

TAC Series Power Supplies

The TAC / TAC R series comprises of six models of compact, high-performance DC constant voltage / constant current power supplies offering a low cost solution for a wide range of applications. Providing dual readouts of current and voltage enables the user to simultaneously monitor levels. Fine and course controls ensure easy and accurate setting. The R version provides additional features including output sensing and external remote control. The TAC D version offers dual output with four displays.



MAIN FEATURES

- ◆ *Simple operation*
- ◆ *Simultaneous display (voltage and current)*
- ◆ *Large selection of output levels*

STANDARD FEATURES

- ◆ Fully variable voltage and current
- ◆ CV and CC modes, LED indication
- ◆ Output on/off
- ◆ Dual displays
- ◆ Floating output or selectable +/-
- ◆ Low ripple and Low noise
- ◆ Low cost
- ◆ Over-voltage category II

ADDITIONAL FEATURES R Version

- ◆ Output On/Off Terminals
- ◆ Output Sensing Terminals
- ◆ Remote control
- ◆ External voltage or Resistance
- ◆ Master / Slave (up to several units)
- ◆ Parallel and serial operation

ADDITIONAL FEATURES D Version

- ◆ Dual output
- ◆ Four Displays

Specification

TAC Series Power Supplies

Model		TAC30-3/R	TAC30-3D	TAC30-6/R	TAC60-3R
Output					
Output voltage		0 to 30V	0 to 30V (x2)	0 to 30V	0 to 60V
Output current		0 to 3A	0 to 3A (x2)	0 to 6A	0 to 3A
Constant voltage characteristics					
Input regulation	For AC $\pm 10\%$ fluctuation	5mV	8mV	5mV	8mV
Load regulation	For 0 to 100% fluctuation	5mV	8mV	5mV	8mV
Ripple and noise	10Hz to 1MHz	0.5mV rms	0.5mV rms,	1mV rms	1mV rms
Ripple peak	10Hz to 20MHz	4m Vp-p	4mVp-p	4m Vp-p	4m Vp-p
Transient response	Standard value (current 5%to100%)	50 μ Typical	50 μ Typical	50 μ Typical	50 μ Typical
Temperature coefficient	Standard value	100ppm/ $^{\circ}$ C Typical	100ppm/ $^{\circ}$ C Typical	100ppm/ $^{\circ}$ C Typical	100ppm/ $^{\circ}$ C Typical
Remote control (TAC-R only)					
Controlled by external voltage 0 to 10V	Output voltage	0 to 30V $\pm 5\%$		0 to 30V $\pm 5\%$	0 to 60V $\pm 5\%$
Controlled by external resistance 0 to 10k Ω	Output voltage	0 to 30V $\pm 5\%$		0 to 30V $\pm 5\%$	0 to 60V $\pm 5\%$
Constant current characteristics					
Input regulation	For AC $\pm 10\%$ fluctuation	2mA	4mA	6mA	3mA
Load regulation	For 0 to 100% fluctuation	10mA	10mA	15mA	15mA
Ripple and noise	10Hz to 1MHz	2mA rms	3mA rms	3mA rms	2mA rms
Temperature coefficient	Standard value	250ppm/ $^{\circ}$ C Typical	250ppm/ $^{\circ}$ C Typical	250ppm/ $^{\circ}$ C Typical	250ppm/ $^{\circ}$ C Typical
Remote control (TAC-R only)					
Controlled by external voltage 0 to 10V	Output voltage	0 to 30A $\pm 5\%$		0 to 6A $\pm 5\%$	0 to 3A $\pm 5\%$
Controlled by external resistance 0 to 10k Ω	Output voltage	0 to 30A $\pm 5\%$		0 to 6A $\pm 5\%$	0 to 3A $\pm 5\%$
Constant voltage operation indication		CV (green LED) lights		CV (green LED) lights	CV (green LED) lights
Constant current operation indication		OC (red LED) lights		OC (red LED) lights	OC (red LED) lights
Digital meter indication					
Voltmeter indication	Red 3-digit LED	Max.99.9V, fixed range	Max.99.9V, fixed range	Max.99.9V, fixed range	Max.99.9V, fixed range
Accuracy	Output ON	$\pm(0.2\% \text{ rdg}+2\text{digits})$	$\pm(0.2\% \text{ rdg}+2\text{digits})$	$\pm(0.2\% \text{ rdg}+2\text{digits})$	$\pm(0.2\% \text{ rdg}+2\text{digits})$
Ammeter indication	Red 3-digit LED	Max.99.9V, fixed range	Max.99.9V, fixed range	Max.99.9V, fixed range	Max.99.9V, fixed range
Accuracy	Output ON	$\pm(1.0\% \text{ rdg}+3\text{digits})$	$\pm(1.0\% \text{ rdg}+3\text{digits})$	$\pm(1.0\% \text{ rdg}+3\text{digits})$	$\pm(1.0\% \text{ rdg}+3\text{digits})$
Functions					
Output ON/OFF		Output on/off is possible (Remote control is possible only for the TAC-R series)			
Remote (TAC-R only)					
Remote sensing	TAC-R series only	Possible by using the (+S) and (-S) terminals on the panel. Compensation possible up to 1V one way.			
Series operation	Master/slave mode, TAC-R series only	One control series operation is possible (within the ground proof voltage).			
Parallel operation	Master/slave mode, TAC-R series only	One control parallel operation is possible (only for the same models)			
Operating conditions (Indoor use only)					
Altitude		Up to 2000m			
Over voltage category		Category 2			
Operating temperature and humidity range		0 to 40 $^{\circ}$ C 10 to 80%RH			
Storage temperature and humidity range		-20 to 60 $^{\circ}$ C 10 to 85%RH			
Cooling method		Natural air cooling			
Output polarity		+(red), -white), GND(black), *grounding possible			
Ground proof voltage		$\pm 200\text{V}$			
Insulation resistance	Between chassis and input supply	DC500V 30M Ω			
	Between chassis and input terminal	DC500V 20M Ω			
Power					
Input power	Voltage fluctuation:within $\pm 10\%$	AC100V/120V/220V/230V, selectable			
	(Approx.)	235VA/165W		450VA/370W	380VA/300W
Dimension, weight					
Dimension (WxHxD)mm		134x147x322	234x160x326mm	210x147x324	210x146x324
Max. dimensions (WxHxD)mm		138x162x345		210x163x347	210x163x347
Weight (kg)		6.6	7.5	10	10
Accessories		Instruction manual (1), power cable (1)			

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