Argantix XDS Series

Overview

| ≋ | 208 | 400 | 480 |

- **Compact Modular DC Power**
  5, 10 and 15 KW versions in 3U, 19″ rack.

- **Wide Range of Applications**
  Telecommunications, automotive, industrial and commercial applications.

- **Built-in Measurements**
  Voltage, current and power readback capability standard.

- **Fast Transient Response**
  Capable of driving demanding loads.

- **Parallel / Current Share Capability**
  Paralleled chassis can deliver up to 75 KW.

- **Standard RS232C Interface and Optional GPIB.**
  Instrument drivers and software support for easy system integration.

Compact Power

The XDS Series packs up to 15 KW of DC power into a 5.25″ rack mount chassis. Despite the high power density of this design, the XDS Series provides a low noise, stable output.

A full set of measurements is built-in to provide instant feedback on EUT load characteristics.

The XDS Series offers all the basic DC power supply capabilities needed for a wide range of applications and provides cost effective alternative to larger and more expensive products typically used for these applications.

Easy To Use Controls

Simple menu driven operation and familiar rotary controls for setting voltage and current ensures that the XDS Series Power Supplies are easy to operate. All front panel controls including the rotary knobs are digitally encoded for long lasting, trouble free operation. The voltage and current control knobs can be used to quickly slew output parameters.

The intuitive front panel controls allow for easy operation of the supply by both novice and experienced users alike.

Applications

With excellent output regulation and accuracy, the XDS Series DC Power Supplies support a wide variety of DC power applications. Examples include communications, semiconductors, automotive, information technology and industrial. The standard RS232C serial interface supports remote control of all power supply functions and measurements and allows for easy integration into ATE systems. Use of standard SCPI command language syntax and instrument drivers for popular programming environments further ease system integration. An optional GPIB interface is available as well.

XDS Series - GUI Software

All XDS Series Power Supplies come with Windows GUI software. This GUI program offers additional functionality. This includes the following capabilities:

Output Sequencing: Time driven output changes can be programmed, stored and executed under program control. Events include steps, sweeps, drops and surges of voltage and/or current. This allows a variety of power conditions and DC tests to be set up without having to develop application specific code. Multiple setups can be stored on disk.

Data Logging: All measurements taken from the DC supply can be recorded to disk in a format that is easily exported to other programs such as MS Excel for analysis and display.

Pass/Fail Testing: Automatic output sequencing and data read back with user defined pass/fail criteria. This mode may be used for burn-in or product evaluation applications. A simple to use spreadsheet-like user interface allows entry of time delays, settings, readings and pass/fail limits. Any number of setups can be saved to disk for future use.

The GUI program operates over the standard RS232C interface or the optional IEEE-488/GPIB interface and provides comprehensive on-line help.

AMETEK
Programmable Power
9250 Brown Deer Road
San Diego, CA 92121-2267
USA

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PROGRAMMABLE POWER

XDS Series

XDS Series - Models[1] : Output

Model	Voltage	Current	RMS Noise	Model	Vpltage	Current	RMS Noise
XDS 30-167	0-30	0-167	15mv	XDS 150-33	0-150	0-33	25mv
XDS 30-333	0-30	0-333	15mv	XDS 150-66	0-150	0-66	25mv
XDS 30-500	0-30	0-500	15mv	XDS 150-100	0-150	0-100	25mv
XDS 40-125	0-40	0-125	15mv	XDS 300-17	0-300	0-17	100mv
XDS 40-250	0-40	0-250	15mv	XDS 300-33	0-300	0-33	100mv
XDS 40-375	0-40	0-375	15mv	XDS 300-50	0-300	0-50	100mv
XDS 50-100	0-50	0-100	15mv	XDS 400-12	0-400	0-12.5	100mv
XDS 50-200	0-50	0-200	15mv	XDS 400-25	0-400	0-25	100mv
XDS 50-300	0-50	0-300	15mv	XDS 400-37	0-400	0-37	100mv
XDS 80-62	0-80	0-62	25mv	XDS 600-8	0-600	0-8	250mv
XDS 80-125	0-80	0-125	25mv	XDS 600-17	0-600	0-17	250mv
XDS 80-187	0-80	0-187	25mv	XDS 600-25	0-600	0-25	250mv
XDS 100-50	0-100	0-50	25mv				
XDS 100-100	0-100	0-100	25mv				
DS 100-150	0-100	0-150	25mv				

Electrical

Output

Power Maximum 5, 10 or 15 KW

Voltage Accuracy: 0.3 % FS
Resolution: 0.033 % FS
Line Regulation: < 0.1% of V range
Load Regulation: < 0.1% of V range
Transient Response: Voltage will recover to within 2% of V range within 2 msec for 30 % load step.
Stability: ± 0.05% of max. rating per 8 hours after 30 mins. warmup period.

