

### Diode driver (QCW / CW)

#### Information



Pulse / CW laser power supply for diode-pumped lasers is designed to supply diode arrays, that are used for the pumping of high-power solid-state or fiber lasers. Power supply is designed for operation in the laboratory, educational, experimental and industrial applications. Additionally the power supply can be equipped with a thermal stabilization controller (TEC controller). Also it has current limit, duty cycle limit and safety interlocks. Could be modified by a customer's request for the optimal selection of parameters for a specific load.

#### Specifications

|                            | SF530                      |         | SF550                         |         |
|----------------------------|----------------------------|---------|-------------------------------|---------|
|                            | pulse mode                 | CW      | pulse mode                    | CW      |
| Pulse rate* (F)            | 1-500 Hz, single mode      | -       | 1-1000 Hz, single mode        | -       |
| Output voltage* (V)        | 0-160 V                    | 0-160 V | 0-200 V                       | 0-200 V |
| Output current* (I)        | 1-300 A                    | 1-150 A | 1-300 A                       | 1-150 A |
| Pulse duration* ( $\tau$ ) | 50-1000 $\mu$ s            | -       | 50-1000 $\mu$ s               | -       |
| Rise time**                | <60 $\mu$ s                | -       | <60 $\mu$ s                   | -       |
| Fall time**                | <60 $\mu$ s                | -       | <60 $\mu$ s                   | -       |
| Output current tolerance   | 0.3 %                      | 0.3 %   | 0.3 %                         | 0.3 %   |
| Average output power* (P)  | 2.5 kW                     | 2.5 kW  | 4.6 kW                        | 4.6 kW  |
| Data display               | LCD                        |         | LCD                           |         |
| Communication interface*** | RS232                      |         | RS232                         |         |
| Trigger in                 | 5 V, 10 $\mu$ s            |         | 5 V, 10 $\mu$ s               |         |
| Trigger out                | 5 V, 10 $\mu$ s            |         | 5 V, 10 $\mu$ s               |         |
| Interlock                  | switch contact closure     |         | switch contact closure        |         |
| Cooling                    | air cooled                 |         | air cooled                    |         |
| Power Input                | single phase 220 VAC, 50Hz |         | three phase 220/380 VAC, 50Hz |         |
| Dimensions                 | 440*132*440 mm; 3U         |         | 440*177*520 mm; 4U            |         |
| Weight                     | 20 kg                      |         | 25 kg                         |         |

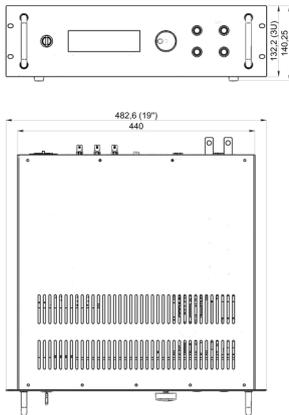
\* Values are limited by average power:  $F \cdot V \cdot I \cdot \tau \leq P$  (pulse mode);  $V \cdot I \leq P$  (CW mode)

\*\*With a length of laser diode power wire is not more than 2m

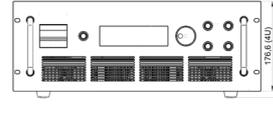
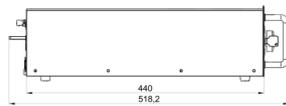
\*\*\*Installation of FOCL, LAN on request

### Размеры

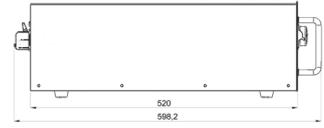
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SF530



SF550



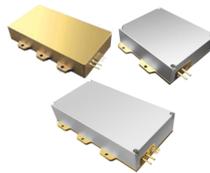
### Examples of laser diode arrays



Laser II-VI



BPC/OPC40W,60W& 80W — 92A 1,8V  
 BPC/OPC80W — 81A 1,65V  
 HPC50W — 54A 1,65V  
 Monsoon Compact framed vertical stack module  
 Monsoon Frameless Vertical Stack Module  
 Compact Bar on Microchannel cooler and etc.



808nm150W - 11A 40V / 915nm150W — 13.5A 24V  
 915nm158W - 11A 36V / 915nm200W — 13.5A 35V  
 940nm150W - 14A 24V / 940nm200W — 14A 35V  
 976nm150W - 14A 23,8V / 976nm200W — 14A 35V  
 976nm100W - 11,5A 24V / 976nm140W — 14A 23,8V  
 976nm180W - 14A 35V  
 915/940/976nm на 600W / 1000W / 2000W / 3000W and etc.



Vshiny FL-HVS61-6X1-360-760 — 80A 15V  
 Vshiny FL-HVS61-6X1-600-1060 — 115A 2V  
 Vsilk FL-1200-1000-808 — 110A 20V and etc.



Emitter of injection lasers IL-1M2  
 KMLD-130 — 65A 6V  
 32DL-504 / LLD-10  
 SLM-7 / SLM-P-8N  
 SLMP-6HP / LLD-500-1 and etc.