Asterion
Performance. Reliance. Brilliance.

Sorensen™ Asterion® DC ASM Series High Performance, 3-Channel Programmable DC Power Supply with Touch Screen Display

(1700 W per Channel, 5100 W Total, 40-600 V, 2.8-42 A)

The Sorensen™ Asterion® DC ASM Series is the newest addition to the Asterion platform of power testing solutions. The new ASM Series features up to three independent, isolated, fixed-range outputs in a 1U high chassis.

The Asterion DC ASM Series, just like the Asterion DC Series, offers complete remote programming and control via Virtual Panels™ GUI, and intuitive front panel touch screen operation. Additionally, the instrument can be controlled via standard LXI Ethernet, USB, and RS232 control interfaces, as well as through the optional GPIB control interface or isolated analog programming.

Advanced Intelligent Control

The Asterion DC Series is operated from the intuitive, easy-to-use front panel touch screen display. Quickly access output programming parameters, measurements, configuration and system settings from the touch screen interface. Functions and parameters can be directly selected from the touch screen or by using the encoder selector button. The control resolution is adjusted by a dynamic rate change algorithm that combines the benefits of precise control over small parameter changes with quick sweeps through the entire range.

Advantages:

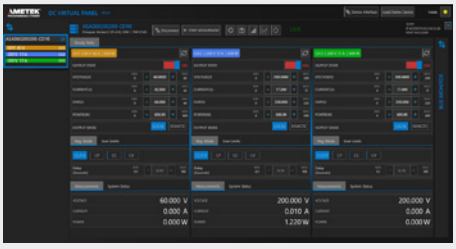
- Three 1700 W channels in a 1U chassis up to 5100 W total
- Mix or match any four of nine available output channel options
- 3-Phase AC Input options for system phase balancing
- Intuitive touch panel control
- Multi-channel programmable sequencing, ramps and delays
- Full remote control via Virtual Panels™

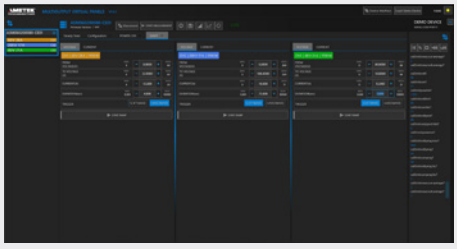
Applications

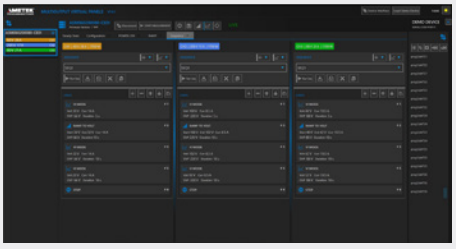
The Asterion DC ASM Series is designed for testing today's complex electronics, including telecommunications and commercial electronics requiring low profile, light weight power supplies with high power density. Other applications include:

- Military and aerospace electronics test
- Test & Measurement ATE applications
- Semiconductor testing and burn-in
- Commercial manufacturing and process control
- Research and development
- Automotive component and battery testing

Asterion DC Virtual Panels GUI



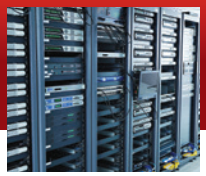




AMETEK®
PROGRAMMABLE POWER
9250 Brown Deer Road, San Diego, CA 92121 USA • 858-458-0223
www.programmablepower.com

Asterion
Performance. Reliance. Brilliance.


