

100 W (0,5 J × 200 Hz) LD pumped Picosecond Nd:YAG laser

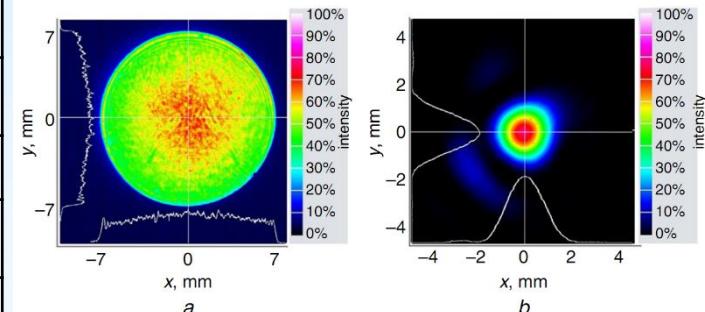
Wavelength	1064 nm	532 nm
Pulse energy	920 mJ (without SHG)	730 mJ
Pulse duration	76 ps	63 ps
Pulse repetition rate	200 Hz	
SHG efficiency	79%	
Beam diameter	15 mm	
Beam divergence	Less than 1.5×DL	Less than 1.9×DL
Laser head dimensions	1100×500×215 mm	
Laser head weight	80 kg	

Features:

- Diode pumping
- Two-pass two-stage amplifier
- Adaptive optical system for compensation non-stationary component of thermal lens

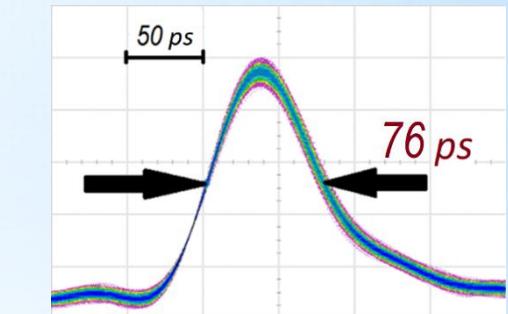
Applications:

- Material processing
- Medicine application
- Plasma diagnostics
- Satellite laser ranging
- Atomic and molecular spectroscopy
- Parametric light generation

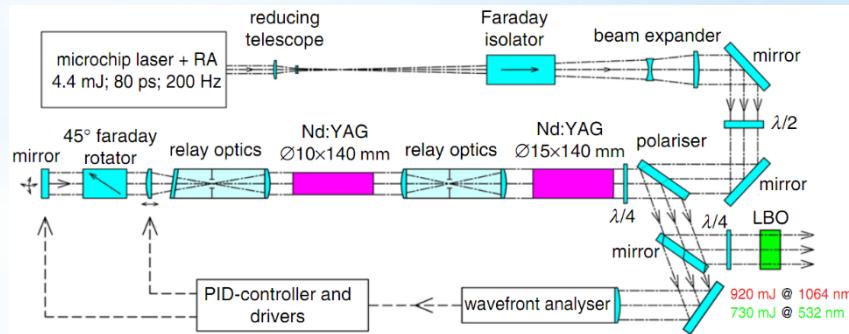


Near field ($\varnothing 15$ mm)

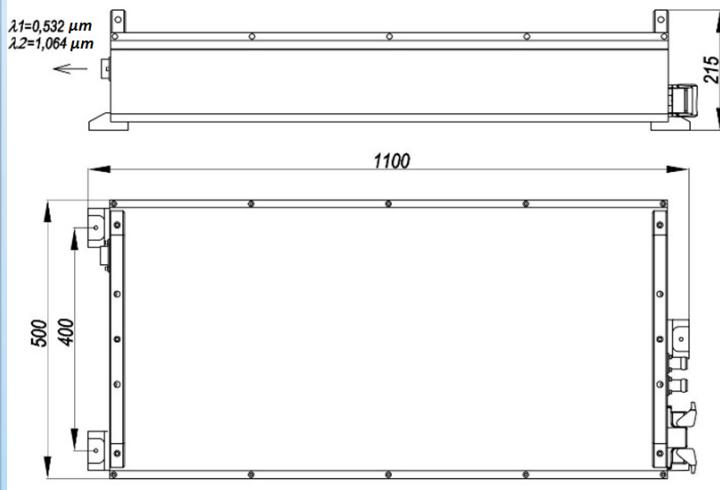
Far field ($1.5 \times \text{DL}$)



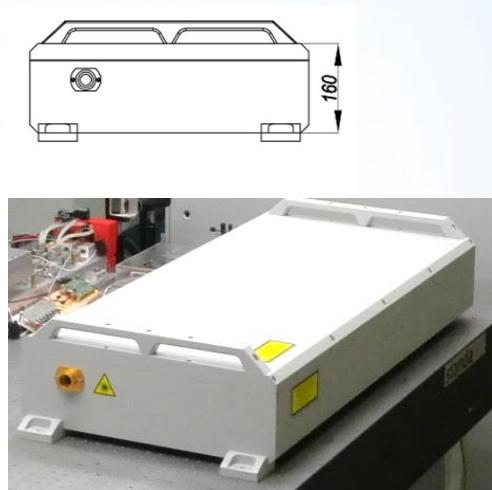
FWHM pulse duration of 1064 nm radiation



Principle optical scheme – two-pass two-stage amplifier



Laser head dimensional drawing



Laser head
(1100×500×215 mm)



Power supply
(600×800×1500 mm)