

TELECOM DC-Power Supply

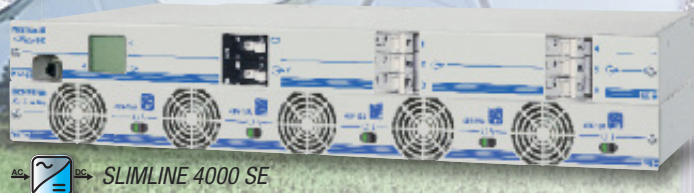
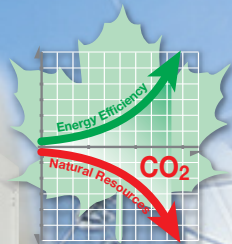
SLIMLINE SE Super Efficiency

BENNING
World Class Power Solutions

Excellent Technology, Efficiency and Quality

Advantages:

- Extremely high power density reduces space demand
- High efficiency > 96% even under partial load operation
- Wide range input voltage (85 V – 275 V) allows worldwide operation.
- Constant Power output with temperature compensation
- Real hot-plug connectivity
- Automatic set-up of additional rectifiers
- Simple installation, operation and expansion.
- Tolerant of harsh environmental conditions, operational from -33°C up to +75°C ambient temperature
- Remote control via TCP/IP or modem



SLIMLINE SE (Super Efficiency)

As one of the leading global power supply companies, BENNING offers, through the use of the new range of SLIMLINE SE (Super Efficiency) rectifiers, power systems with high power density, high efficiency and exceptional reliability.

Extremely high power density reduces the space demands on site of these hot-plug-systems. Installation, operation and future expansion is simple to handle. Together with the appropriate cabinets and

remote monitoring systems, modern, secure and high efficiency DC-power systems are available.

SLIMLINE SE rectifier systems comprise of multiple 1U sub-racks (the required quantity being related to the number of plug-in rectifier modules) and BENNING wall or floor mounted system cabinets with a monitoring and control unit, type MCU 2500. The MCU 2500 provides local monitoring via a front panel mounted keypad and LCD.

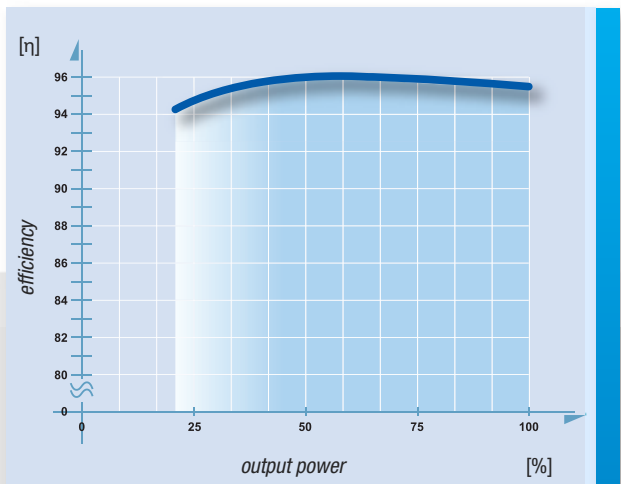
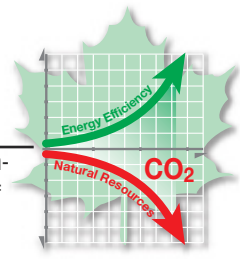


Fig. 1: Efficiency vs. output power SLIMLINE 2000 SE

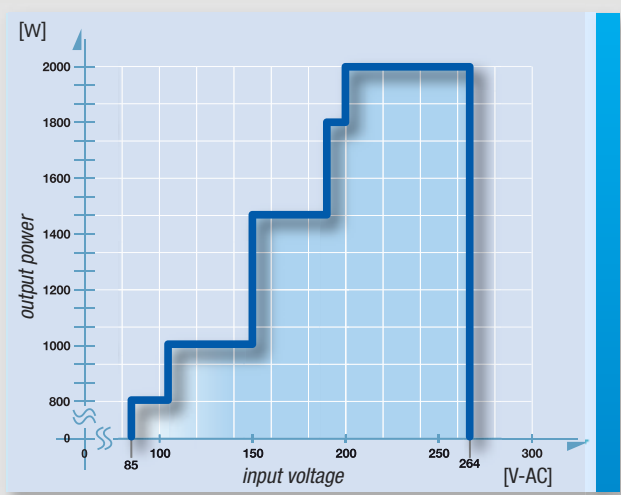


Fig. 2: Output power vs. input voltage SLIMLINE 2000 SE

Reduced operating costs due to high efficiency, even with partial load operation.

