

CPC 1040

Compact Pulse Compressor Accessory

CPC 1040 is a pulse compressor for the 1040 nm output from the Chameleon Discovery. It will ensure highest peak power is delivered directly to the sample plane.

CPC 1040 incorporates negative dispersion mirrors that add a stepwise, variable amount of Group Dispersion Delay (GDD/prechirp) to the laser pulses. This ensures that the short pulse and high peak power are precompensated for the group dispersion inherent in the optical paths of commercial and home-built microscope systems.

The rugged optical design delivers excellent pointing stability, and power efficiency is optimized through careful coating design.

The compact size and simple alignment process makes installation straightforward and fast. The unit can also be added as a field upgrade to existing Coherent laser systems.



Superior Reliability & Performance

CPC 1040 Features:

- **Maximum peak power for highest fluorescent efficiency**
- **Optimized for Chameleon Discovery**
- **Wide range of dispersion control**
- **High power handling and excellent transmission efficiency**
- **Compact**
- **Excellent beam pointing stability**

CPC 1040 Applications:

- **Multiphoton Excitation (MPE) Microscopy**
- **Second Harmonic Generation Imaging**
- **Third Harmonic Generation Imaging**
- **Coherent Anti-stokes Raman Scattering (CARS) Microscopy**
- **Stimulated Raman Scattering (SRS) Microscopy**
- **Optogenetics**
- **Non-linear Optics**

CPC 1040

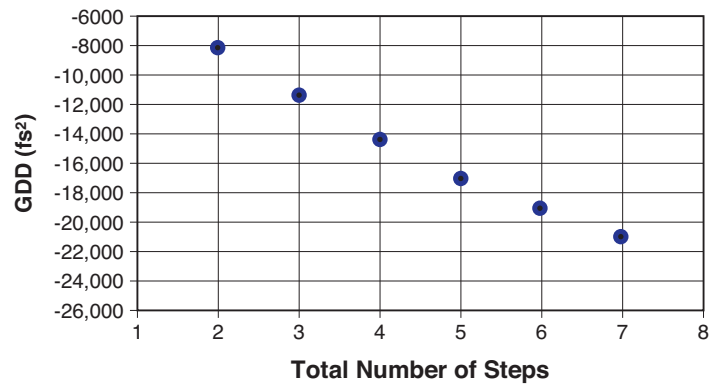
Compact Pulse Compressor Accessory

Specifications

CPC 1040

| | |
|---|----------------|
| Center Wavelength (nm) | 1040 |
| Maximum Input Bandwidth (nm) | 40 |
| Typical GDD Step Size (fs ²) | 3500 |
| Transmission Efficiency (%) | >85 |
| Typical Negative GDD range (fs ²) | 8000 to 20,000 |

Typical Group Dispersion Delay Setting

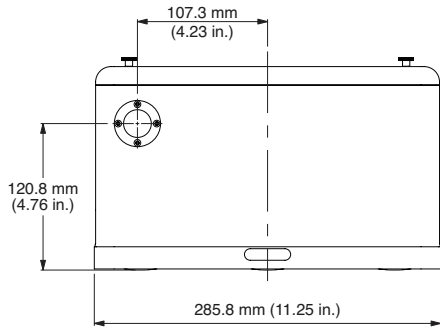
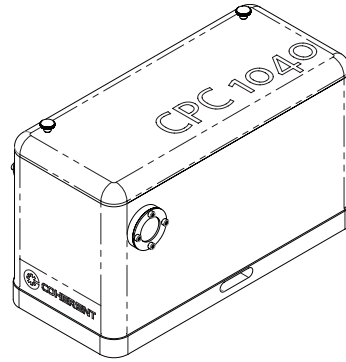
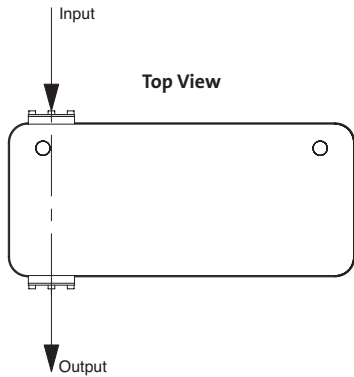


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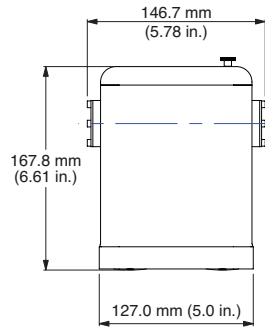
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Mechanical Specifications

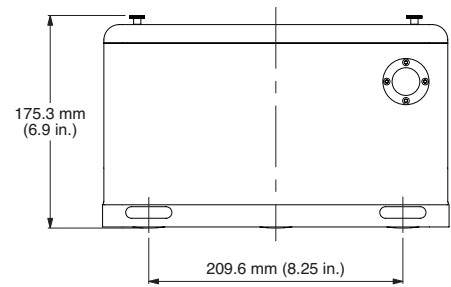
Laser Head



Right Side View



Front View



Left Side View



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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 CPC 1040 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.