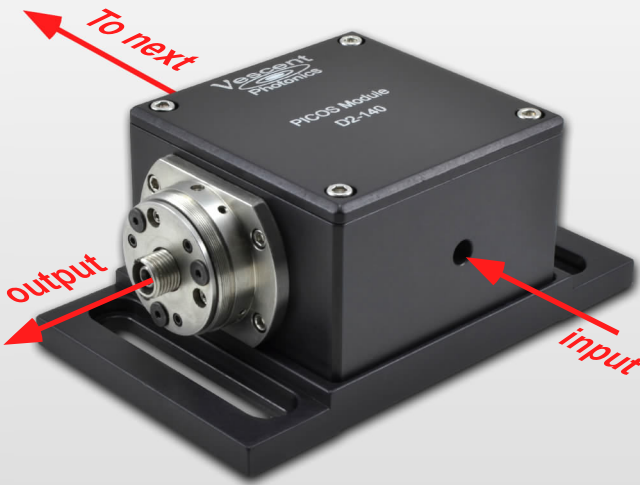


# D2-140 PICOS Module

## Pulsing, Intensity Control, and Optical Shuttering



The D2-140, PICOS Module (**P**ulsing, **I**ntensity **C**ontrol, and **O**ptical **S**huttering) is a multi-functional intensity controller. Using liquid-crystal shutters configured for fast operation, the PICOS Module can replace mechanical shutters that give rise to mechanical shock and vibration. As a pulse generator and it can replace acousto optics for pulse generation or intensity stabilization. The PICOS Module operates on collimated beams so focusing is not required. Multiple PICOS Modules can be placed in the beam line as needed for different functions. A separate D2-145 PICOS driver operates up to four modules.

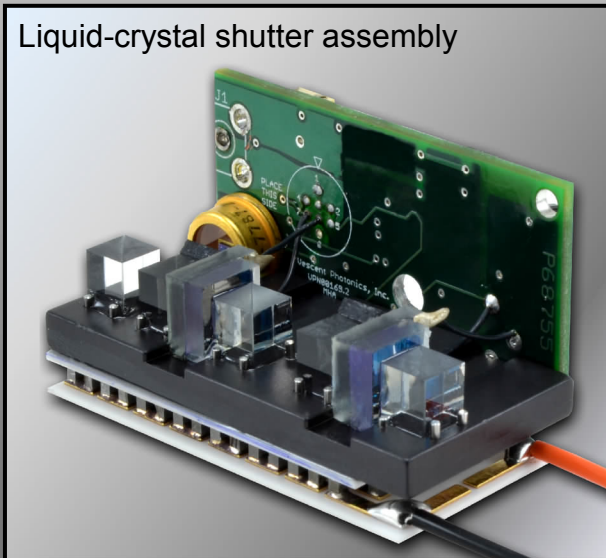
### **Applications Include:**

*Atom & ion trapping, including BEC*  
*AMO research*  
*Optical dosimetry*  
*Laser stabilization and control*

### **Features Include:**

*100  $\mu$ s pulse generation*  
*Intensity stabilization out to 100 kHz*  
*Shuttering with 65 dB attenuation*  
*Variable beam splitting with optional output to fiber*  
*High optical throughput*  
*Computer control*

Liquid-crystal shutter assembly



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**Vescent**  
Photonics

Specifications:

General	
Max. Input Power	1 W
Wavelength Range	630 nm –1080 nm
Throughput Efficiency	70%
Clear Aperture	4.7 mm
Optical Pulse Generator	
Min Pulse Width	100 $\mu$ s
Min Reset Time	5 ms
Intensity Controller	
Loop Bandwidth	100 kHz
Intensity Sampling	2%
Optical Shutter	
Attenuation	55 dB (w/o VBS)
	65 dB (w VBS)
Variable Beamsplitter (VBS)	
Splitting ratio	0-100%