Pulse Compressor



Applications

- Greater than 80 GHz OTDM system
- Investigation of optical nonlinearities

Features

- Wavelength range from 1545 to 1560 nm
- Pulse compression to 300 fs from 3 ps input pulse
- Post compression output powers higher than 100 mW
- Near transform-limited output
- Pedestal after compression less than 3%
- Post-compression spectral width larger than 9 nm

The pulse compressor (PCS) consists of a fiber amplifier unit and a pulse compressor unit. It has excellent stability and reliability with turnkey operation. Along with a portable design, Calmar's advanced simulation software enables us to design PCS according to the end user's laser specification. The pulse width can be compressed from 3 ps to 300 fs with a minimal pedestal. The compressed pulse is near transform-limited or near soliton-like shape. An average output greater than 100 mW is achieved with the built-in amplifier. PCS can also be used as a stand alone Erbium Doped Fiber Amplifier (EDFA) when pulse compression is not required.

Technical Specifications

| Model Number | PCS-1 | PCS-2 |
|-----------------------------------|----------------------|--------------|
| Pulse Width Pre-Compression (ps) | 3.0 | 1.5 |
| Pulse Width Post-Compression (fs) | 300 | |
| Input Signal Power (mW) | 1 ~ 10 | |
| Input Wavelength Range (nm) | 1545 ~ 1560 | |
| Input Repetition Rate Range (GHz) | 2 ~ 20 | 10 ~ 50 |
| Spectral Width (nm) | >9 | |
| Output Power (mW) | 100 @ 20 GHz | 100 @ 40 GHz |
| Pedestal (%) | <3 | |
| Operating Temp (°C) | 0 ~ 50 | |
| Operating Voltage (VAC) | 85 ~ 264 | |
| Dimensions (cm) | 34(w) x 42(d) x 9(h) | |

Due to our continuous improvement program, specifications are subject to change without notice.









