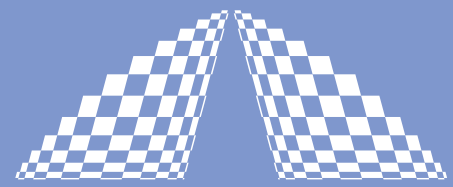


PULSE DRIVE



A P E

ACOUSTOOPTICAL MODELOCKER



In cw lasers a train of ultrashort laser pulses can be generated by synchronous modulation techniques (mode locking). One of these methods is loss modulation by means of an intracavity acoustooptical modulator.

The modelocker **PulseDrive** has been designed as an upgrade-set to fit different types of Ar⁺-lasers, and can be operated at VIS and UV lines as well. It consists of a compact modulator head containing the modulator element and the high reflector, and the control electronics with an RF generator. The precise temperature control and the ultra stable direkt digital synthesizer RF generator guarantee very short and stable laser pulses with high average power and minimal jitter.

All operation parameters can easily be set at the control electronics. The modelocker **PulseDrive** has a non-volatile memory for the parameter settings. Once the optimal parameters are determined (usually at the installation by our service personnel) they are stored in the memory, which means daily operation is reduced to switch the instrument on and wait for the 15 min warm-up.

High stability due to low noise oscillator

Compact modulator head with integrated temperature control

Standard versions for different Ar⁺ -laser types and resonator lengths

Ti:Sa-, Nd:YAG- and other versions optional

Ultrafast Pulse Diagnostics

Wavelength Conversion

Pulse Management

Acoustooptics

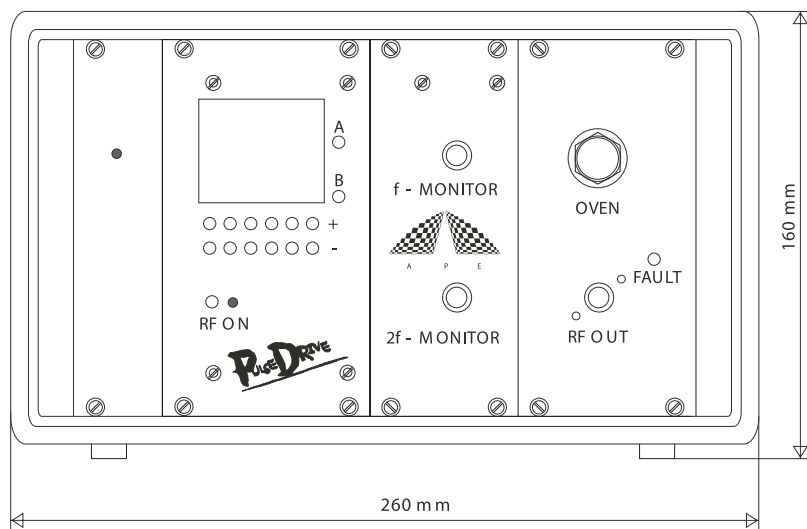
Your Partner in Ultrafast

PULSED DRIVE

SPECIFICATIONS

| | |
|----------------------------------|--|
| Wavelength range | 450 ... 520 nm (other ranges optional) |
| Optical losses | < 5 % of cw output power |
| Typical modelocked average power | > 25 % of cw output power (@514,5 nm/1W cw) |
| Pulse repetition rate | 70 ... 130 MHz (depending on laser cavity length) |
| Driver frequency resolution | 1 Hz |
| Driver frequency stability | 1 ppm |
| Amplitude noise | < 1 % |

DIMENSIONS



Distributors

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APE follows a policy of continued product improvement. Therefore, specifications are subject to change without notice.