Current Accuracy: 0.5% FS at 0-100% of range
Resolution: 0.1%-0.033 % (model specific)
Line Regulation: < 0.1% of I range
Load Regulation: < 0.1% of I range
Stability: ± 0.05% of max. rating per 8 hours after 30 mins. warmup period

Input Voltage: 208 - 10 % to 230 + 10% VAC
400 ± 10 % VAC (option -400)
480 ± 10 % VAC (option -480)
All inputs are L-L, 3 phase, 3-wire plus safety ground.
Current RMS: Typical RMS current per phase at low line input voltage.
Power Factor: > 0.65
Efficiency: > 85 % at full load.

Power Level

Vlow	5 kW	10 kW	15 kW
187 V	27 A	54 A	81 A
360 V	15 A	30 A	45 A
432 V	12A	24 A	36 A

Measurements

Voltage

Model	Resolution	Accuracy
XDS 30-XXX	0.01 V	0.05 V
XDS 40-XXX	0.01 V	0.05 V
XDS 50-XXX	0.02 V	0.1 V
XDS 80-XXX	0.02 V	0.1 V
XDS 100-XXX	0.1 V	0.2 V
XDS 150-XXX	0.1 V	0.3 V
XDS 300-XXX	0.1 V	0.5 V
XDS 400-XXX	0.1 V	0.5 V
XDS 600-XXX	0.2 V	1.0 V

Current

Current Range	Resolution	Accuracy
0 - 8.3 A	0.003 A	0.013 A
0 - 16 A	0.005 A	0.025 A
0 - 33 A	0.01 A	0.05 A
0 - 66 A	0.02 A	0.1 A
0 - 187 A	0.1 A	0.3 A
0 - 400 A	0.1 A	0.5 A
0 - 500 A	0.2 A	1 A

Power

Range	Resolution	Accuracy
0 - 5 KW	1 W	0.3 % FS
0 - 10 KW	2 W	0.3 % FS
0 - 15 KW	5 W	0.3 % FS

Peak Current
Resolution: See current table Accuracy: Same as current + 3 x resolution.

Protection
Over temperature, short circuit, over current protection

Controls and Indicator
Controls
Voltage setting: Digitally encoded rotary knob
Current setting: Digitally encoded rotary knob
Measurement select: Push button
Output on/off: Push button
Power on/off: Toggle switch

Indicators
Display: Dual 7 segment large LED
LED's for: Output on/off, cc mode, cv mode,
          remote, measurements.

Remote Control
A standard RS232C and analog RPV (0-10 VDC)
are included with all XDS Series DC Power
Supplies. An optional GPIB/IEEE-488 input is
available as well.

RS232C - Standard
9 pin D-shell connector, 19200 baud, SCPI syntax
RPV Input - Standard
          Input: 0-10 VDC for 0-100% range
          Connector: 15 pin D-sub.
Remote Inhibit - Standard
          Programmable for default high or low

-IF Option
IEEE-488 Interface
IEEE-488 (GPIB) talker listener.

Subset: AH1, L3, RL2, SH1, T8
          IEEE-488.2 SCPI syntax

Environmental
Temperature Coefficient
Voltage set point: 0.02%/°C of V Range
Current set point: 0.03%/°C of I Range
Ambient Temperature
Operating: 0° to 40° C / 32° to 104° F
Storage: -40° to 75° C / -40° to 167° F
Humidity
Operating: 0 to 80% RH, non condensing
Cooling
Forced air, side and top intake, rear exhaust

Mechanical
Dimensions
Height: 5.25" / 133.35 mm
Width: 19" / 482.6 mm
Depth: 22.19" / 563.3 mm excl. bus
          bars and cover
          24.74" / 628.4 mm incl. bus
          bars and cover

Weight

	15 KW	10 KW	5KW
Net:	90 lbs.	70 lbs.	50 lbs.
	41 Kg	32 Kg	23 Kg
Shipping (approx.):			
	125 lbs.	105 lbs.	85 lbs.
	57 Kg	48 Kg	39 Kg

Rack Mounting: Unit must be supported by shelf
or brackets when mounted in 19" cabinet. No
provisions for rack slides are made on instrument.

Ordering Information
Model
All XDS Series model numbers specify voltage and
current range.
          XDS VVV-CCC-LLL-XX-XXXXX
          VVV = Voltage
          CCC = Current
          LLL = Input Line Voltage
          XX = Options
          XXXXX = Configuration
Refer to table shown for model numbers and
configurations.

Includes
• User manual and programming manual
          on CD ROM.
• Windows GUI software on CD ROM.
• RS-232C serial cable

Options
-IF GPIB / IEEE-488 interface
          programming option.
-400 400 ±10% volt line to line AC input
-480 480 ±10% volt line to line AC input

Optional Configurations
-AUX   Auxilliary control.
-RPV5   Remote voltage programming, 0-5V
-RPV10   Remote voltage programming, 0-10V
-RPC5   Remote current programming, 0-5V
-RPC10   Remote current programming, 0-10V

Ordering Examples:
Model Description

XDS 50-100-208 Output voltage range is 50 Vdc,
maximum current is 100 Adc, line input is 208
V line to line, three phase. Includes standard
RS232C and analog interfaces.

XDS 80-187-400-IF Output voltage range is 80
Vdc, maximum current is 187 Adc, line input is
400 V line to line, three phase. Includes optional
IEEE/RS232 and analog interfaces.

Notes

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