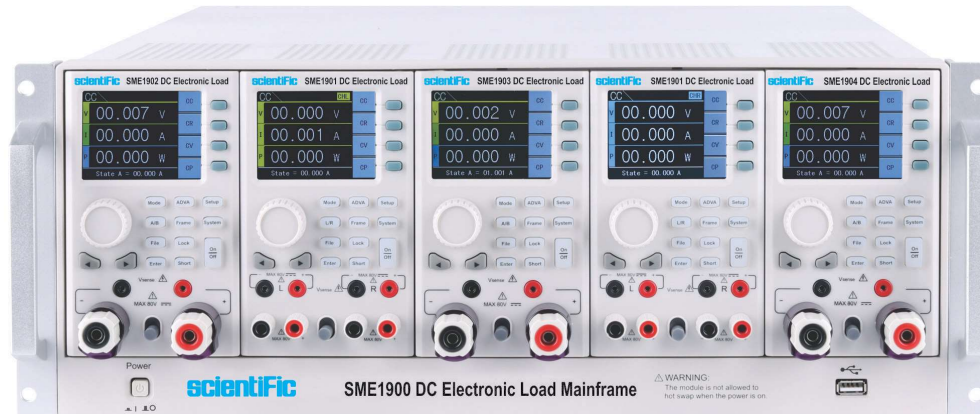


# Programmable DC Electronic Load SME1900 Series



## Features

- Unit maximum power 2000 W, Maximum current 400 A
- Module maximum power 400 W, maximum current 80 A and maximum voltage 80 V
- High Resolution : 0.1 mV / 10  $\mu$ A
- Up to 50 kHz dynamic frequency
- Up to 500 kHz sampling speed
- Support over current protection (OCP), Over voltage protection (OVP), Over power protection (OPP), Over temperature protection (OTP), Reverse polarity protection (REV), Low voltage protection (LVP)
- 12 advanced test functions
- Modular design, support each module to operate independently
- 2 module / 5 module frame
- One single machine can support up to five modules in parallel and support up to ten channels
- Modular 40 files storage
- Connect via CAN interface, support up to four complete machines online.
- 24 bit, 2.8 inch color LCD display
- Smart fan system
- Support power on hold function
- Support timing function
- Electrical isolation, external input and output

Technical Specifications		SME1901	SME1902	SME1903	SME1904
Input	Voltage	0 ~ 80 V			
	Current	0 ~ 20 A	0 ~ 40 A	0 ~ 60 A	0 ~ 80 A
	Power	100 W X 2	200 W x 1	300 W x 1	400 W x 1
	Min. Operating Volt.	0.5 V @ 0.2 A 0.5 V @ 2 A 0.5 V @ 20 A	0.5 V @ 0.4 A 0.5 V @ 4 A 0.5 V @ 40 A	0.5 V @ 0.6 A 0.5 V @ 6 A 0.5 V @ 60 A	0.4 V @ 0.8 A 0.4 V @ 8 A 0.4 V @ 80 A
Operating Mode		Constant Current (CC) Mode, Constant Resistance (CR), Mode, Constant Voltage (CV) Mode and Constant Power (CP) Mode			
Constant Voltage	Range / Resolution	6 V/0.1 mV, 16 V/1 mV, 80 V/1 mV			
	Accuracy	0.05% + 0.1% F.S.			
Constant Current (CC)	Range	0 ~ 0.2 A	0 ~ 0.4 A	0 ~ 0.6 A	0 ~ 0.8 A
	Resolution	0.01 mA			
	Range	0 ~ 2 A	0 ~ 4 A	0 ~ 6 A	0 ~ 8 A
	Resolution	0.1 mA			
	Range	0 ~ 20 A	0 ~ 40 A	0 ~ 60 A	0 ~ 80 A
	Resolution	1 mA			
Accuracy	0.1% + 0.1% FS				

