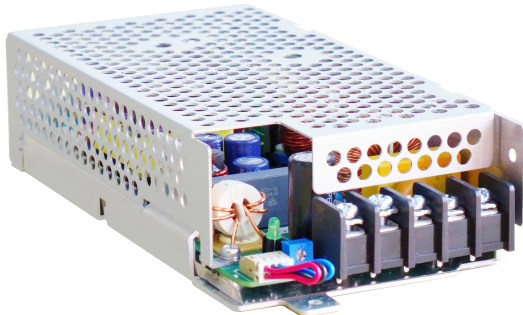


TRFS0931 Series

Ultra-low ripple Modular Power Supply | AC/DC, 50W, Single-pole switch



- Ultra-low ripple and noise
- Effectively reduce common-mode noise
- Low conducted emission, low radiated emission
- Floating ground output, high reliability
- Low leakage current (only 0.15mA at 264VAC)
- Primary-secondary dielectric strength kVAC (1 minute)

Introduction:

The TRFS0931 series of ultra-low ripple single switch power supplies from Teslaman, with a maximum rated output of 24V 50W (other output voltages can be customized) and a minimum ripple peak-to-peak that can be better than 1mV, stands for its outstanding performance, reducing noise to an ultra-low level and demonstrating unprecedented noise reduction capabilities. This series of power supplies is equipped with a sophisticated resonant converter technology on the inside ensuring the stability of the output DC power and effectively filtering out various types of noise that could potentially interfere with the device. As a preferred solution for noise-sensitive applications, TRFS0931 series is particularly suitable for those occasions that have extremely high requirements for power quality. In the field of advanced ultra-fine measurement, it can ensure precise error-free measurement results; in test equipment, it can ensure a stable and reliable test process; and in the medical and biotechnology fields, the TRFS0931 is also an indispensable ideal power choice for all kinds of precision instruments, providing a solid foundation for research and applications in these areas.

Typical Applications:

Semiconductor testing; electrostatic applications; material analysis; electron microscopy; other scientific research nanotechnology instruments; electron microscopes; CD-SEM; DR-SEM; EBI, high-end oscilloscopes; medical diagnosis; inspection machines; audio equipment; RF transceivers.

Specifications:

Input	AC85~264V (Typical AC100~240V), 47~63Hz(Typical 50/60Hz), 0.8A/0.5A.
Output	24VDC, 2.1A, 50.4W(Max).
Line regulation	96mV (0.04%).
Load regulation	150mV (0.625%).
Ripple	1mV (p-p).
Environmental	Operational:-10 °C to 60 °C.Storage:-20 °C to 85 °C.
Humidity	10% ~ 95%, non-condensing
Efficiency	80%.
Cooling	Convection
Protection	Over-voltage, over-current.

Input/Output connection	Screw terminal.
Control	Analog 8Pin connector
Dimensions	W82mm, H42mm, D178.5mm.
Weight	500g.

Description of Model Code

The model code represents the performance and parameters of the power supply, which are:

Maximum output voltage in V;

Maximum output power in W;

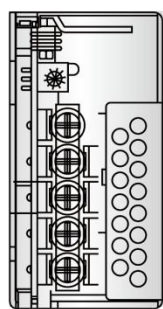
Output polarity, D for differential output;

TRFS0931	D	24	-	50
Model	Differ ential	Rated voltage		Rated Power

TRFS0931 series model selection table(customizable):

Rated output		Model
V	A	
5	10	TRFS0931D5-50
12	4.2	TRFS0931D12-50
15	3.4	TRFS0931D15-50
24	2.1	TRFS0931D24-50
*30	1.7	TRFS0931D30-50
*48	1.1	TRFS0931D48-50

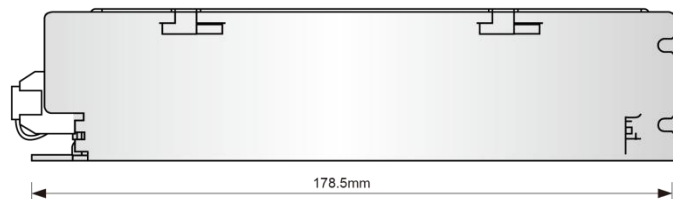
Dimensions:mm



42mm
Front View



184mm
Top View



178.5mm
Side View