

# DC Power Supply System

Part Number FW01-10102-10

## PRODUCT DESCRIPTION

The DC Power Supply (DCPS) System contains a Digital programmer module, independently-controlled five (5) floating bipolar power supply modules, two (2) filler panels, and an analog programmer module that are mounted in a 19 inch rack chassis with a 4U form factor. Parallel Mode is possible for the five (5) modules with external connections of the modules.

Designed to meet the requirements of commercial and military Automatic Test Equipment (ATE) systems, the FW01-10102-10 DCPS is ideal for solving obsolescence and enhancing the performance of new or pre-existing ATE.

The instrument has been designed with several notable features:

- Internal or External Sense Line Selection
- Constant Voltage and Constant Current Modes of Operation
- Industry-Standard 19 Inch Rack Mount with 4U Form-Factor
- Internal over-voltage, over-current, and over-temperature monitoring
- Programmed over IEEE-488 communication bus using simple ABLE commands



Science and Engineering  
Services, LLC



RELIABLE DESIGN

19 INCH RACK FORM FACTOR

RUGGED ARCHITECTURE

## SPECIFICATIONS

### ELECTRICAL

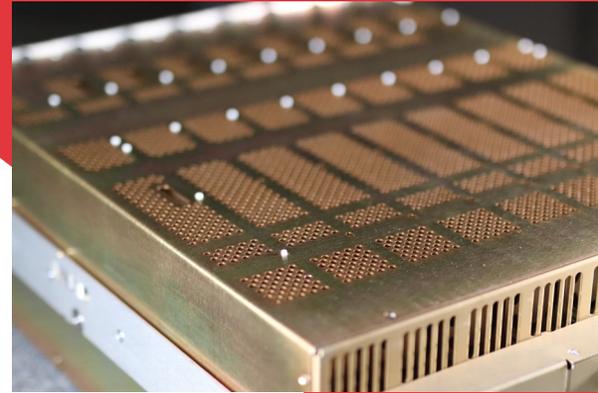
- AC Input:
  - 115 Volts Alternating Current, 60 Hz, 40 Amperes Maximum
- Internal or Remote Sense Lines: Selectable
- Single Power Mode per Module or Parallel Mode: DC1-DC5
- Constant Voltage or Constant Current Modes of Operation
- Output Voltage
  - Range: -32 to +32 VDC; DC1-DC5
  - Programmed Accuracy:  $\pm 0.075\%$  Programmed Value
  - $\pm 16$  mVDC with Remote Sensing
- Output Current
  - Range: 0 to 6.25 Amperes DC per Module
  - Programmed Accuracy:
    - $\pm 2.25\%$  of Full Scale with Remote Sensing
- Parallel Mode:
  - DC1-DC2: 0 to 12.5 Amperes DC
  - DC1-DC3: 0 to 18.75 Amperes DC
  - DC1-DC4: 0 to 25.0 Amperes DC
  - DC1-DC5: 0 to 31.25 Amperes DC
- Remote Analog
  - Voltage Control: 0 to 4.5 VDC
    - Accuracy:  $\pm 1\%$  of Full Scale
    - Readback: 0 to 4.5 VDC
    - Accuracy:  $\pm 1\%$  of Full Scale
  - Current Control: 0 to 4.5 VDC
    - Accuracy:  $\pm 1\%$  of Full Scale
    - Readback: 0 to 4.5 VDC
    - Accuracy:  $\pm 1\%$  of Full Scale
- Output Ripple: less than 100 mVpp
- Over-Voltage, Over-Current and Over-Temperature monitoring
- Output and Sense Lines are Opened/Closed with Relays

### ENVIRONMENTAL

- Operating Temperature Range: 0 to 50 °C (Rated Load)
- Storage Temperature Range: -40 to +70 °C
- Humidity Range: 0 to 90% Relative Humidity, Non-Condensing
- Fungus: Resistant, Non-Nutritive Materials Used
- Internal Fans: Exhaust to the rear

### MECHANICAL

- Dimensions: 7" H x 19"W x 22.17" D
- Weight: 29.7 lbs
- DC Output Connector J2: DPKB-64SNA-7
- Analog Programmer Output J4: MS3112E20-39S
- AC Input Power J5: MS27466T-21A11P
- IEEE 488 J6: Standard IEEE-488 connector
- IEEE 1118 Control Bus J7: Not Used
- Industry-Standard 19 Inch Rack Mount with 4U Form-Factor



### SERVICES AVAILABLE

- Technical Support
- Installation and Setup
- Maintenance
- Application Support
- Hardware and Software Support
- Guaranteed Warranty

For More Information, Contact:

Science and Engineering Services, LLC  
110 Stillwater Circle  
Bonaire, GA 31005  
(478) 293-4798  
[www.ses-i.com](http://www.ses-i.com)

