

pulseCheck SM Type 2

High Dynamic Range Autocorrelator for High Contrast Pulse Characterization

Revealing Pre-/Post-pulses, Pedestals, Satellites

- High contrast measurements with the Autocorrelator *pulseCheck SM Type 2 autocorrelator* provide information about how far in time and intensity the main pulse is accompanied by pre-pulses, post-pulses and pedestals.
- With a high dynamic range of 10^7 , the *pulseCheck SM Type 2* is ideally suited for the characterization of high-intensity, high-repetition rate laser pulses, such as the used in material processing or in ultra-high intensity light-matter interaction experiments.

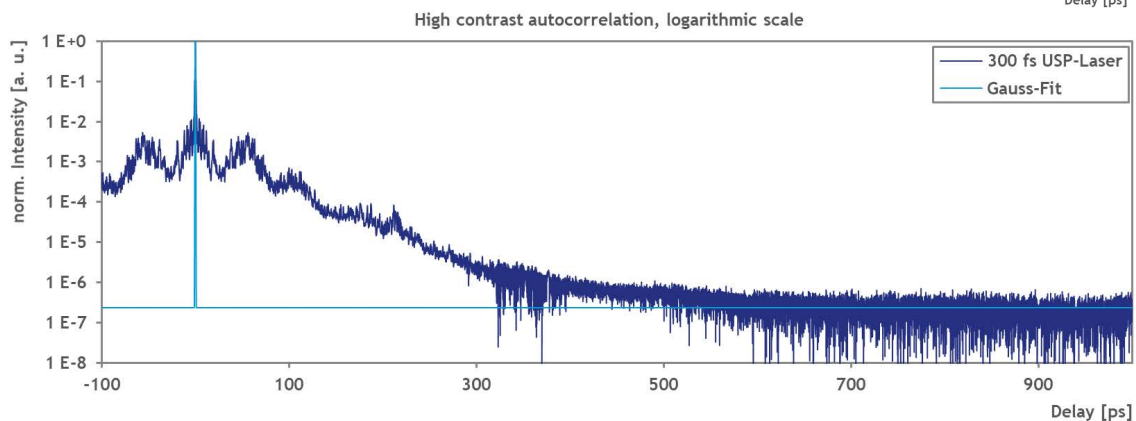
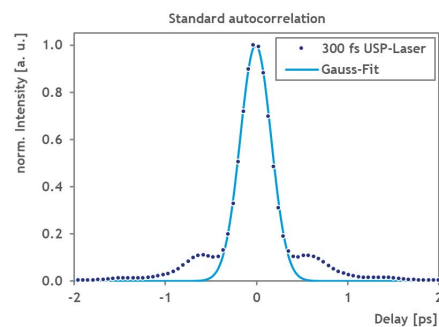
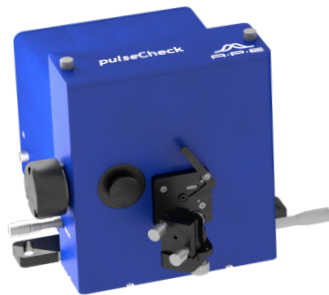


Figure: SM Type 2 high contrast autocorrelation measurement of an industrial femtosecond fiber laser with a nominal pulse duration of ~ 280 fs (please note the ps scale of the measurement). Measurement conditions: ~ 1030 nm, 35 mW, 1 MHz.

- Measuring intense pulses and their pre-pulses, post-pulses, pedestals
- High dynamic range measurements of ultra-short laser pulses
- Temporal resolution for normal operation 1 fs and 25 fs for high contrast operation
- Ethernet, TCP/IP and USB connectivity for easy remote automation
- NIST traceable temporal calibration

pulseCheck SM Type 2

Specifications

Specifications

Measurable Pulse Width Range	< 100 fs ... 400 ps
Wavelength Range	NIR 700 ... 1200 nm
Detector	PD
Dynamic Range	10 ⁷
Delay Linearity	< 1 %
Delay Resolution	1 fs normal operation, 25 fs high contrast operation
Recommended Repetition Rate	≥ 1 MHz for high contrast measurements
Type of Measurement Mode	Collinear, Non-Collinear
SHG Tuning for Phase Matching	Software aided
Input Polarization	Linear (vertical or horizontal)
Input Beam Coupling	Free-space
Input Aperture	6 mm (free-space)
Software	Included; Real-time display of pulse width
Connection	USB, Ethernet
Remote Control	Possible via TCP/IP (SCPI command set)
Calibration	NIST traceable calibration certificate included

Dimensions and Power

Dimensions	250 x 190 x 440 mm ³
Power	95 ... 240 V, 50 ... 60 Hz, 60 W

Contact

APE Angewandte Physik & Elektronik GmbH

Plauener Str. 163-165 | Haus N | 13053 Berlin | Germany

T: +49 30 986 011-30

F: +49 30 986 011-333

E: sales@ape-berlin.de

www.ape-berlin.de

Your local contact:

