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Choose your own fiber-coupled SLED superluminescent diode + turn-key driver solution

Standard singlemode superluminescent diodes (SLEDs) from 1 to 10 mW are offered as stock items or associated with a CW or nanosecond pulsed turn-key driver.



Model	Wavelength	Power	Emission Bandwidth	Ripple (Typ)	Spectral shape	Nominal current (typical/max)	Fiber (eq.)
1310SLED-1	1310 nm	1 mW	45 nm	0.2 dB	Gaussian	75/120 mA	SMF 28 (standard) PM1550
1310SLED-2		10 mW	45 nm	0.2 dB	Gaussian	225/300 mA	
1550SLED-1	1550 pm	1 mW	45 nm	0.2 dB	Gaussian	75/150 mA	(option) Multimode
1550SLED-2	1550 mm	10 mW	45 nm	0.2 dB	Gaussian	550/700 mA	(option)



> Example of a typical spectrum of the 1 mW 1550 nm SLED model with 52 nm bandwidth (3dB bandwidth)



> Comparative RIN curve performances of the various CW and pulsed&CW drivers

Choose your **driver** performance :

	CW Driver (« <u>CCS-CW</u> » is the open driver and CCSI-CW is the integrated version)	CW Driver (Ultra low noise verison) (« <u>CCS-LN</u> » is the open driver and CCSI-LN is the integrated version)	Pulse & CW Driver (from 1 ns to CW : « <u>CCS- std</u> » is the open driver and «CCSI-std» is the integrated version)	User design pulse shape Driver (From 0.5 ns to 8 µs : « <u>SHAPER</u> » is the open driver and Shaper-i is the integrated version)		
User design Pulse shape	No	No	No (On-Off only)	Yes		
SLED Temperature / stability	15 - 50 °C / <10 mK	0 - 90°C / <1 mK	15 - 50 °C / <10 mK	15 - 50 °C /< 10 mK		
Pulse duration (Ext trigger)		CW only	0.5 ns - CW	0.5 ns - 8 μs		
Pulse duration (Internal pulse generator)			0.5 ns - 500 ns			
Typ rise/fall time ; Min pulse duration	CW only		3 (ns/A) ; 1.5 ns	< 1ns/A ; 1.5 ns		
Internal rep rate adjustment			1 Hz - 4 MHz (250 MHz optional)	1 Hz - 20 MHz		
Temporal Jitter			< 8 ps	< 2 ns (<10 ps with reference clock synchonization)		
Adj. CW offset (pulse regime)			Yes	No		
Interface/GUI/libraries	USB - Windows - DLLs - Hexa - Labview - Python - Python/Linux					
Ccs-cW/ Ccs-std Open-frame driver for and HP electronics boar single mode diodes	product form	factor : OPEN-FR	RAME or INTEGRA SHAPE	ATED R en-frame driver for «S electronic board and s e diodes		
CCSI-CW/ CCSI-std	CCSI- (Low No	LN ise) Integrated version	SHAPE for	R-I Accoso > Integrated version		

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CCSI_Low Noise







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for Shaper electronics board

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GUI (examples)





Mechanical (examples) :



CW & Pulsed

SHAPER



Classification :

Name	SLED :		
[WL] SLED - [Power model]	Choose your model from the table above		
Driver Electronics :	0: SLED alone 1: CCS-CW (open driver for CW only) 2: CCS-std (Pulse and CW Driver) 3: SHAPER (pulse only with user design pulse shape)		
Form Factor	0: SLED alone 1: Open frame 2: Integrated		
SMF or PM	Nothing or 1: SMF Fiber 2: PMF Fiber 3: Multimode Fiber		

Ordering information :



Example : 1550SLED-2-1-2 = 1550 nm 10 mW SLED with a PM Panda fiber output, mounted on a «pulsed On/ Off & CW» open frame driver.



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