ARTESYN iLS1500 SERIES

Intelligent Laboratory Power

1500W Rack Programable Power Supplies



Advanced Energy's Artesyn iLS1500 series is a programmable DC power supply with a single 1500 Watt output. With 12-bit D/A & A/D converters embedded, the power supplies come with the capability of reporting voltage and current very accurately. The iLS1500 series provides convenient dynamic rotary controls for voltage and current adjustment. The power supplies also come with rear ports that allow remote control via USB, Ethernet, and analog control inputs and they are designed to offer either bench use or rack mounting. The iLS1500 series is LXI certified, details for using this interface can be found in our Programming Manual.

AT A GLANCE

Total Power:

1500 Watts

Input Voltage:

100 - 240 Vac

# of Outputs:

Single

SPECIAL FEATURES

- 1500W with extended range
- LXI certified
- 5 models: up to 400V and 70A
- Small, high-density 1U package
- Wireless digital remote sense
- Built-in voltage and current measurement
- Full OCP and OVP protection
- Series and parallel operation

STANDARD USER INTERFACE INCLUDES:

- Ethernet, USB 2.0 and analog
- LXI interface
- Command capability for keysight 603X, sorenson DLM and xantrex XFR
- LabVIEW drivers

SAFETY

- Conforms to UL 60950-1 and UL 62368-1
- Certified to CAN/CSA C22.2 No. 60950-1 & 62368-1

APPLICATIONS

- Test and Measurement
- ATE
- Laboratory
- Research and Development

RESOURCE LINKS

Click Here for the Programming Manual

Click Here for the Scripting Manual

Click Here for the User Manual

Click Here for Drivers

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iLS1500 SERIES 1500W LXI CERTIFIED PROGRAMMABLE POWER SUPPLIES

iLS1500 MODEL:	iLS1500-3	iLS1500-5	iLD1500-10	iLS1500-20	iLS1500-40
Output[1]					
Voltage, Volts	30 V	50 V	100 V	200 V	400 V
Current, Amps	70 A	40 A	20 A	10 A	5 A
Power, Watts[6]	1500 W	1500 W	1500 W	1500 W	1500 W
Output Ripple & Noise[2]					
RMS Constant Voltage	10 mV	20 mV	40 mV	80 mV	100 mV
P-P Constant Voltage	45 mV	75 mV	100 mV	200 mV	300 mV
Regulation					
Load: 10-90% - Voltage	0.05%	0.05%	0.05%	0.05%	0.05%
Load: 10-90% - Current	0.05%	0.05%	0.10%	0.05%	0.05%
Line (Change from 100 to 132 VAC Input or 180 to 260 VAC Input):					
Voltage	0.05%	0.05%	0.05%	0.05%	0.05%
Current	0.05%	0.05%	0.05%	0.05%	0.05%
Programming Accuracy[1]					
Voltage	0.10%	0.15%	0.10%	0.10%	0.10%
Current	0.20%	0.15%	0.15%	0.15%	0.15%
Measurement Accuracy					
Voltage (0.1%+)	0.10%	0.15%	0.10%	0.10%	0.10%
Current (0.1%+)	0.20%	0.15%	0.15%	0.15%	0.15%
Transient Recovery Time[3]					
Time	≤1.5 ms	≤1.5 ms	≤1.5 mss	≤1.5 ms	≤1.5 ms
Supplemental Characteristics*					
Output response time (settle to within ±1% of the rated output, with a resistive load)					
Up, 10-90%, Milliseconds	15 ms	30 ms	25 ms	30 ms	35 ms
Down, 90-10%, Milliseconds	25 ms	25 ms	25 ms	45 ms	40 ms
Down, No Load, Seconds	<2.5 s	<3.0 s	<4.0 s	<10.0 s	<10.0 s
Command Response Time[4], Milliseconds	50 ms				
Data Readback Transfer Time[5], Milliseconds	5 ms				
Remote Sense Compensation Volts/Load Lead	1 V	1 V	2 V	4 V	4 V
Over-Voltage Protection					
Range, Volts	0.5-33 V	0.5-55 V	0.5-110 V	0.5-220 V	0.5-440 V
Accuracy, Volts	0.3 V	0.5 V	1.0 V	2.0 V	4.0 V
Output Ripple and Noise[2], CC rms, Milliamps	20 mA	10 mA	10 mA	5 mA	5 mA
Programming Resolution[1]	0.1%				
Measurement Resolution[1]	0.1%				
Front Panel Display Accuracy					
Voltage	0.10%	0.15%	0.15%	0.10%	0.10%
Current	0.20%	0.15%	0.10%	0.15%	0.15%
Mechanical					
Dimensions	Height 1.73 in. (44 mm) x Width 19.0 in. (483 mm) x Depth 15.5 in. (394 mm)				
Weight	12.8 lbs. (5.8 Kg)				

