VSP SERIES

High-power programmable power supplies

Features:

- Up to 1.2kW in 1U or up to 2.7kW in 2U
- Standard 19” rack mount suitable for ATE and OEM applications
- Achieve up to 7.2kW by connecting up to three 1.2kW or 2.4kW units in parallel with active current sharing
- Zero voltage soft switching technique, low ripple and noise
- CV & CC: Constant Voltage/Constant Current mode with auto mode crossover
- LabView™ and LabWindows™ drivers
- Active PFC input with wide range input
- Four digit display for voltage & current read back
- Isolated analogue programming and monitoring and RS232 interfaces as standard
- Optional interfaces: RS485, GPIB and Ethernet (via card kit)

The Adaptive Power Systems VSP Series of Programmable Power Supplies set a new standard for flexible, reliable AC to DC power systems in OEM, Industrial and Laboratory applications. They have been designed with excellent thermal management and can be conveniently stacked in a 19” rack without the need for any space between them for ventilation. The zero voltage soft-switching technique employed in the VSP series virtually eliminates the switching transients to derive lower noise, which is closer to levels found in linear supplies. This also helps increasing the overall conversion efficiency which in turn decreases the heat generation, thus reducing the stress on the power components which results in greater reliability.

VSP DC Power Supply Model Selection Guide

Model	Voltage Range	Current Range	Max Power	Ripple (RMS)	Output Noise (90-20MHz) Voltage (peak to peak)	Comms * Optional	Weight / Dims (W/H/D)
VSP600-10-60	0-10V	0-60A	600W	<10mV <20mA	<45mV P-P	Analogue GPIB* RS232* RS485* Ethernet*	7kg 19”, 1U, 450mm
VSP600-20-30	0-20V	0-30A		<10mV <10mA			
VSP600-30-20	0-30V	0-20A					
VSP600-40-15	0-40V	0-15A					
VSP600-60-10	0-60V	0-10A					
VSP600-120-5	0-120V	0-5A					
VSP1200-20-60	0-20V	0-60A	1200W	<10mV <20mA			
VSP1200-30-40	0-30V	0-40A		<10mV <10mA			
VSP1200-40-30	0-40V	0-30A					
VSP1200-60-20	0-60V	0-20A					
VSP1200-80-15	0-80V	0-15A		<20mV <10mA			
VSP1200-120-10	0-120V	0-10A					
VSP2400-30-80	0-30V	0-80A	2400W	<10mV <20mA			13kg 19”, 2U, 450mm
VSP2400-40-60	0-40V	0-60A					
VSP2400-60-40	0-60V	0-40A		<10mV <10mA			
VSP2400-80-30	0-80V	0-30A		<20mV <10mA			
VSP2400-120-20	0-120V	0-20A					
VSP2700-60-45	0-60V	0-45A	2700W	<10mV <10mA			
VSP2700-80-33	0-80V	0-33A		<20mV <10mA			
VSP2700-120-22	0-120V	0-22A					

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ADAPTIVE POWER SYSTEMS

VSP SERIES

General Specifications

AC input voltage
600W 95 to 264V AC, 47 to 63Hz, 1 Phase
1200W 95 to 264V AC, 47 to 63Hz, 1 Phase
2400W 175 to 264V AC, 47 to 63Hz, 1 Phase
2700W 175 to 264V AC, 47 to 63Hz, 1 Phase

Input power factor
For all models 0.99 typical @ full Load, nominal line

Switching frequency
For all models 45KHz nominal

Time delay
For all models 7 sec. maximum from power ON until output stable

Voltage mode transient response
For all models better than 200µS for load change from 40% to 90%.

Minimum voltage differential
For all models ±600V DC from output to safety ground

Remote analogue programming
For all models Voltage & current programming inputs through 0-5V (default), 0-10V or 0-4.85K for 0 to 100% output voltage & current change

Remote analogue monitoring
For all models isolated voltage & current monitoring outputs 0-5V (default), 0-10V

Remote programming & monitoring accuracy
For all models 0.5% for 0 to 100% output

Maximum remote sense compensation
For all models 1V/Line

Operating temperature
For all models 0 to 50°C

Storage temperature
For all models -20 to 70°C

Humidity
For all models up to 90% RH non-condensing

Front panel voltage & current controls
For all models 10 turn potentiometers for voltage, current & over voltage set/digital rotary encoder

Input AC connection
600W 10A, 250V line socket
1200W 16A, 250V line socket/3core
2400W 3 way-terminal 30A, 415V terminal block/3 core, 20A
2700W 3 way-terminal 30A, 415V terminal block/3 core, 20A

Dimensions & Weight
600W & 1200W 19"(W), 1 U (H), 450 mm, 7 Kgs.
2400W & 2700W 19"(W), 2 U (H), 450 mm, 13 Kgs.

Conforming standards
CE mark: meets EN55022, class A, safety standard EN60950