



Sorensen[™] Asterion[®] DC Fixed Range & Autoranging Programmable Power Supply with Touch Screen Display (1.7/3.4/5.0 kW, 40 & 60 V, 28 -125 A)

The Sorensen[™] Asterion[®] DC Series is the newest addition to the Asterion platform of power testing solutions. The new DC series features two types of product lines: fixed range and autoranging. The fixed range supplies are economical, traditional rectangular wave output power supplies with all the enhanced operation advantages standard with the Asterion platform. The autoranging supplies feature expanded current and voltage range at the full output power level, enabling the ability to satisfy a wider testing need without requiring the purchase of additional models. Initial voltages offered are 40 V and 60 V, with current up to 125 A.

The Asterion DC Series, just like the Asterion AC Series, has several operating advantages such as easy auto-paralleling, complete remote programming and control via Virtual Panels[™] GUI, and intuitive front panel touch screen operation.

Asterion DC Virtual Panels GUI



Advantages:

- < High power density in a 1U chassis up to 5kW
- < Intuitive touch panel control
- < Multi-language display for global operation
- < Auto paralleling for higher power
- < Full remote control via Virtual Panels™

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.

Additionally, the instrument can be controlled via standard LXI Ethernet and RS232 control interfaces, as well as through the optional GPIB control interface. The unit can be controlled remotely via the Virtual Panels GUI.



Sorensen Asterion DC Series: Preliminary Product Specifications & Details

Model	Asterion DC 1.7 W	Asterion DC 3.4 kW	Asterion DC 5 kW				
Output Specifications							
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	0.01% of rated power						
Load Regulation	0.01% of rated power						
Ripple RMS (20 Hz-300 kHz)	12 mV						
Transient Response Time	75 mV						
Voltage Programming Accuracy	+/- 0.1% of rated output voltage						
Current programming accuracy	+/- 0.2% of rated output voltage	+/- 0.2% of rated output voltage					
AC Input Specifications							
Input Voltage Operating Range	1ph, 90-145VAC* 1ph/3ph 180-264VAC	1ph, 90-145VAC* 1ph/3ph 180-264VAC	3ph 180-264VAC				
Input Frequency Range	47-63 Hz, 360-440 Hz	47-63 Hz, 360-440 Hz	47-63 Hz, 360-440 Hz				
Power Factor	98% (single phase 220VAC), 94% (three ph	98% (single phase 220VAC), 94% (three phase input)					
Efficiency (Typical)	≤89%	≤91%	≤91%				
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.

Output Specifications (Fixed)								
Model	AST40-42	AST60-28	AST40-85	AST60-56	AST40-125	AST60-83		
Max Output Voltage	40 V	60 V	40 V	60 V	40 V	60 V		
Max Output Current	42 A	28 A	85 A	56 A	125 A	83 A		
Max Output Power	1700 W	1700 W	3400 W	3400 W	5000 W	5000 W		

Output Specifications (Autoranging)								
Model	AST60-42AR	AST40-85AR	AST60-56AR	AST40-125AR	AST60-85AR	AST60-125AR		
Max Output Voltage	60 V	40 V	60 V	40 V	60 V	60 V		
Max Output Current	42 A	85 A	56 A	125 A	85 A	125 A		
Max Output Power	1700 W	1700 W	1700 W	3400 W	3400 W	5000 W		





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