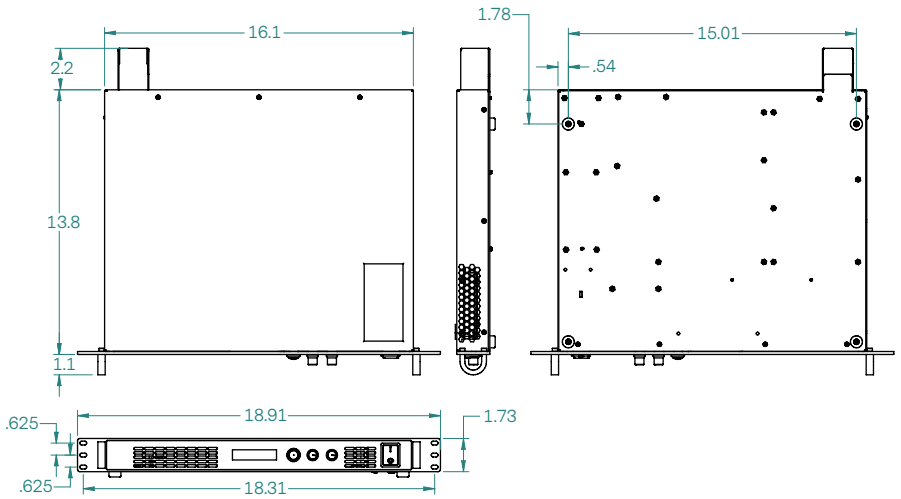
iLS1500 SERIES 1500W LXI CERTIFIED PROGRAMMABLE POWER SUPPLIES (CONTINUED)

Notes

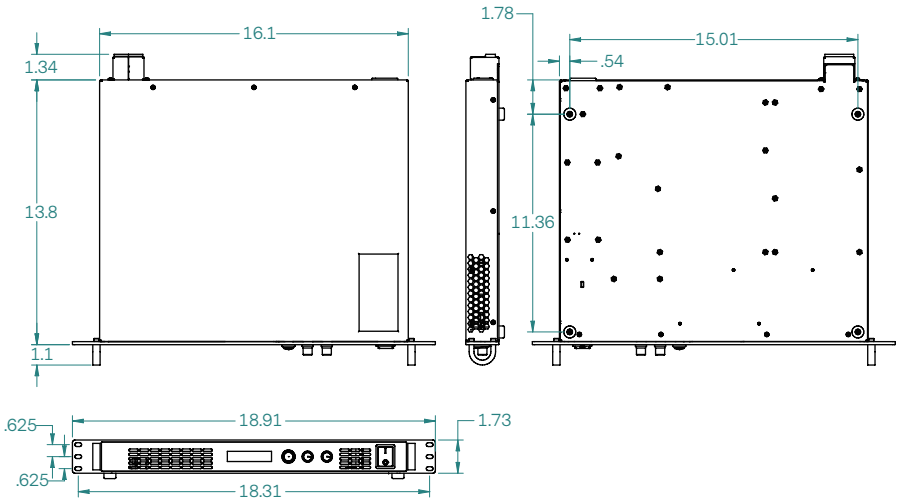
1. Rating is percent of full scale. Rating is for operation between 10% of minimum voltage or current rating to 100% of voltage rating and the current rating at that voltage. Minimum voltage is guaranteed at greater than 1% of the rated output voltage. Minimum current is guaranteed at greater than 1% of the rated output current.
2. Measured with 20 MHz bandwidth and excluding line frequency ripple (see application note AN024 for measurement details).
3. Time for output voltage to recover within 0.5% of its rated output for a load change from 10 to 90% of its rated output current. Voltage set point from 10% to 100% of rated output.
4. Add this to the output reopens time to obtain the total programming time.
5. Time to provide data back to the controller using LAN interface (does not include A/D conversion time).
6. 1500 Watt Output is only available with an AC input of 110 VAC or grater. With a lower AC line, output will be limited to 1100 Watts.

* Supplemental characteristics are not warranted but are descriptions of typical performance determined either by design or type testing. Specifications subject to change without notice. Contact Versatile Power for full specifications and additional information.

iLS1500 LV MECHANICAL DRAWING



iLS1500 HV MECHANICAL DRAWING



ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

PRECISION | POWER | PERFORMANCE

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