

Short-Pulse Laser Source



Externally-triggered sub-nanosecond pulse laser source

= 1310nm or 1550nm

New **DFB laser available**

id Quantique's id300 Short-Pulse Laser Source has been designed to meet the specific requirements of researchers who need to generate short laser pulses at a wavelength of 1310nm or 1550nm. The laser source, based on Fabry-Perot (FP) or on distributed-feedback (DFB) laser diodes, is triggered externally via a trigger input to produce sub-nanosecond laser pulses with a repetition rate ranging from DC to 500MHz.

The *id300* laser source is ideally suited to work in combination with *id Quantique's* Single Photon Detection and Counting Modules (*id201* series). The laser source can be directly triggered by the counter's own internal trigger. Used in combination with a variable optical attenuator, this short-pulse laser source makes an ideal cost-effective single-photon source.

Key features

- ▶ Sub-nanosecond laser pulses
- ▶ Repetition rate from DC to 500MHz
- ▶ Wavelength: 1310nm or 1550nm
- ▶ External trigger
- ▶ Compact and reliable stand-alone unit
- ▶ Polarization maintaining fiber available upon request

Applications

- ▶ Quantum Optics
- ▶ Fiber Optics Characterization
- ▶ Optical measurements

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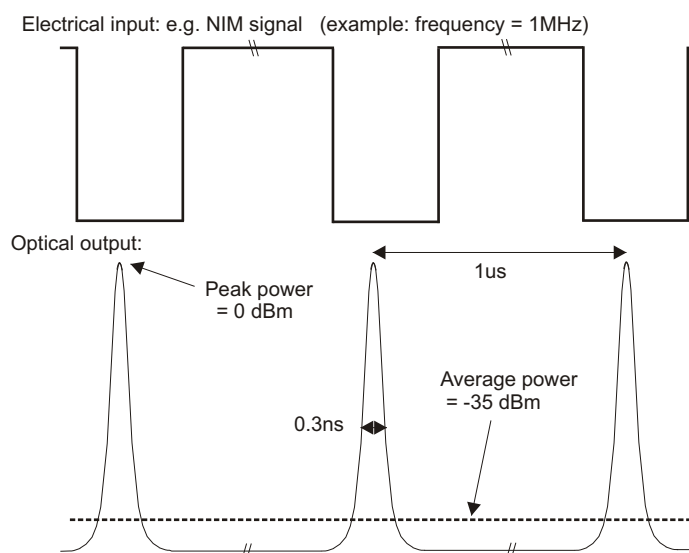

A Quantum Leap for Cryptography

Specifications (T = 25°C)

Parameter	Min	Typical	Max	Units
Wavelength ^{id300-1310}	1290	1310	1330	nm
Wavelength ^{id300-1550}	1520	1550	1580	nm
Spectral width (FWHM) - FP option		7	15	nm
Spectral width (FWHM) - DFB option		0.6	1.5	nm
Frequency range	0		500	MHz
Pulse duration		0.3*	0.5	ns
Peak power	0.7	1		mW
Output power at 1MHz	-36	-35	-34	dBm
Trigger input**	NIM, ECL, PECL, LVPECL, TTL, TTL 50			

* can be increased up to 2ns upon demand ** choose one trigger input from this list. See ordering information below.

Operating principle



General information

Operating temperature	+10 to +30	°C
Dimension L×W×H	185 x 172 x 55	mm
Weight	915	g
Optical connector	FC-PC on SMF fiber (Polarization maintaining fiber available upon request)	
Electronic connector	BNC	
Power supply	100 - 240 (autoselect)	VAC

Ordering Information and Sales Contact

Part number: *id300-XXXX-YYY-ZZZ*

XXXX: select wavelength. Choose between 1310 and 1550nm

YYY: select laser type. Choose between FP and DFB

ZZZ: select trigger input. Choose between NIM, ECL, PECL, LVPECL, TTL, TTL 50

For further information on this or other products, please contact *id Quantique* by phone: +41 (0)22 301 83 71 or email:sales@idquantique.com

Disclaimer

The information and specification set forth above are subject to change at any time by *id Quantique* without prior notice.