

Switched mode power supply for diode-pumped laser

Information



- Designed to power the diode arrays used to pump high-power solid-state or fiber lasers.
- Optimized for use as part of laboratory, educational, experimental and industrial applications.
- In addition, it can be equipped with a controller of thermal stabilization of Peltier elements (TEC controller).
- It has current limit, duty cycle limit and safety interlocks.
- It can be modified according to customer requirements for optimal selection of parameters for a specific load.

Specifications

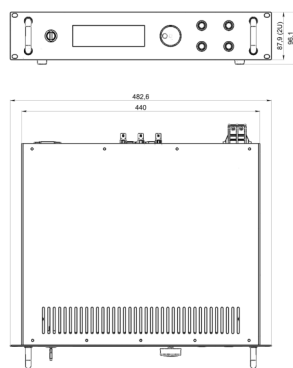
Parameter Type	SF306	SF315	SF350
Pulse rate* (F)	1 — 500 Hz, single pulse	1 — 500 Hz, single pulse	1 — 1000 Hz, single pulse
Output voltage* (V)	0-140 V	0-300 V	0-300 V
Output current* (I)	1-150 A	1-300 A	1-350 A
Pulse duration* (τ)	50-1000 μ s	50-1000 μ s	50-1000 μ s
Rise time**	<60 μ s	<60 μ s	<60 μ s
Fall time**	<60 μ s	<60 μ s	<60 μ s
Output current tolerance	0.3 %	0.3 %	0.3 %
Average output power* (P)	0.4 kW	1.5 kW	4.6 kW
Data display	LCD	LCD	LCD (SF350) Light Indication (SF350M)
Communication interface***	RS232	RS232	RS232
Trigger in	5 V, 10 μ s	5 V, 10 μ s	5 V, 10 μ s
Trigger out	5 V, 10 μ s	5 V, 10 μ s	5 V, 10 μ s
Trigger out delay	1-1100 μ s	1-1100 μ s	1-1100 μ s
Interlock	switch contact closure	switch contact closure	switch contact closure
Power Input	single phase 220 VAC, 50Hz	single phase 220 VAC, 50Hz	three phase 220/380 VAC, 50Hz
Type of cooling	air cooling	air cooling	air / water cooling
Dimensions	440*88*345 mm; 2U	440*132*440 mm; 3U	440*177*485 mm; 4U
Weight	10 kg	12 kg	25 kg

* Values are limited by average power: $F \cdot V \cdot I \cdot \tau \leq P$

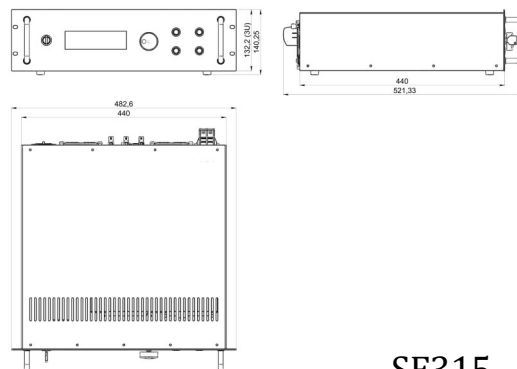
**With a length of laser diode power wire is not more than 2m

***Installation of FOCL, LAN on request

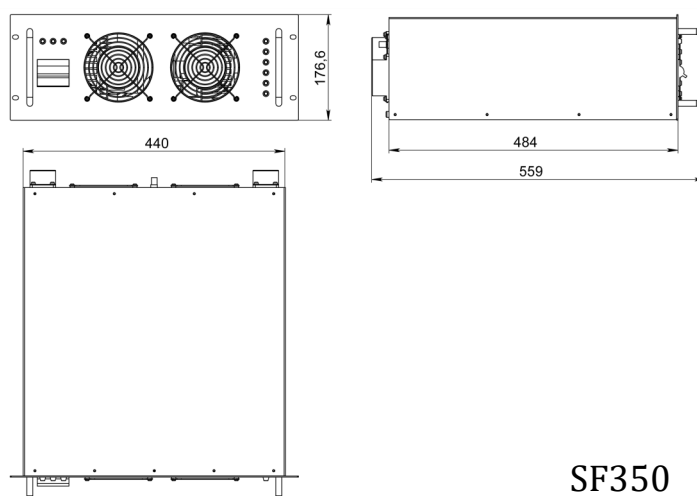
Dimensions



SF306



SF315



SF350

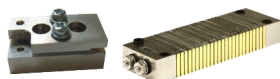
Examples of laser diode arrays



FL-AA05-3X10-6000-808
FL-GS02-25X1-3750-808
FL-GS04-5X1-750-808
FL-GS05-5X1-1250-808
FL-VS120-Nx1-500xN-808(Q)
FL-HCS02-250-808(Q)



СЛМ-2 / СЛМ-2-1Н / СЛМ-3
СЛМ-3-3600-1 / СЛМ-П-0.5Н-3
СЛМ-П-2НШ
ИЛД-8 / ИЛ-1М
ЛДЛИИ-70-940-1



ATC-Q120-11 / ATC-Q200-11
ATC-Q250-11 / ATC-Q5000-10x20
ATC-Q2500-5x20