



# POWER SUPPLY SYSTEMS FOR LASER APPLICATIONS

## High Power Platform Solutions

PBF introduces the new standard in industrial power supplies. Compact and cost effective, designed especially for the dynamic behaviour in laser power systems. Easy to adapt to customer requirements.



**High reliability**



**Compact, scalable design**



**Safety interlock**

- Power level: 2 – 21 kW, for a single unit
- Water, base plate or fan cooled options
- Output voltage adjustment range: 5 – 52 V and up to 270 V
- Parallel operation with active current sharing for increase of power levels (up to 168 kW)
- Voltage and/or current controllable
- Current capability up to 4300 A
- Pulse load capability: 0 Hz to 200 kHz, optimized for dynamic response
- Interfaces for monitoring and control
- Universal mains: 1 Phase: 100 – 240 V<sub>AC</sub>, 3 Phase: 200 – 480 V<sub>AC</sub>
- SEMI F47, UL/CSA safety approvals

# TECHNICAL DATA

## Technical data

	2.4 kW version	3.8 kW version	21 kW version
Output voltage	5 ... 40 V <sub>DC</sub>	5 ... 52 V <sub>DC</sub>	0 ... 45 / 90 / 135 / 180 / 270 V
Output current	60 A	73 A	540 / 270 / 180 / 135 / 90 A
Input voltage	90 ... 264 V <sub>AC</sub> 1 ph	180 ... 528 V <sub>AC</sub> 3 ph	360 ... 528 V <sub>AC</sub> 3 ph
Power factor	> 0.99	> 0.94	> 0.93
Efficiency	> 93 %	> 93 %	> 93 %
Holdup time	> 20 ms	> 10 ms	> 10 ms
Temperature	Ambient 0 ... 50 °C	Baseplate 0 ... 35 °C	Water 0 ... 25 °C
Dimensions (mm)	425 x 125 x 65	407 x 103 x 85	445 x 445 x 133
Cooling type	Fan	Baseplate	Water
Aux supply	24 V / 4 A		



## LAP53800

### Common modular system

Up to 6 Single units of 3.8kW running in parallel. Total output power on system level is 22.8 kW.

PBF can provide the complete solution including water cooling and housings or can provide single units that can be integrated into a customized design.



## LAP521000

### Modular 19" power system

84 kW system, consists of 4 x a 21 kW power supply. The system can be scaled up to 8 units to have a total output power of 168 kW (4300 A). Integrated water cooling provides optimal usage of the available space.