Components

Femtosecond Pulse Compressor Compulse

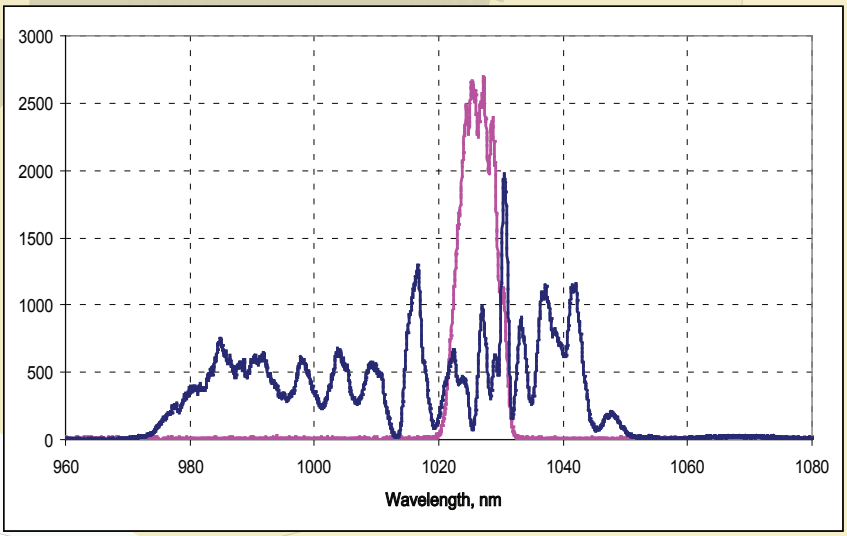
- Up to 1:10 compression ratio
- Energy efficiency 50%
- Input pulse energy up to 1 mJ
- 800 and 1058 nm standard models

Product description

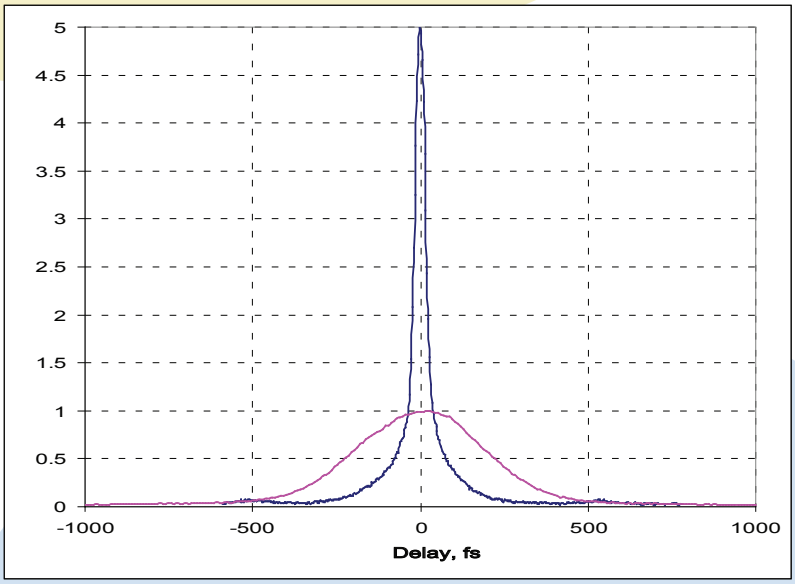
Compressors are employed for shortening of femtosecond laser pulses. They are based on spectral broadening (chirping) of femtosecond laser pulse in noble gas-filled capillary with subsequent pulse compression by grating or prism compressor. The pulse compression (ratio of initial pulse duration to the compressed pulse duration) varies from 5 to 10 for laser pulses with duration from 50 to 300 fs. The energy conversion efficiency reaches 50% for 0.01-1 mJ laser pulses. The compressor size is 130x50x15 cm^3 (LxWxH).

The Compulse compressor family includes two standard models, namely Compulse-800 and Compulse-1050 (designed for 800 nm and 1058 nm sources respectively). Customized requests are also welcome.

Images



Spectra and autocorrelation traces: purple curves – output pulse of ytterbium laser with duration of 290 fs, blue curves – after spectral broadening in a capillary filled with Xe and subsequent compression down to 27 fs.



Avesta Ltd., Laboratory Building, P. N. Lebedev Physical Institute,
Troitsk, 142190, Moscow, Russia

Tel: +7 495 967-94-73; +7 495 851-00-78
Fax: +7 495 646-04-95

e-mail: fs@avesta.ru
www.avesta.ru