

# CCSI-HPHS

High-Power-High-Speed Pulsed Laser Diode



AeroDIODE

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## High Power Pulsed Laser Diode

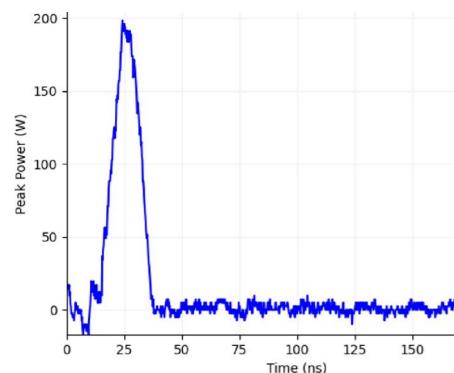
High peak power (100's W) nanosecond pulses fiber-coupled laser diode from 450 up to 1500 nm.



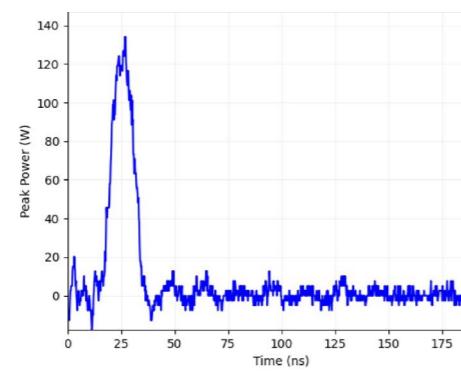
Designed to offer an optimized solution for the generation of high peak power nanosecond precision pulses at visible or infra-red wavelengths such as 450, 785, 808, 830, 905, 915, 980, 1064 or 1470 nm. All modules have a very high brightness with a typical output fiber core of 105 µm (62.5 µm also available as a special request). This makes it an ideal solution for LIDAR R&D or various laser lighting applications.

### Key features:

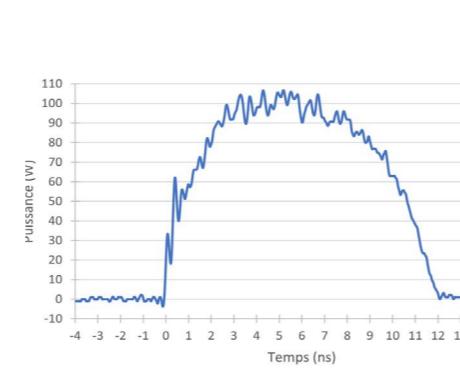
- Adjustable pulse width
- Adjustable peak power
- Adjustable repetition rate
- Low Jitter internal and external triggering with an embedded pulse generator
- Down to 1 ns rise/fall time
- Includes one «Tombak» multifunctional synchronization pulse delay generator. This device allows to generate any pulse or burst configuration with adjustable width and delay. It includes a voltage converter for low voltage triggering.



Exemple of a 200 W peak power 15 ns pulse at 808 nm out of a 200 µm-core fiber. The peak power, pulse width and repetition rates are adjustable.



Exemple of a 120 W peak power 10 ns pulse at 940 nm out of a 105 µm-core fiber.



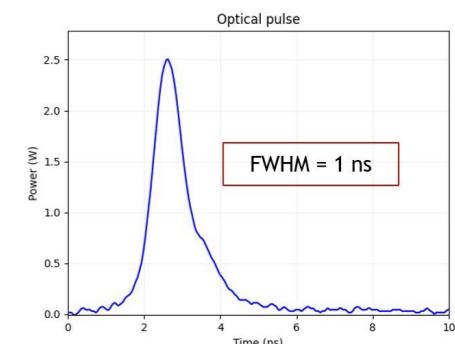
Exemple of a 100 W peak power 9 ns pulse at 940 nm out of a 105 µm-core fiber. The peak power, pulse width and repetition rates are adjustable.

## Technical Specifications



The product includes our famous Tombak multifunctional synchronization pulse delay generator

This Turnkey unit has multiple adjustments capabilities controlled by an efficient GUI.



Down to 1 ns pulselwidth with multi-Watt peak power

**TOMBAK** is a multifunctional pulse delay generator. It is ideal for complex synchronization needs like burst generation, frequency division, voltage conversion, Arbitrary Waveform Generation etc. One Tombak module is included within each of the CCSI-HPHS product.



### HPHS (High Power High Speed) modules performances :

Nominal Wavelength (nm)	version	Min pulse width*	Max pulse width*	Max peak power*	Max Duty Cycle
450 nm	1	High speed low current	10 ns	2 000 ns	20 W
	2	High speed high current	10 ns	50 ns	60 W
	3	Long pulse high current	20 ns	1 000 ns	40 W
785 nm	1	High speed low current	5 ns	2 000 ns	30 W
	2	High speed high current	5 ns	50 ns	100 W
	3	Long pulse high current	20 ns	1 000 ns	75 W
808 nm	1	High speed low current	2 ns	2 000 ns	30 W
	2	High speed high current	2 ns	50 ns	300 W
	3	Long pulse high current	20 ns	1 000 ns	200 W
830 nm	1	High speed low current	10 ns	2 000 ns	30 W
	2	High speed high current	10 ns	50 ns	100 W
	3	Long pulse high current	20 ns	1 000 ns	75 W
905 nm	1	High speed low current	2 ns	2 000 ns	18 W
	2	High speed high current	2 ns	50 ns	250 W
	3	Long pulse high current	20 ns	1 000 ns	150 W
915 nm	1	High speed low current	2 ns	2 000 ns	18 W
	2	High speed high current	2 ns	50 ns	250 W
	3	Long pulse high current	20 ns	1 000 ns	150 W
940 nm	1	High speed low current	2 ns	2 000 ns	18 W
	2	High speed high current	2 ns	50 ns	250 W
	3	Long pulse high current	20 ns	1 000 ns	150 W
980 nm	1	High speed low current	2 ns	2 000 ns	18 W
	2	High speed high current	2 ns	50 ns	250 W
	3	Long pulse high current	20 ns	1 000 ns	150 W
1064 nm	1	High speed low current	2 ns	2 000 ns	10 W
	2	High speed high current	2 ns	50 ns	80 W
	3	Long pulse high current	20 ns	1 000 ns	60 W
1470 nm	1	High speed low current	5 ns	2 000 ns	15 W
	2	High speed high current	5 ns	50 ns	35 W
	3	Long pulse high current	20 ns	1 000 ns	35 W

\*Typical values - contact us to share your precise need and evaluate the associated performances



### Classification:

Name	940PHS -
HPHS version :	1 : High Speed Low Current 2 : High Speed High Current 3 : Long Pulse High Current

### Ordering information:

HPHS: 940PHS - [ ]

Nominal Wavelength :  
450; 785 ; 808 ; 830 ; 905 ; 915 ; 915 ; 940 ; 980 ; 1064 ; 1470  
Version  
1 : High Speed Low Current  
2 : High Speed High Current  
3 : Long Pulse High Current



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