

**NEW**

## Monolithic Pulsed Laser System

### PROVE WHAT'S POSSIBLE.

Polarium™ combines seed amplification, pump laser, thermal management, control electronics, and an intuitive graphical user interface into a single, compact unit. From FC/APC seed input to high-power optical output, it delivers a fully integrated optical engine. Designed for both standalone use and seamless system integration, Polarium offers uncompromised performance in a streamlined, user-friendly form.

Tethered to CPTEC and built with INO's FastFBR Tapered Fiber (Yb-MCOF-35/250-56/400-PM), the system leverages the exceptional ultrafast performance and mode-filtering characteristics of the gain fiber. Its all-fiber, monolithic design eliminates free-space optics, enabling true plug-and-play operation with enhanced reliability and alignment-free simplicity.

### Key Features

- PL'e Safety Classification
- Seed Dropout Protection
- Seed Amplification
- Air and Water Cooled Options
- Clean, Accessible GUI for Seamless Operation

Optical	Unit	Specification
Center Wavelength	nm	1029-1120
Air-Cooled CW Power	W	<150
Water-Cooled CW Power	W	<400
Pulse Energy	mJ	<5
Peak Power	kW	950
Beam Quality	M <sup>2</sup>	<1.2
Beam Pointing Stability	urad	<10
Collimated Output	mm	2.8
Seed Connector		FC/APC
Seed Input Power	mW	10-100
Electrical		
Supply Voltage	VAC	100 - 240
Power Consumption	W	<750
Enviromental		
Operating Temperature	°C	10 - 40
Storage Temperature	°C	-20 - 60
Weight	kg	<25

## Applications

- Ultrafast Amplifiers
- Nonlinear Microscopy
- LIDAR / LADAR
- Digital Laser Array
- High Energy CBC Array
- Materials Surface Processing

