



Pulse Selector IOM

Pulse Driver / Pulse Picker Controller
for Integrated-Optical Amplitude Modulators



The Pulse Selector IOM is a pulse picker controller for a reliable reduction of high pulse laser repetition rates. It can be used as triggered pulse generator for modulator driving too. The preferred modulator type is JENOPTIK AMXXXXb.

For normal operation, the Pulse Selector IOM requires only the synchronizing signal of the laser source.

It is controlled by PC via the USB port using a command set. An integrated photo diode enables the use of a feed-back loop for automatic bias control of the modulator.

Benefits

- Short rise times
- High extinction
- High repetition rate
- Automatic bias-control

Application

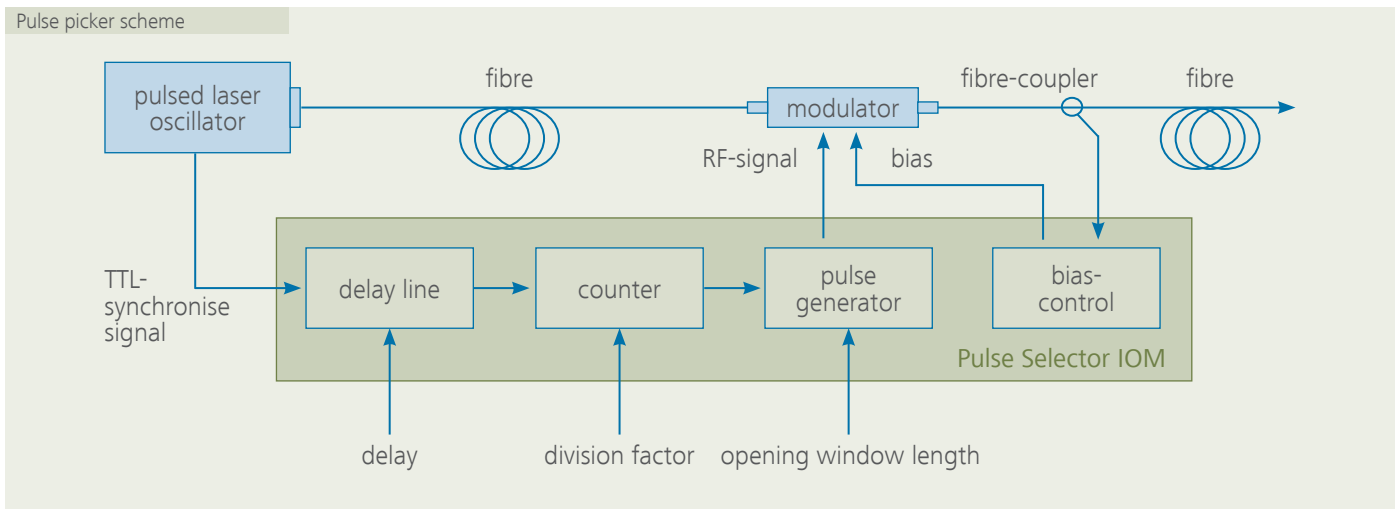
- Reduction of laser pulse repetition rate in oscillator-amplifier systems

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Specifications

Usable modulator type	AMXXXXb (XXXX: wavelength in nm)
Trigger repetition rate	100 kHz ... 100 MHz
Trigger input	TTL / LVTTTL (50 Ohms), SMA(f)
Division factor	2, 3, 4, ... 16383 (Trigger repetition rate < 50 MHz) 3, 4, 5, ... 16383 (Trigger repetition rate > 50 MHz)
Delay	5 ... 255 ns, step 1 ns
Modulator opening window	10 ns ... 255 ns, step 1 ns single pulses or pulse bursts
Output to modulator (RF)	SMA(f), 0 V ... 7 V (connected to 50 Ohms) Monitoring output at the rear side (SMA(f))
Output to modulator (bias)	SMC(m), - 10 V ... 10 V (connected to high-resistance connector)
Interface to computer	USB (emulated RS232)
Manual operation	Value input via PC Handling by terminal-software, IOM Control demo software
Automatic operation	Automatic operation point control by a feed-back loop possible Modulators pulse suppression > 500 : 1
Feed-back	Internal InGaAs-photodiode, bandwidth 1 GHz, FC-receptacle 1000 nm ... 1600 nm
Mains	85 ... 264 V ac, 50 ... 60 Hz
Storage / Transport temperature	- 20 °C ... 60 °C
Operation temperature	10 °C ... 40 °C
Dimensions (W x D x H)	330 mm x 268 mm x 73 mm



It is our policy to constantly improve the design and specifications. Accordingly, the details represented herein cannot be regarded as final and binding.



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