Avionics Test


Power Simulation


ATE Applications

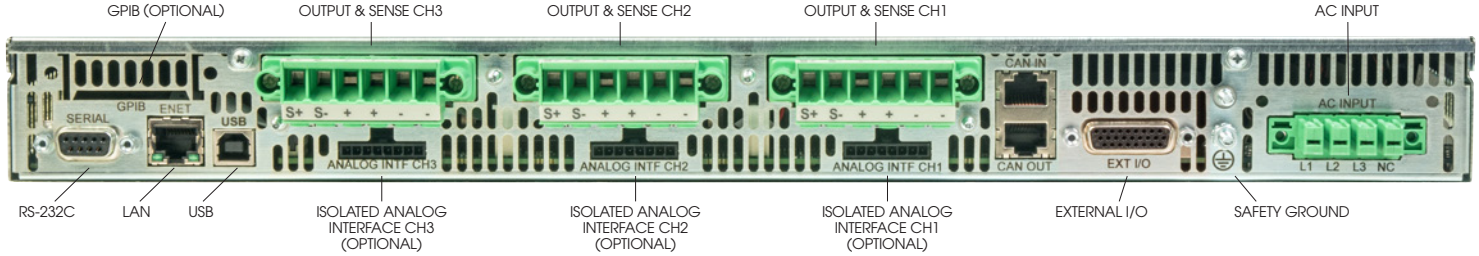

Manufacturing

Sorensen Asterion DC ASM Series: Product Specifications & Details

Output Specifications – Choose up to three channels of any configuration[1]					
Channel Models	**Voltage (V)**	**Current (A)**	**Power (W)**	**Voltage Ripple & Noise RMS, mV [2]**	**Voltage Ripple & Noise PK-PK, mV [3]**
040	40	42	1680	12	75
060	60	28	1680	12	75
080	80	22	1700	15	90
100	100	17	1700	15	90
150	150	12	1700	20	120
200	200	9	1700	40	150
300	300	6	1700	60	200
400	400	4.3	1700	80	300
600	600	2.8	1700	80	350
000	Channel 3 blank, only Channel 1 and 2 populated.				

1) Channel configuration installed at factory, not field replaceable. 2) RMS ripple/noise, over 20 Hz to 300 kHz bandwidth, is measured directly across the output terminals with the supply operating into 90% of rated resistive load in all channels and nominal AC input line voltage. 3) PK-PK ripple/noise, over 20 Hz to 20 MHz bandwidth with the supply operating into 90% of rated resistive load in all channels and nominal AC input line voltage.

Back View



Output Specifications (Continued)		
Constant Voltage Mode		
Line Regulation	0.01% of rated voltage	
Load Regulation	0.02% of rated voltage	
Constant Current Mode		
Line Regulation	0.05% of rated current	
Load Regulation	0.15% of rated current	
Constant Power Mode		
Line Regulation	0.1% of rated power	
Load Regulation	0.1% of rated power	
Transient Response Time	40V to 100V Output: 1 ms; 150V to 400V Output: 2 ms. Typical time to recover within 0.5% of rated output voltage for load step of 10-90% of rated output current. Transient response is measured with load change on one channel and other two channels are loaded to 90% of rated power.	
Voltage Programming Accuracy	+/- 0.1% of rated output voltage	
Current Programming Accuracy	+/- 0.2% of rated output current	
AC Input Specifications		
Input Voltage Operating Range	Opt. C: 1-phase line-neutral: Low-input range: 90-145 VAC, high-input range: 180 VAC-264 VAC or 3-phase line-line: 180 VAC-264 VAC Opt. D: 3-phase line-line 342-456 VAC Opt. E: 3-phase line-line 396-528 VAC	
Input Frequency Range	47-63 Hz	
Power Factor	98% (single phase 220VAC), 95% (three phase input)	
Efficiency (Typical)	80%, active PFC	
Isolation Voltage	1500 VAC Input to Ground, 3000 VAC Input to Hazardous Secondary, 3000 VAC Input to Isolated SELV barriers	Output terminal Positive (+Ve) and Negative (-Ve): ±600 V(PK), maximum, with respect to chassis ground. Isolated Analog Interface Signals and External User Control I/O interface to Output Negative terminal: ±600 V(PK), maximum; optional Isolated Analog programming and external user interface signals are galvanically isolated from negative output terminal; operation of Isolated Analog Interface Signals should be at SELV safety voltage conditions to chassis ground.
Environmental		
Operating Temperature	0°C to 50°C (32°F to 122°F)	
Storage Temperature	-30°C to +85°C	
Relative Humidity	20-90% RH, non-condensing	

*See manual for output power ratings vs input voltage.

AMETEK®
PROGRAMMABLE POWER
9250 Brown Deer Road, San Diego, CA 92121 USA • 858-458-0223
www.programmablepower.com