

# **Pulse Picker**

Accessory for Selecting Pulses from Modelocked Ti:Sapphire Oscillators

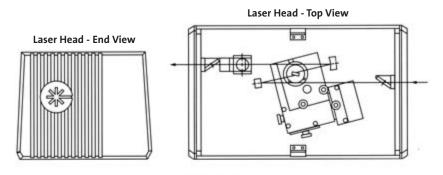


### **Features**

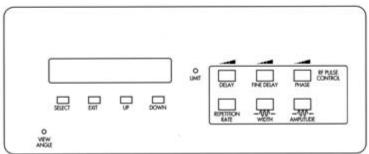
- Standalone accessory for selecting pulses from femtosecond or picosecond Ti:Sapphire oscillator
- For use with femtosecond or picosecond lasers
- Wavelength options covering 500 to 3000 nm
- Single-pass Bragg cell for easy alignment

- High diffraction efficiency and contrast ratio
- Dedicated controller with CPU
- LCD display of operational parameters
- Controller settings provide widely variable repetition rate: 9.5 kHz to 4.75 MHz

**Mechanical Specifications** 



**Power Supply** 



## **Pulse Picker**

## Accessory for Selecting Pulses from Modelocked Ti:Sapphire Oscillators

#### **Specifications**

Pulse Repetition Rate From ~9.5 kHz to 4.75 MHz variable by integer division of oscillator frequency.¹ The unit also can be externally triggered at any repetition rate below 4 MHz or operated single-shot.  Diffraction Efficiency² (%) TeO2 Cell >60 SiO2 Cell >50  Contrast Ratio³ TeO2 Cell >500:1 SiO2 Cell >1000:1  Wavelength Range (nm) <700 to >1000⁴ (other ranges available on request)  Max. Input Power (W) TeO2 Cell <2 SiO2 Cell <4  Dimensions (L x W x H) Head 270 x 160 x 160 mm (10.5 x 6.2 x 6.2 in.) Controller 440 x 440 x 180 mm (17.2 x 17.2 x 7 in.)		
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SiO2 Cell       >1000:1         Wavelength Range (nm)       <700 to >10004 (other ranges available on request)         Max. Input Power (W)       TeO2 Cell         SiO2 Cell       <4	Contrast Ratio <sup>3</sup>	
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SiO2 Cell <4  Dimensions (L x W x H) Head 270 x 160 x 160 mm (10.5 x 6.2 x 6.2 in.)	Max. Input Power (W)	
Dimensions (L x W x H)  Head 270 x 160 x 160 mm (10.5 x 6.2 x 6.2 in.)	TeO <sub>2</sub> Cell	⟨2
Head 270 x 160 x 160 mm (10.5 x 6.2 x 6.2 in.)	SiO2 Cell	<4
	Dimensions (L x W x H)	
Controller 440 x 440 x 180 mm (17.2 x 17.2 x 7 in.)	Head	270 x 160 x 160 mm (10.5 x 6.2 x 6.2 in.)
	Controller	440 x 440 x 180 mm (17.2 x 17.2 x 7 in.)

Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice.

Coherent's scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all Pulse Picker accessories. For full details of this warranty coverage, please refer to the Service section at www.Coherent.com or contact your local Sales or Service Representative



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The Pulse Picker accepts the nominal 76 MHz input frequency from the synchronous output photodiode of the Mira 900.
 A 38 MHz RF clock is divided by 8 thru 4096.

 Percentage of incident pulse energy in diffracted output pulse.
 Main pulse to non-adjacent pulses. Main pulse to adjacent pulse is >100:1 TeO2 cell or >200:1 SiO2 cell. Contrast ratios for high-power pumped femtosecond systems are 0.5 times the given values for the TeO2 cell.
 For SHG operation, the fundamental output must be pulse picked first, then frequency doubled.