

Models* VSP6020, VSP2050, VSP4030, VSP12010

High Power Switching DC Power Supplies

Data Sheet

Specifications		models		
Output Specification	VSP6020*	VSP2050*	VSP4030*	VSP12010*
Power	1.2KW	1.2KW	1.2KW	1.2KW
Output Voltage	0–60V	0–20V	0–40V	0–120V
Output Current	0–20A	0–50A	0–30A	0–10A
Ripple rms. (10Hz to 1MHz)	≤ 10mV	≤ 15mV	≤ 10mV	≤ 20mV
Noise (10Hz to 20MHz)	≤ 45mVpp	≤ 45mVpp	≤ 45mVpp	≤ 45mVpp
Programming Resolution(Digital Interface), LSB (not LED displays)				
Voltage	20 mV	10 mV	10 mV	100 mV
Current	10 mA	20 mA	10 mA	10 mA
Output Programming Accuracy(Analog Programming 0 To 5v & 0 To 10)				
Voltage	0.5 % of F. S. ± 1 Digit (spec. for all VSP models)			
Current	0.5 % of F. S. ± 1 Digit (spec. for all VSP models)			
Meter Accuracy				
Voltage	+/- 0.2% of ES. +/- 3 Digit. (spec. for all VSP models)			
Current	+/- 0.2% of ES. +/- 3 Digit. (spec. for all VSP models)			
Regulation				
CV Line Regulation	0.1 % of ES (spec. for all VSP models)			
CC Line Regulation	0.1 % of ES (spec. for all VSP models)			
CV Load Regulation	0.1 % of ES (spec. for all VSP models)			
CC Load Regulation	0.1 % of ES (spec. for all VSP models)			
Output Specification				
Stability	0.05%			
Efficiency	80% Minimum			
Transient Response	250 microseconds for load change from 40% to 90%			
Mode Of Operation				
Local Mode	Through front panel potentiometer for voltage, current and over voltage and Push switch for Output ON/ OFF control. Interface Analog programming of voltage and current.			
Remote Mode				
Voltage	0 - 5 volts or 0 – 10 volts for output voltage and current, selection through DIP-switch.			
Resistance	0 – 4.85k ohms from 0 to full-scale level.			
Digital Interface	RS-232 / GPIB			
Protections				
Over voltage protection	Programmable through POT in local mode and through digital interface in remote mode.			
Over temperature protection	Through 90 °C. Thermal switch on heat sink.			
Input specifications				
Mains Input Range	95Vac to 264Vac.			
Input Frequency	47 To 63 Hz			
Input Power Factor	0.99 On Full Load At Nominal Input.			
Inrush Current	Limited By NTC			
Operating Environment				
Temperature	0 - 50°C			
Relative Humidity	< 80% rh – non condensing			
Storage Temperature	- 20°C. to + 70°C.			
Warm-up Time	15 minutes.			
Safety Standards				
EMI Filtering	EN55022 Class-A			
Safety Class	EN60950			
Mechanical Specifications				
Weight (approx.)	13.7lbs. (6.2 KG.)			
Dimensions (WxHxD)	19 x 1.75 x 18" (483 x 44.5 x 457mm)			
Dimensions with rubber feet	19 x 2.13 x 20" (483 x 54 x 457mm)			
Accessories		One Year Warranty		

Accessories

One Year Warranty

SUPPLIED: Instruction Manual
OPTIONAL (for all models): TL-5, TL-30

* = Specification also apply to corresponding GPIB model (Add GPIB to the model number for a GPIB interface instead of a RS232 interface. Example: VSP6020GPIB)
ES = Full Scale. Full scale will be different for each model. Example: If you have a VSP2050 and you are measuring the voltage meter accuracy, the meter can not off more than 0.3V (20V + 0.2% + 3 digit). Note: 3 digits refers to the power supply displays least significant digit.

B&K Precision Corporation

22820 Savi Ranch Parkway, Yorba Linda, CA 92887

Tel: 714-921-9095, Fax: 714-921-6422

www.bkprecision.com

Specifications subject to change without notice