Technical Specifications		SME1901	SME1902	SME1903	SME1904
Constant Resistance (CR)	Range	0.04 ~ 80 Ω (100 W / 6 V)	0.02 ~ 40 Ω (200 W / 6 V)	0.015 ~ 30 Ω (300 W / 6 V)	0.01 ~ 20 Ω (400 W / 6 V)
		1.44 ~ 2.9 kΩ (100 W / 16 V)	0.8 ~ 1.5 kΩ (200 W / 16 V)	0.3 ~ 600 Ω (300 W / 16 V)	0.36 ~ 720 Ω (400 W / 16 V)
		5.76 ~ 12 kΩ (100 W / 80 V)	3 ~ 6 kΩ (200 W / 80 V)	1.5 ~ 3 kΩ (300 W / 80 V)	1.45 ~ 2.9 kΩ (400 W / 80 V)
	Resolution	0.1 Ω			
Accuracy	1%				
Constant Power (CP)	Range	0 ~ 2 W	0 ~ 4 W	0 ~ 6 W	0 ~ 8 W
	Resolution	1 mW	2 mW	3 mW	4 mW
	Range	0 ~ 10 W	0 ~ 20 W	0 ~ 30 W	0 ~ 40 W
	Resolution	10 mW	20 mW	30 mW	40 mW
	Range	0 ~ 100 W	0 ~ 200 W	0 ~ 300 W	0 ~ 400 W
	Resolution	100 mW	200 mW	300 mW	400 mW
	Accuracy	1%			
Advance Mode	Dynamic Test, Dynamic Frequency Scan, CR-LED Test, Battery test, Time Test, MPPT test, OCPT Test, OVPT Test, OPPT Test, sine wave test, list test, automatic test				
<b>Dynamic Mode - Constant Current Mode</b>					
Minimum Working Voltage		1.5 V			
Frequency	Range	100 Hz ~ 50 kHz / 0.01 Hz ~ 1 kHz			
	Accuracy	1 μs / 1 ms + 100 ppm			
	Duty Cycle	1 ~ 99% (Minimum rise time controlled)			
Slope	Range	0.04 A/ms ~ 0.02 A/μs	0.08 A/ms ~ 0.04 A/μs	0.12 A/ms ~ 0.06 A/μs	0.16 A/ms ~ 0.08 A/μs
	Resolution	0.01 mA/μs			
	Range	0.4 A/ms ~ 0.2 A/μs	0.8 A/ms ~ 0.4 A/μs	1.2 A/ms ~ 0.6 A/μs	1.6 A/ms ~ 0.8 A/μs
	Resolution	0.1 mA/μs			
	Range	4 A / ms ~ 2 A/μs	8 A / ms ~ 4 A/μs	12 A / ms ~ 6 A/μs	16 A / ms ~ 8 A/μs
	Resolution	1 mA/μs			
	Accuracy	10 % ± 20 μs			
Minimum Rise Time	10 μs				
<b>Measurement (Read Back)</b>					
Voltage	Range/Resolution	0 ~ 6 V / 0.2 mV			
	Accuracy	0.025% + 0.01% FS			
	Range/Resolution	0 ~ 16 V / 0.3 mV			
	Accuracy	0.025% + 0.01% FS			
	Range/Resolution	0 ~ 80 V / 1.4 mV			
	Accuracy	0.01% + 0.025% FS			
Current	Range	0 ~ 0.2 A	0 ~ 0.4 A	0 ~ 0.6 A	0 ~ 0.8 A
	Resolution	0.004 mA	0.008 mA	0.012 mA	0.016 mA
	Range	0 ~ 2 A	0 ~ 4 A	0 ~ 6 A	0 ~ 8 A
	Resolution	0.04 mA	0.08 mA	0.12 mA	0.16 mA
	Range	0 ~ 20 A	0 ~ 40 A	0 ~ 60 A	0 ~ 80 A
	Resolution	0.4 mA	0.8 mA	1.2 mA	1.6 mA
	Accuracy	0.05% + 0.05% FS			
Power	Range	0 ~ 16 W	0 ~ 30 W	0 ~ 30 W	0 ~ 60 W
		0 ~ 30 W	0 ~ 60 W	0 ~ 60 W	0 ~ 60 W
		0 ~ 100 W	0 ~ 200 W	0 ~ 300 W	0 ~ 400 W
	Accuracy	0.1% + 0.1% + F.S.			
Protection Function	Over voltage protection (OVP) Over current protection (OCP) Over power protection (OPP) Over temperature (OTP)				
<b>Short Circuit Function</b>					
Constant Current (CC)		Set to 100% of rated current			
Constant Voltage (CV)		0 V			
Constant Resistance (CR)		60 kΩ (6V), 150 kΩ (16V), 700 kΩ (80 V)			

Technical Specifications		SME1901	SME1902	SME1903	SME1904
<b>General Specifications</b>					
Interface		RS232, USB Host, USB Device, LAN, GPIB, SYSTEM I/O, CAN			
Storage		40 groups ( 50 groups of status memory)			
Input Voltage		175 ~ 230 VAC (47 ~ 63 Hz)			
Power Consumption		Less than 300 VA			
Operating Temperature		0°C ~ 40°C			
Storage Temperature		- 20°C ~ 70°C			
Operating Humidity		10% ~ 90% (Non-condensing)			
Altitude		< 2000 m			
Pollution Degree		2			
Safety Level		II			
Dimensions	MF1900-5 (5 Modules Frame)	W : 480 x H : 177 x D : 590 mm			
	MF1900-2 (2 Modules Frame)	W : 260 x H : 177 x D : 590 mm			
Weight	MF1900-5 (5 Modules Frame)	15 Kg			
	MF1900-2 (2 Modules Frame)	11 Kg			
Standard Accessories		RS232, USB Host, USB Device, GPIB, LAN, CAN, System I/O			

Subject to change

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