The cutting edge design of the SLIMLINE super efficient systems makes an important contribution in the fight against climate change. The peak efficiency of the SLIMLINE SE module is 96.5% and even in partial load operation is only marginally reduced. This results in lower power losses (see picture 1). The high energy efficiency of the SLIMLINE SE series reduces the TCO (Total Cost of Ownership) by minimising energy consumption and operational expenses (e.g. air conditioning). This provides a much faster Return-On-Investment.

Rectifier Module SLIMLINE 800 SE

		SMS 2400 SE			SMS 4000 SE	
Output power	[W]	800	1600	2400	3200	4000
Module quantity	-	1	2	3	4	5
Input voltage (AC)	[V]	1 x 85 – 264 (1~) or 1 x 147... 457 (3~)			2 x 85 – 264 (1~) or 2 x 147... 457 (3~)	
Input current (at 230 V)	[A]	3.7	7.4	11.1	14.8	18.5
Power factor	cos φ	0.99				
Weight	[kg]	5.1	6.1	7.1	12.2	13.2
Output current (at 48V)	[A]	16	32	48	64	80
Characteristic	-	IPU (Power constant)				
Efficiency	[%]	> 96				

Output voltage

Boost voltage	[V/C]	2.4
Float voltage	[V/C]	2.23

Voltage stability

Static	[%]	± 1
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Dimensions-Rectifier

Height x Width x Depth	[mm]	44.3 x 88 x 250
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Dimensions - 19" rack

Height x Width x Depth	[mm]	44.5 x 483 x 332	89 x 483 x 332
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MCU 2500

The microprocessor based MCU 2500 monitoring system collects and monitors all necessary power system information. Service software is available for local and remote interrogation.

Connectivity can be via a PC, modem or TCP/IP adapter. Remote operation reduces the system maintenance costs.

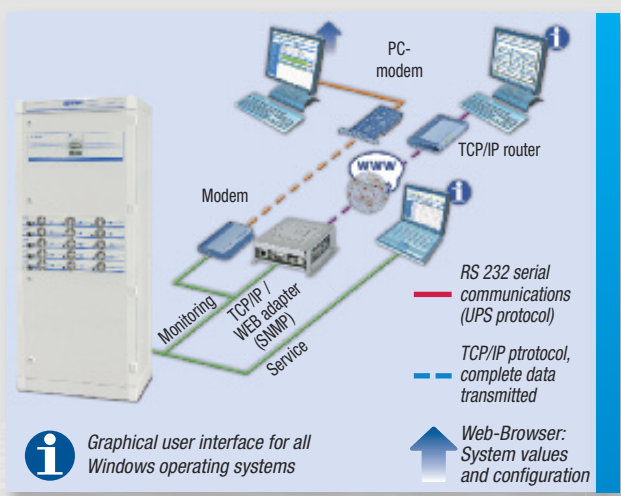


Fig. 3: MCU 2500 monitoring concept

Rectifier Module SLIMLINE 2000 SE

		SMS 6000 SE			SMS 18000 SE		
Output power	[W]	2000	4000	6000	8000	12000	18000
Module quantity	-	1	2	3	4	6	9
Input voltage (AC)	[V]	1 x 85 – 264 (1~) or 1 x 147... 457 (3~)			3 x 85 – 264 (1~) or 3 x 147... 457 (3~)		
Input current (at 230 V)	[A]	9.1	18.2	27.3	36.4	54.6	81.9
Power factor	cos φ	0.99					
Weight	[kg]	9.5	11.2	12.9	30.2	33.6	38.7
Output current (at 48V)	[A]	40	80	120	160	240	360
Characteristic	-	IPU (Power constant)					
Efficiency	[%]	> 96					

Output voltage

Boost voltage	[V/C]	2.4
Float voltage	[V/C]	2.23

Voltage stability

Static	[%]	± 1
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Dimensions- Rectifier

Height x Width x Depth	[mm]	44.3 x 162 x 275
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Dimensions - 19" rack

Height x Width x Depth	[mm]	89 x 483 x 340	267 x 483 x 340
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BENNING

BENNING Elektrotechnik und Elektronik GmbH & Co.KG
 Münsterstr. 135 - 137 · 46397 BOCHOLT
 Tel.: +49 (0) 28 71 / 93-0 · Fax: +49 (0) 28 71 / 9 32 97
 E-Mail: info@benning.de · www.benning.de

