FASTLITE

Ultrafast - Shaping - Measurement - Control

DAZZLER™ WR-460-740

Intermediate-cut 25mm DAZZLER™
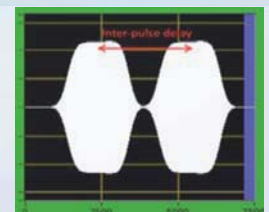
Specifications

PROGRAMMABLE AMPLITUDE AND PHASE FILTER FOR FEMTOSECOND LASER PULSE SHAPING

✓ **Ultra-compact device**

✓ **Advanced software functionalities**

✓ **In-line geometry**

✓ **Simple optical alignment**

- Wavelength tuning range — 460 nm to 740 nm
  - *Optional extended tuning range* — *510 nm to 950 nm*
  - *Typical 30 to 40% diffraction efficiency drop on extended tuning range*
  - *Wavelengths outside this range are poorly or not diffracted*

- Instantaneous bandwidth — up to 280 nm

- Spectral resolution — 0.2 nm at 500 nm
  0.3 nm at 700 nm

- Intensity control dynamic range — > 45 dB

- Maximum programmable delay — 9 ps at 500 nm
  7 ps at 700 nm

- Diffraction efficiency for operation up to 10 kHz — 60% on a 50 nm bandwidth
  30% on a 100 nm bandwidth
  - *With optional 20W RF amplifier (up to 6kHz)* — *40% on a 100 nm bandwidth*
  - *With optional 50W external RF amplifier (up to 2.5kHz)* — *40% on a 250 nm bandwidth*

- Typical acoustic waveform refreshing time — < 3ms

- Input beam requirements — 30 µJ max on ϕ = 2.5 mm, collimated

- Optical module dimensions — 33 x 85 x 22 mm^3

- Typical optical jitter — < 10 fs
  - *With optional Low-jitter electronics* — *< 100 as*

✓ Special feature for multidimensional spectroscopy experiments

The optional *Streaming mode* allows to switch between pre-defined pulse shapes at repetition rates up to 500Hz. The maximum number of waveforms is over 100 000. Includes specific hardware, software, and synchronization management.