

Multiple Output 180W~315W

Introduction

The TP2000 and TP2000TK series are linear DC power supplies with 3 channels, 195W to 315W output. In constant voltage and current operations, the power supply provides high regulation and low ripple & noise. Auto series and parallel operations double output voltage and current. Heat sink and automatic cooling fan control give sufficient cooling to the power supply and minimize fan noise. The output ON/OFF control and preset voltage & current function protect the power supply and related loads from unexpected damages. The TP2000 and TP2000TK series are widely used in applications of powering operational amplifier, push pull stages, logic circuit and definition systems.

Features

- ✓ Two independent adjustable outputs 0~30V/0~3A x2, 0~30V/0~5A x2, one fixed output 5V/3A x1
- ✓ Constant voltage and constant current operations, auto CV and CC switch
- ✓ Low ripple and noise, low temperature drift
- ✓ Auto Series and Parallel tracking operations
- ✓ Output ON/OFF control
- ✓ Preset function, setting of voltage and current with output open circuit (TP-2303TK/2305TK)
- ✓ High efficiency, high power density
- ✓ Over load and reverse polarity protections
- ✓ Dual-color four digital panel meters

Selection guide

Model	TP-2303E TP-2305E	TP-2303C TP-2305C	TP-2303K TP-2305K	TP-2303 TP-2305	TP-2303TK TP-2305TK
Output voltage	0~30V x2	0~30V x2	0~30V x2	0~30V x2	0~30V x2
Output current	0~3A x2 0~5A x2	0~3A x2 0~5A x2	0~3A x2 0~5A x2	0~3A x2 0~5A x2	0~3A x2 0~5A x2
Fixed output		5V/3A	5V/3A	5V/3A	5V/3A
Preset V&I					✓
Output ON/OFF			✓	✓	✓
Tracking operation	✓	✓	✓	✓	✓
Dimension (WxHxD)	255x155x330mm			255x155x370mm	
Weight	7kg/9kg	7kg/9kg	7kg/9kg	8kg/10kg	8kg/10kg

Multiple Output Linear DC Power Supply



Product photo

TP-2303E



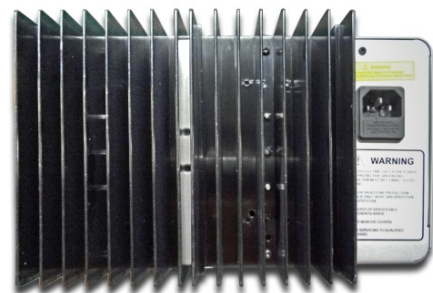
TP-2303C



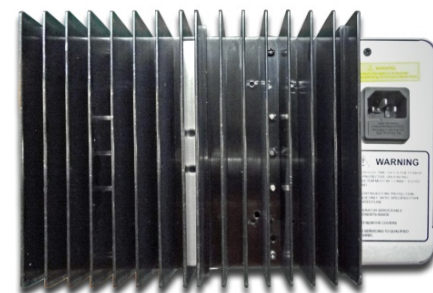
TP-2303K



TP-2303



TP-2305TK



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Specifications

Constant voltage operation		
Line regulation		$\leq 0.01\% + 3\text{mV}$
Load regulation		$\leq 0.01\% + 3\text{mV}$ ($I \leq 3\text{A}$); $\leq 0.02\% + 5\text{mV}$ ($I > 3\text{A}$)
Ripple & Noise (5Hz~1MHz)		$\leq 1\text{mVrms}$ ($I \leq 3\text{A}$); $\leq 2\text{mVrms}$ ($I > 3\text{A}$)
Constant current operation		
Line regulation		$\leq 0.2\% + 3\text{mA}$
Load regulation		$\leq 0.2\% + 3\text{mA}$ ($I \leq 3\text{A}$); $\leq 0.2\% + 5\text{mA}$ ($I > 3\text{A}$)
Ripple & Noise		$\leq 3\text{mArms}$ ($I \leq 3\text{A}$); $\leq 6\text{mArms}$ ($I > 3\text{A}$)
Tracking operation		
Parallel	Line regulation	$\leq 0.01\% + 3\text{mV}$
	Load regulation	$\leq 0.01\% + 3\text{mV}$ ($I \leq 3\text{A}$); $\leq 0.02\% + 5\text{mV}$ ($I > 3\text{A}$)
Series	Line regulation	$\leq 0.01\% + 5\text{mV}$
	Load regulation	$\leq 300\text{mV}$
	Tracking error	$\leq 0.5\% + 10\text{mV}$ of the master, no load (with load, add load regulation $\leq 300\text{mV}$)
Auxiliary output (fixed)		
Output voltage		$5\text{V} \pm 0.25\text{V}$
Output current		3A
Load regulation		$\leq 25\text{mV}$ @110/220VAC rated input
Ripple & noise (5Hz~1MHz)		$\leq 2\text{mVrms}$
Display		
Voltmeter		3 digits LED display
Ammeter		3 digits LED display
Resolution		100mV/10mA
Accuracy		Real voltage and current output: $\pm(1\% \text{ reading} + 2 \text{ digits})$
		Preset voltage and current: $\pm(1\% \text{ reading} + 8 \text{ digits})$
General		
Insulation		Between base and output terminal: $\geq 20\text{M}\Omega/500\text{VDC}$
		Between base and AC power cord: $\geq 300\text{M}\Omega/500\text{VDC}$
Operating environment		$0^\circ\text{C} \sim 40^\circ\text{C}$, $\leq 80\%\text{RH}$
Storage environment		$-10^\circ\text{C} \sim 70^\circ\text{C}$, $\leq 70\%\text{RH}$
Power source		AC110V/220V $\pm 10\%$, 50/60Hz
Accessories		Power cord x1, Operation manual x1