



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-parallelism, 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.

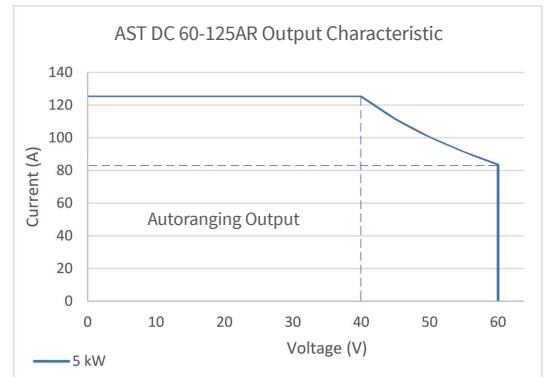
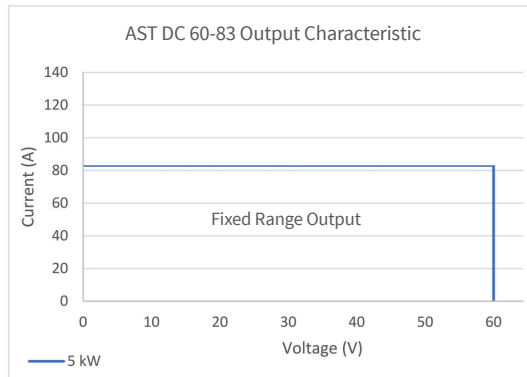
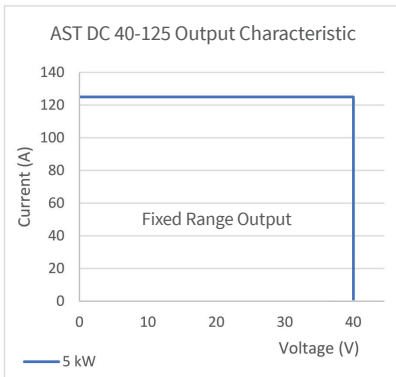
Sorensen Asterion DC Series: Preliminary Product Specifications & Details

| 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 | | |
| 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 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 |

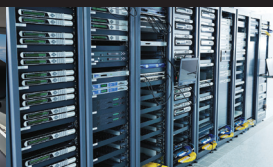
| Output Specifications (Autoranging) | | | | | | |
|--|------------|------------|------------|-------------|------------|-------------|
| Model | AST60-42AR | AST40-85AR | AST60-56AR | AST40-125AR | AST60-85AR | AST60-125AR |
| Max Output Voltage | 60 V | 40 V | 60 V | 40 V | 60 V | 60 V |
| Max Output 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 |



Avionics Test



Power Simulation



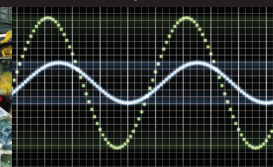
ATE Applications



Manufacturing



Frequency Conversion



IEC Standards Testing

