

	SM70-CP-450	SM210-CP-150	SM500-CP-90	SM1500-CP-30
Series operation max. total voltage	Not possible	Not possible	750V* 1000V**	Not possible
Master / Slave operation			maximum 6 units ³ *) units delivered before Q4 / 2018 **) units delivered Q4 / 2018 or newer Contact factory for upgrading to enable 1000V series operation for older units.	
Parallel operation Master / Slave operation	maximum 6 units contact factory for more units	t.b.d.	maximum 60 units	maximum 60 units
Remote sensing max. voltage drop per load lead	default 1 V, can be set to 10 V			
Limits Voltage adjust range Current adjust range Power adjust range Voltage OverLoad level Voltage Self-Protection level	0 - 101 % 0 - 101 % 0 - 101 % 102.5 % - unit will continue to operate (OL-indication in display) 105 % - output is automatically disabled (PROT-indication in display)			
Potentiometers front panel control with knobs resolution	15 bits			
Meters scale voltage scale current scale power accuracy read output	4 digit 0.00 - 70.00 V - 450.0 - 450.0 A - 15000 - 15000 W 0.2% + 2 digit	4 digit 0.0 - 210.0 V - 150.0 - 150.0 A - 15000 - 15000 W 0.2% + 2 digit	4 digit 0.0 - 500.0 V - 90.0 - 90.00 A - 15000 - 15000 W 0.2% + 2 digit	4 digit 0 - 1500 V - 30.00 - 30.00 A - 15000 - 15000 W 0.2% + 2 digit

Mounting	stacking of units allowed, air flow is from left to right			
AC Terminals (CON A)	screw terminals for wire 4 mm ² , 3 phase + earth (no neutral)			
DC Terminals (CON B1 & B2)	M12 bolts	M8 bolts		
Programming connectors (LAN)	standard with RJ45-connector for Ethernet at rear panel			
Interlock (CON F)	input for contact at rear panel			
Cooling audio noise level air flow	low noise blower, fan speed adapts to temperature of internal system ca. 50 dBA at full load, 25 °C ambient temperature, 1 m distance ca. 65 dBA at full load, 50 °C ambient temperature, 1 m distance From left to right			
Enclosure degree of protection	IP20			
Dimensions front panel: h x w behind front panel: h x w x d	132 x 483 mm (19", 3 U) 128 x 448 x 591 mm (excluding feet) no extra depth is required with optional interfaces assembled			
Weight	27 kg			

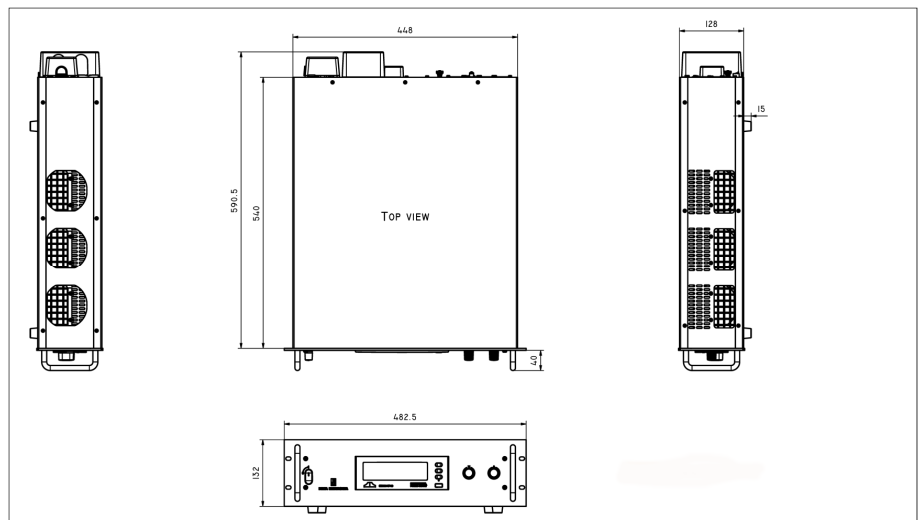
CV = Constant Voltage
CC = Constant Current
CP = Constant Power

Specifications measured at
 $t_{amb} = 25 \pm 5 \text{ }^\circ\text{C}$ and $V_{in} = 400 \text{ VAC}$,
50 Hz unless otherwise noted.

The information in this document is
subject to change without notice.

Notes:

1. Measured at full load.
2. Signal latency depends on the interface used and data traffic.
3. See safety Instructions in the operating manual.



Typical Applications

- Solar inverter testing, PV-Simulation
- Car testing systems
- ATE in industrial production lines
- Plasma chambers
- Automotive battery simulations
- Controlled battery (dis)charging
- Lasers
- Sustainable energy
- Driving PWM-Controlled DC motors
- Accurate current sources
- Aerospace and military equipment

Standard Features



Bi-Directional Two-Quadrant Output

Full power Bi-Directional two quadrant operation maintains the DC output voltage constant whether the output power is positive or negative. Ideal for PWM-speed controlled DC-Motors and ATE systems.



Digital CV-, CC- and CP-Settings

Reliable, long-life digital encoders are implemented at the front panel. Includes total front panel lock (also for CV- / CC-knobs) and a coarse or fine pitch adjustment depending on the turning speed.



Sequencer

Arbitrary Waveform generator or standalone automation.



High Voltage Isolation

A high DC output isolation allows floating operation up to 1000 V for SM70-CP-450, SM210-CP-150 and SM500-CP-90, and up to 1500 V for SM1500-CP-30.



Ethernet Interface

Ethernet interface for programming and monitoring



USB-Input

Not yet available: Front and rear panel USB-Input for exchange of settings and waveforms (Host / Type-A), or for controlling the unit (Device / Type-B).

Options



Software control and Interfaces

Field installable interfaces:

- Master / Slave controller
- Isolated Contacts
- Serial controller with multiple protocols: RS 232, RS 485, RS 422 and USB (Device)
- Digital I/O
- Isolated Analog Programming

Order Codes :

- INT MOD M/S-2
- INT MOD CON
- INT MOD SER
- INT MOD DIG
- INT MOD ANA



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