

# DATASHEET

## PROGRAMMABLE BIDIRECTIONAL DC POWER SUPPLY



A-426, Road No. 28, Wagle Estate  
Thane-400604, Maharashtra, INDIA.  
Mob: +91-80977 07496 | +91-72085 60460  
Email: [sales.powertronsmps@gmail.com](mailto:sales.powertronsmps@gmail.com)  
Web: [www.powertrondcps.com](http://www.powertrondcps.com)

PIPL-80300DCPSP

### PROGRAMMABLE BIDIRECTIONAL DC POWER SUPPLY

#### ❖ FEATURES :

- SMPS Based Design.
- Output V & I Adjustable from 0 to Specified Range.
- Protection: Short circuit / Over load / Over voltage.
- High efficiency, long life and high reliability.
- Miniature size.
- Bidirectional and regenerative functionality.
- Battery Charge and Discharge facility.

#### ❖ SPECIFICATION :

MODEL NO		PIPL-80300DCPSP
Output	DC VOLTAGE ADJ. RANGE	0 TO 80VDC
	DC CURRENT ADJ. RANGE	0 TO 300AMP
	RATED POWER	10000W
	LINE REGULATION	Voltage: $\leq 0.01\%FS$ , Current: $\leq 0.05\%FS$
	LOAD REGULATION	Voltage: $\leq 0.02\%FS$ , Current: $\leq 0.05\%FS$
	Setup Resolution	Voltage: 0.001 V, Current: 0.01 A
	Readback Resolution	Voltage: 0.001 V, Current: 0.01 A
	Setting Accuracy	Voltage: $\leq 0.02\% + 0.02\%FS$ , Current: $\leq 0.1\% + 0.1\%FS$
	Readback Accuracy	Voltage: $\leq 0.02\% + 0.02\%FS$ , Current: $\leq 0.1\% + 0.1\%FS$
	Setting Temp. Coefficient	Voltage: $\leq 50PPM/^{\circ}C$ , Current: $\leq 200PPM/^{\circ}C$
	Readback Temp. Coefficient	Voltage: $\leq 50PPM/^{\circ}C$ , Current: $\leq 200PPM/^{\circ}C$
	Rise Time	Full Load: $\leq 30ms$
	Fall Time	Full Load: $\leq 15ms$
	Setup Stability 30 min	Voltage: $\leq 0.02\% + 0.02\%FS$ , Current: $\leq 0.1\% + 0.1\%FS$
	Setup Stability 8 Hour	Voltage: $\leq 0.02\% + 0.02\%FS$ , Current: $\leq 0.1\% + 0.1\%FS$
	Readback Stability 30 min	Voltage: $\leq 0.02\% + 0.02\%FS$ , Current: $\leq 0.1\% + 0.1\%FS$
	Readback Stability 8 Hour	Voltage: $\leq 0.02\% + 0.02\%FS$ , Current: $\leq 0.1\% + 0.1\%FS$
	Power factor	$\geq 0.99$
	Ripple Voltage peak to peak	$\leq 120 mV$
	Isolation	500V or better
Input	Size	3U
	Communication Interface	USB, Ethernet (LAN)
	Software feature	: Data Setting and Saving: Yes, Export data to excel: Yes, Import data from Excel: Yes, Battery Emulator feature: Yes
	Operation in Source Mode	CV / CC / CP
	Operation in Sink Mode	CC / CP / CR
	EFFICIENCY	$\geq 90\%$
ENVIRONMENT	Regenerative efficiency	95% or better
	Input Supply	1-phase 230V nominal, 50Hz nominal
	Protection	Protection Type : OVP / OCP / OPP / OTP / V sense protection
	WORKING TEMP.	Storage: $0^{\circ}C$ to $70^{\circ}C$ , Working: $0^{\circ}C$ to $50^{\circ}C$
SAFETY & EMC	SAFETY STANDAEED	Designed to meet UL60950-1
	EMI & EMC	Designed to meet EN55011 / EN55022, EN61000-4-2
	COOLING	Forced cooling
NOTE	<p>1. All parameters NOT specially mentioned are measured at Typical input, rated load and 25 Deg.c. Ambient temperature.</p> <p>2. Ripple and noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 47uF parallel capacitor.</p> <p>3. Tolerance includes set up tolerance, line regulation and load regulation.</p> <p>4. The power supply is considered a component which will be installed into final equipment. The final equipment must be recon formed that it still meets EMC directives.</p>	

SMPS | DC DC Converter | Battery Chargers | Dc Power Supply | DC AC Converter | Electro Plating Rectifier | POE SMPS |  
Adapters | LED Driver | Inverter | CVT | Servo controlled Voltage Stabilizer | Transformer