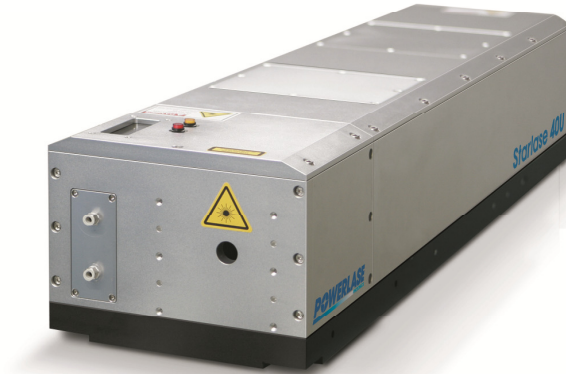


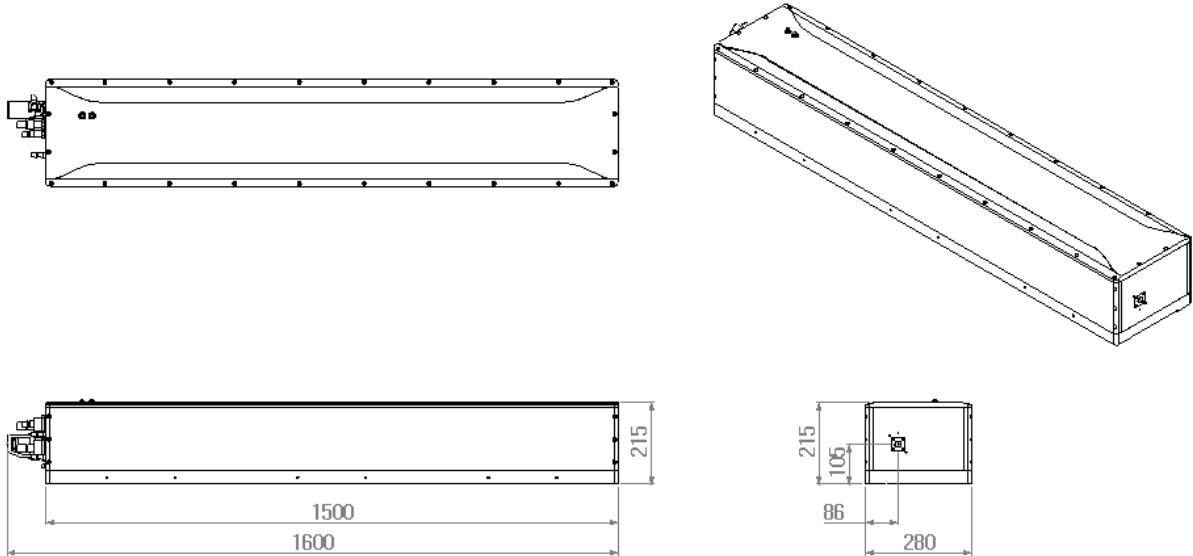
AO 40UV



An acousto-optically Q-switched, diode-pumped Nd:YAG laser system designed for high-volume 24/7 manufacturing environments. Delivers high average powers at a wavelength of 355 nm with linear polarisation. Rugged head design and a flexible control system provide a platform that is ideally suited to industrial applications. A microprocessor architecture allows for serial interfaces, touch screen control and simple integration with OEM equipment and process lines. Real time condition-monitoring provides details of laser performance using power monitors and internal diagnostics. First pulse control can be provided across the performance range. The laser head accepts an optional motorized optical attenuator for refined output power control.

Applications

- Thin film removal
- Photovoltaic processing
- Hard materials processing
- Micro machining
- Annealing



Typical laser performance – Preliminary Data

	Low PRF		High PRF		
Pulse Repetition Freq. (kHz)	10	20	30	40	50
Average Power (W)	40	20	15	10	5
Pulse Energy (mJ)	4	2	1.5	1	0.5
Pulse Duration (ns)	60	100	130	170	200
M ²	25	25	25	20	20
Divergence (mrad, 1/e ² FA)	4	4	4	3	3
Typical Power Stability	±1% pk-pk				

Facility requirements

Supply Voltage	220/380 VAC (±10%)
Supply Frequency	50/60 Hz
Nominal Power Consumption	7 kVA
Cooling Water	10 litres/min at 11-17°C
Gas Purge	N ₂ or Air (Grade N5.0, <1 ppm THC)
Laser Dimensions	1600 x 280 x 215 mm
Control Rack Dimensions	1210 x 600 x 980 mm (h x w x d)
Environmental Conditions	Temp. 15-32°C and RH <60% (90% max, non condensing)

Specifications subject to change without notice

**LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO
DIRECT OR SCATTERED RADIATION
CLASS 4 LASER PRODUCT**