more than light®

PRELIMINARY
PRODUCT DATA SHEET

Continuous wave laser power supply

ampyr® LASER-D 450/5

For the safe operation of high-power diode laser systems

Front view ampyr LASER-D 450/5

Rear view ampyr LASER-D 450/5

The ampyr Laser-D 450/5 laser power supply supplies your high-power laser systems safely, easily and efficiently. Control and monitoring can be performed either via a graphical user interface via USB or an analog interface. Power is supplied via a classic 3-phase mains connection. If critical system conditions are exceeded, the 450 amp laser power supply is set to a safe operating state and the internal power supply is switched off. External components can be integrated into the safety system via an interlock circuit.

PRODUCT HIGHLIGHTS

- Output current 5 to 450 A
- High stability & low noise
- Easy to integrate
- No overshoot / undershoot during switching
- Compact design

AREAS OF APPLICATION

- Stacked diode lasers (bars)
- Solid state lasers

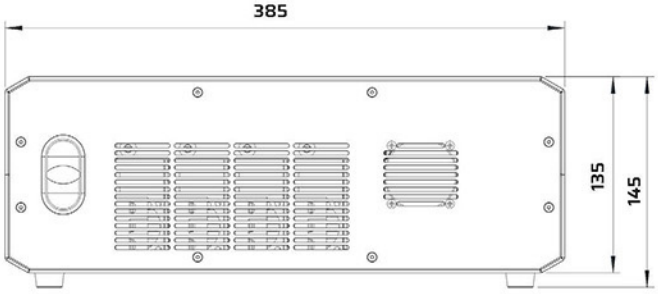
North America: 1-508-634-6688 | Contact@PrecisioneersGroup.com
Europe & Asia: +49 3641 35 30-30 | Sales@lej.de

ampyr® LASER-D 450/5

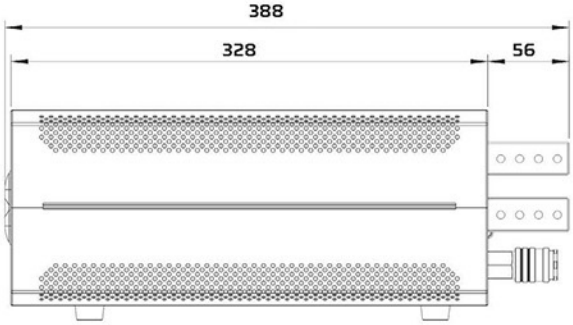
PRELIMINARY | Technical data

Input parameters		
Supply voltage	340 V_{AC} to 455 V_{AC}	
Frequency	47 ... 63 Hz	
Maximum input power	3.7 kW	
Set point	Dimming input analog 0.2 to 3 V	Dimming input digital
Monitor signals	Input, output voltage, output current, temperature, volume flow of the coolant, status	
Output parameters		
Output voltage	1 ... 5 V	
Output current	5 ... 450 A_{cw}	
Maximum output power	2.7 kW	
Ripple/noise p-p	0.5 % to 450 A_{Out}	
Ripple/noise RMS	0,05 % bei 450 A_{Out}	
Linearity error	< 1 %	
Stability	0.01% (after 30 min run-in time, at constant room and coolant temperature)	
Control accuracy	0.02% (after 30 min run-in time, at constant room and coolant temperature)	
Monitoring		
Voltage monitoring input/output	Graphical user interface via USB	
Output current monitoring		
Temperature monitoring internal & connections		
External cooling (volume flow of the coolant)		
Status		
Constructive execution		
Weight	Approx. 14 kg	
Dimensions without connections	328 mm x 135 mm x 385 mm (l/h/w)	
Interfaces	USB	
Ambient temperature range	0 to 50 °C	
Active cooling	Water / air cooling	

*Data measurement was done with a row of SI diodes instead of a diode laser (four 1 meter long cables with 25 mm2 cross section between driver & load).



Front view ampyr LASER-D 450/5 | Dimensions in mm



Side view ampyr LASER-D 450/5 | Dimensions in mm

North America: 1-508-634-6688 | Contact@PrecisioneersGroup.com
Europe & Asia: +49 3641 35 30-30 | Sales@lej.de