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POWERFUL PORTFOLIO.



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PROFIT FROM OUR MANUFACTURING EXPERIENCE.

Our unique portfolio comprises high-performance power supplies as well as fully integrated plug-in-play solutions for laser control. We are able to adapt the features and functions of our products to your exact needs and create the best solution for your individual application.

CM100 POWER SUPPLY MODULES.

POWER SUPPLIES FOR SYSTEM INTEGRATION.

The housing of these ultra-compact devices is smaller than a paper-back book and they produce power ranging up to 18 kW. In the various housings, laser diode bars are powered by up to 350A CW or 800A in pulse mode. For single emitter laser diodes they supply appropriately high-resolution currents

at up to 80V. Tailor made and OEM versions can easily be set up.

- ▶ Ultra-compact housing
- ▶ Flexible configuration for multiple voltage or current ranges
- ▶ Efficiency of up to 97 %
- ▶ Fit for the digital age of Industry 4.0
- ▶ Air, water or conductive cooling
- ▶ Performance Level „e“ (PL e) according to safety standard EN ISO 13849

Type	Max voltage [V]	Max current [A]	CW	Pulse	TEC	Cooling
CM031P 22X140	22	140		x		Conductive
CM132 80W15	80	15	x	x		Water
CM132P 30W200	30	200		x		Water
CM134 80W90	80	90	x	x		Water
CM142 40L100	40	100	x	x		Air
CM143 80L15	80	15	x	x	x	Air
CM143 40L70	40	70	x	x	x	Air
CM154 20W250	20	250	x	x		Water
CM164 50W350	50	350	x	x		Water
CM186P 50W800	50	800		x		Water

FE400/FE100 POWER FRONTENDS.

SAFE AND RELIABLE AC/DC POWER SUPPLIES.

The FE400/FE100 series delivers DC output power within a range up to 10 kW. An integrated auxiliary supply and redundant enable lines make them well-suited to feed DC/DC supplies like the AMTRON CM100 power supply modules series.

- ▶ 19-inch table top (FE400) or compact housing variants (FE100)
- ▶ integrated auxiliary supply 24V
- ▶ max. number of parallel outputs: 6
- ▶ air or water cooling (depending on output power)

Type	Voltage [V]	Max. current [A]	Housing	Cooling
FE131 48L10	48	10	Compact	Air
FE471 48L15	48	15	19"/2HU	Air
FE471 48L62	48	62	19"/2HU	Air
FE471 96L31	96	31	19"/2HU	Air
FE470 48W105	48	105	19"/2HU	Water
FE470 96W105	96	105	19"/4HU	Water

CS400 LASER DIODE CONTROLLERS.

POWER SUPPLIES WITH PROCESS CONTROL.

CS400 series devices supply constant current at up to 300A and pulsed current at up to 2000A with a pulse width as of 10 μ s. With innovative functions such as broken fiber detection and power regulation, these devices monitor and protect the complete processing procedure of CW and pulse lasers.

- ▶ Current, power & temperature regulation for diode lasers
- ▶ Current rise time 5 μs – 100 μs
- ▶ 19" or compact housing
- ▶ Ultra low-noise output power
- ▶ Water or air cooling
- ▶ TEC control with polarity reversal
- ▶ For bars and single emitter lasers

Type	Pulse/ CW	Power unit	PLC and other interfaces	Control panel	TEC	Power values
CS401/CS441 ¹⁾	x/x	1	–	–	–	110V/14A
CS402/CS442 ¹⁾	x/x	1	x	–	–	28V/140A
CS404P	x/–	1	x	–	–	80V/500A
CB411P	x/–	1	–	x	–	15V/2000A
CU402S	x/x	–	x	–	–	Control Unit
CS411/CS451 ¹⁾	x/x	1	–	x	–	10V/120A
CS412P/CS452P ¹⁾	x/–	1	x	x	–	110V/300A
CU412/CU412S ³⁾	x/x	–	x	x	–	Control Unit
CS405	x/x	2	–	–	–	2 x 80V/14A
PU405	x/x	2	–	–	–	2 x 80V/100A
CS403	x/x	1	x	–	x	13V/80A
CS413	x/x	1	x	x	x	80V/14A

¹⁾ Model in compact housing ²⁾ Supply via FE471 front end ³⁾ Output for controlling external laser power supplies or fiber lasers

LS400 LASER DIODE SYSTEMS.

PLUG'N'PLAY SOLUTION FOR LASER PROCESSING.

The LS series devices integrate the laser diodes from renowned manufacturers in user-friendly systems for the direct machining of materials or as intelligent pumps for solid-state lasers. TEC air cooling (TEC – Thermo Electric Cooling) enables the laser temperature to be regulated precisely and is maintenance free.

- ▶ Direct machining of plastics and metals
- ▶ Intelligent pumps for solid-state lasers (e.g. for inscription)
- ▶ Water cooling, TEC control with polarity reversal
- ▶ Wavelengths from 450nm to 1940nm
- ▶ Power up to 300 W, pulse duration 10 μ s to cw

Type	Power [W]	CW	Pulse	PLC and other interfaces	Control panel	Housing	Cooling
LS403	40	x	x	x		19"/3HU	Air
LS443	60	x	x	x		Compact	Air
LS444	80	x	x			Compact	Air
LS453	90	x	x	x	x	Compact	Air
LS413	120	x	x	x	x	19"/3HU	Air
LS412	300	x	x	x	x	19"/4HU	Water

SE200 / SE400 HIGH SPEED PYROMETERS.

FAST LASER PROCESS CONTROL WITH DIGITAL PRECISION.

The AMTRON Pyrometer series SE200 and SE400 offer highest measurement speed and noise immunity even at low process temperatures. Their PY100 and PY200 series sensors contain the complete analog-to-digital signal conversion and an integrated flash memory for parameters.

Compact control units (series CU100-CU500) are available with many different interface options. Highlights are the simultaneous processing of up to 15 sensors and the interfacing to galvanometer scanheads for exact position readout.

- ▶ Suitable for plastic welding, soldering, hardening, selective laser melting
- ▶ Closed loop control or logging of process temperature or radiation
- ▶ Detection rate up to 100kHz (depending on detection wavelength)
- ▶ Direct digital link to CS400 series (SE200)
- ▶ Spatially resolved data acquisition in combination with either multiple pyrometers or galvanometer scanhead
- ▶ Robust signal transmission without the need of fiber cables (up to 20m)
- ▶ For stationary and hand-guided laser heads









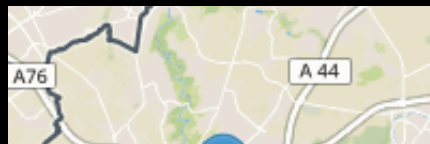


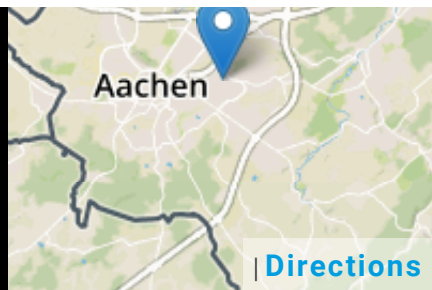


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