

Power Supply with Automatic Four Quadrant (4Q) Operation Switch

The 120A models may be specified with 16 bit (standard) or 20 bit (high resolution) control and resolution. The 16 bit units can be shunt-based or transducer-based whereas the 20 bit units are transducer-based only, for greater stability during normal operation. All units may be operated manually via the front panel or under computer control via USB, or a RS232 port. Quench detection is built into the power supply firmware for optimum responsiveness and security.



The SMS series supplies all have the following design features:

1. Easy to use front panel push button operation and full 80 character Alpha-numeric status display
2. Standard or high current resolution configurations:
 - » 16-bit configuration
 - » 20-bit configuration
3. Full computer control or data logging with easy to use Lab VIEW compatible software set.
4. Precision double stabilised output with fail-safe energy absorber and precision output monitoring for stable operation
 - » 25ppm/K output stability with 16-bit resolution configuration
 - » 3ppm/K output stability with 20-bit resolution configuration
5. Accurate ramp with dual set point and pause, with automatic voltage limit for fast ramping
6. Auxiliary analogue and digital interfaces for peripherals
7. 4Q: $\pm 120A$ (Automatic current reverse through zero with intelligent reversing facility)

Parameter	16-Bit, SMS120C-H-4Q-T	20-Bit, SMS120C-H-4Q-20B
Output Current		
Set range	$\pm 120 A$	$\pm 120 A$
Set Resolution	1.8 mA	0.12 mA
Typical Output stability	20 - 25 ppm / K	3 - 5 ppm / K
Output Voltage:-	0 - 10 V	0 - 10 V
Switch Heater:-		
Setting Range	0 to 8.0 V	0 to 8.0 V
Setting Resolution	0.1 V	0.1 V
Maximum Current	100 mA	100 mA

We also offer other standard power supplies of 5, 10 and 15 volts.

• **SMS Power Supplies with 16-bit Resolution and Shunt:**

Current / amps	5 volts	10 volts
10	SMS10C-4Q-S	N/A
15	SMS15C-4Q-S	N/A
60	SMS60C-4Q-S	N/A
80	SMS80C-4Q-S	SMS80C-H-4Q-S
120	SMS120C-4Q-S	N/A

Further Options Available:

- » Moisture Protection
- » Low Current Bipolar Sources
- » 4-8 Shim Coil Power Supplies

• **SMS Power Supplies with 16-bit Resolution and Transducer:**

Current / amps	5 volts	10 volts	15 volts
80	SMS80C-4Q-T	SMS80C-H-4Q-T	
120	SMS120C-4Q-T	SMS120C-H-4Q-T	
150	SMS150C-4Q-T	SMS150C-H-4Q-T	
160	SMS160C-4Q-T	SMS160C-H-4Q-T	SMS160C-HV-4Q-T
240	SMS240C-4Q-T	SMS240C-H-4Q-T	SMS240C-HV-4Q-T
300	SMS300C-4Q-T	SMS300C-H-4Q-T	SMS300C-HV-4Q-T
450	SMS450C-4Q-T	SMS450C-H-4Q-T	SMS450C-HV-4Q-T
480	SMS480C-4Q-T	SMS480C-H-4Q-T	SMS480C-HV-4Q-T
600	SMS600C-4Q-T	SMS600C-H-4Q-T	SMS600C-HV-4Q-T
1000	SMS1000C-4Q-T	SMS1000C-H-4Q-T	

• **SMS Power Supplies with 20-bit Resolution and Transducer:**

Current / amps	5 volts	10 volts	15 volts
80	SMS80C-4Q-20B	SMS80C-H-4Q-20B	SMS80C-HV-4Q-20B
120	SMS120C-4Q-20B	SMS120C-H-4Q-20B	SMS120C-HV-4Q-20B
150	SMS150C-4Q-20B	SMS150C-H-4Q-20B	SMS150C-HV-4Q-20B
160	SMS160C-4Q-20B	SMS160C-H-4Q-20B	SMS160C-HV-4Q-20B
240	SMS240C-4Q-20B	SMS240C-H-4Q-20B	SMS240C-HV-4Q-20B
300	SMS300C-4Q-20B	SMS300C-H-4Q-20B	SMS300C-HV-4Q-20B
450	SMS450C-4Q-20B	SMS450C-H-4Q-20B	SMS450C-HV-4Q-20B
480	SMS480C-4Q-20B	SMS480C-H-4Q-20B	SMS480C-HV-4Q-20B
600	SMS600C-4Q-20B	SMS600C-H-4Q-20B	SMS600C-HV-4Q-20B
1000	SMS1000C-4Q-20B		