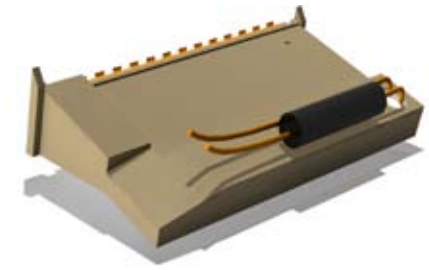
Power switch



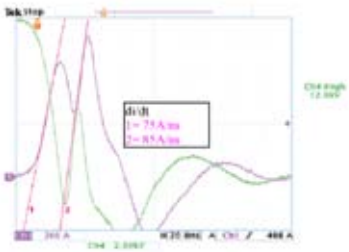
PSM – 1400

Solid-state power switch

- **Direct switching**
- **Peak current up to 3.2 kA**
- **Voltage up to 16 kV**
- **High di/dt up to 100 A/ns**
- **Compact design**
- **Air cooling**
- **Long lifetime**

The direct solid-state power switches are based on the patented solid-state power switches already thousandfold in use in the LTB nitrogen lasers.

Two versions are available for different applications. The small one, PSM 1400, matches the switch used in nitrogen lasers.

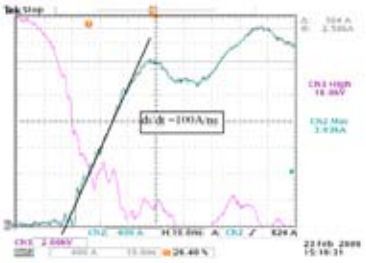


Switching edge 20 ns/div

PSM – 3200

Solid-state power switch

The more powerful PSM 3200 is designed for excimer lasers of the 5 and 10 Watt class and presents the superior alternative to thyratrons and pulser circuits switches.



Switching edge 10 ns/div

Applications

- Direct switching of the discharge in excimer, nitrogen and CO_2 lasers
- Current commutation of the discharge in gas lasers
- Switch for ion optics (max. 20 kV, I_{peak} 100 A, di/dt 1–5 A/ns, 1 kHz)

The modular design allows the adaptation to diverse operational conditions. Voltage up to 25 kV, peak current up to 5 kA, rate of rise (di/dt) up to 200 A/ns at repetition rates of up to 5 kHz are feasible.

Specifications PSM

			PSM 1400	PSM 3200
Allgemein	Voltage	kV	12	16
	I_{peak}	kA	1.4	3.2
	di/dt_{max}	A/ns	80	100
	Load capacity	nF	1–3	8–12
	Max. Rep. rate	Hz	500	500
	Energy	Ws/pulse	0.15	1
	Triggering		optical	optical
	Jitter	ns	+/- 1	+/- 2
	Delay	ns	< 500 ns	< 500 ns
	Cooling		Air cooling	Air cooling
	Operating temperature	°C	15–42	15–42
	Dimensions without cooling unit	mm^3	145 x 80 x 45	213 x 178 x 40
	Weight without cooling unit	g	150	450

Subject to technical changes.

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