

# Quasi-CW Q-Switched Nd:YAG Laser Model PR21-70



- The laser system consists of a power supply unit (6KW9709-35), cooling unit (HEX9604), and control unit (CU21-70), housed in a 19-inch cabinet, and a laser head.
- The laser can be run in two modes:
  - a. with manual control from the front panel of the power supply unit
  - b. with PC control via an RS232 interface
- The laser is equipped with a microprocessor controller to provide timing with an external device and other lasers both in mode SYNCHRO IN and in mode SYNCHRO OUT.
- In the PC control mode, the user can enable or disable the intracavity shutter (ON/OFF), start up or shut down the laser, control the pulse repetition rate or the arc-lamp operational current.
- The laser is equipped with all the necessary safety and functional interlocks. They allow shut down of the power supply at cooling liquid over-temperature, when the amount or flow rate of the cooler is not sufficient, or when the laser head covers are removed.
- The dedicated software controlling the laser operation contains a specific diagnostics window to permit control of the main parameters of the laser system in operation.

## Specifications

Mode:	Multi-mode
Laser medium:	Nd:YAG
Wavelength:	1064 nm
Output power at pulse repetition rate	
4000Hz:	45 W
10000Hz:	60 W
15000Hz:	65 W
20000 – 50000Hz:	75 (80) W
Output beam diameter at output coupler:	4 mm
Beam divergence:	3.5 mrad
Pulse to pulse stability at 4 kHz R.R. (for 99% shots):	+/- 2%
Operation regime:	CW pumping acousto-optical Q-switching
Repetition rate with Internal and External triggering:	950-50000 Hz
Standards Compliance:	EN 61010, IEC 601
Electrical Requirements	220 VAC +/-10%, 3 phase 50/60Hz, up to 5000 W
Overall Size (LxWxH)	
Laser Head:	820 x 170 x 170 mm
Power Supply:	560 x 530 x 770 mm

**Dimensional Drawing**

