



MAIN: CH1/CH2
0~30V/0~3A x2
0~30V/0~5A x2

AUX.: FIXED
5V/3A



► 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

► 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, Test lead x1	

► Selection Guide

Model	TP-2303E	TP-2305E	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	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
Fixed output			5V/3A	5V/3A	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	8kg	10kg	8kg	10kg