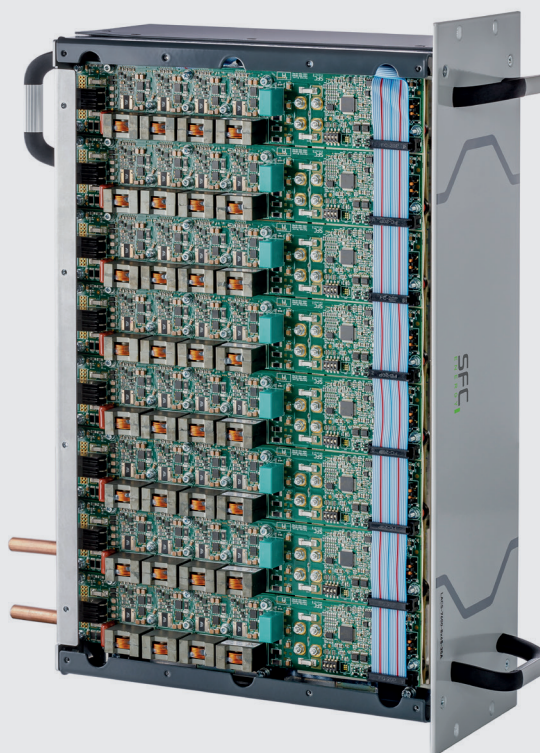




Safety Interlock



LACS series

19" multiple channel fast current driver system for laser applications with safety interlock

The liquid cooled 19" multiple channel fast current driver systems are specially designed for fiber laser and diode bar laser systems applications. They are equipped with a double safety interlock PLe according to ISO 13849-1.



Complete solution from mains to fiber laser pump diodes and laser diode bars



Safety interlock system integrated



DC and pulse solution

Solution for



Laser

The LACS family current source systems are a complete solution to drive multiple smaller laser modules e.g. fiber laser pump diodes or one big laser diode bar. The liquid cooled systems can be connected directly to universal mains. They directly drive almost any fiber laser or laser diode bar.

The LACS family is a modular system and can be configured from 1 to 8 channels. The cost efficiency effective solutions are designed for laser systems in the range of 500W to 5000W optical power and contains CSA certified PLe safety systems under the EU Machinery Directive.



Main Technical Details

Model		LACS-3800	LACS-7600	LACS-11400	LACS-15200	LACS-19000
Output	Voltage	0 - 65V				
	Current per channel	0 - 35A, 0 - 70A, 0 -105A, 0 -140A, 0 - 210A, 0 - 280A				
	Number of channels	1 to 8				
	Total output power	3800W	7600W	11400W	15200W	19000W
	Ripple and noise	< 0,25%				
	Rise and fall time programmable	< 10µs (10% to 90%)				
	Start-up time	< 3s				
	Hold up time	> 10ms, at 90% load				
Input AC	Voltage	180V - 528Vac, 3 Phase + PE. No derating at low line				
	Frequency range	47 - 63Hz				
	Power factor (typ)	0.95				
	Inrush current at 400 Vac	< 5Arms	< 10Arms	< 15Arms	< 20Arms	< 25Arms
Protections	Protections	Over temperature, Over current, Over voltage, input under and over voltage, phase loss etc.				
Functions	Output current programming	0 - 100%, simmer current possible				
	Remote ON/OFF	Yes				
	Safety interlock	2 interlock signals, 2 feedbacks				
	Remote control and monitoring	RS485 or EtherCat or analog / digital				
	Status outputs	Fail and AC-fail				
	Interface	Galvanic isolated				
Environmental	Cooling type	Liquid (copper, stainless steel on request)				
	Baseplate temperature	0 - 55°C, derating above 35°C				
	Ambient temperature	0 - 55°C				
	Storage temperature	- 40°C - 85°C				
	Humidity	5 - 90%, non-condensing				
Safety & EMC	Safety	IEC/UL/CSA 61010				
	Interlock	ISO 13849-1 PLe, DCavg > 99%				
	MTTFd	> 5000 years	> 2500 years	> 1650 years	> 1250 years	> 1000 years
	EMC emission	IEC61000-60-4				
	EMC immunity	IEC 61000-6-2				
	Semi	F 47				
Others	Dimension	19", 3U x 250mm	19", 3U x 250mm	19", 3U x 355mm	19", 3U x 460mm	19", 3U x 565mm

