

# PSW-2-F

Instrument Power Supply  
Output 24Vdc, 200mA

## DESCRIPTION.

The PSW-2-F is designed differently from a general purpose power supply. Emphasis is placed on withstanding and rejecting EMI events.

The PSW-2-F is an isolated switch mode power supply with an output voltage of 24dc and up to 200mA continuously.

Due to advancements in Switch Mode Power Supply technology, special techniques have been developed that make the PSW-2-F both very low noise (typically less than 4mV) and high precision. Both line and load regulation is better than 0.1% over all conditions. These attributes make the PSW-2-F better than most comparable linear power supplies.



## FEATURES.

- Fixed Power Supply 24Vdc.
- Output Current of 200mA.
- Powers up to 10x 4~20mA 2-wire loops.
- Better than most comparable linear supplies.
- Overload protection.
- Low noise.
- High accuracy 2%.
- Precision regulation.
- Isolated output floats close to earth potential.
- Short circuit tolerant.
- Compact DIN rail mount enclosure.
- Low cost.

## ORDERING INFORMATION.

**PSW-2-F** Instrument Power Supply: Output: 24Vdc, 200mA

## PSW-2-F SPECIFICATIONS.

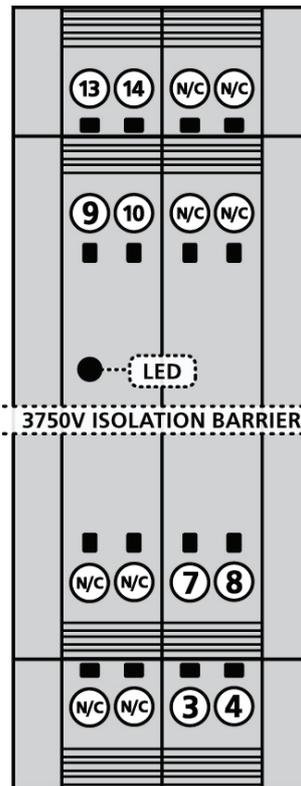
Input voltage supply	85~265Vac/dc
Output voltage	24Vdc
Output current	200mA max
Output ripple	4mV rms/25mVpp max
Load regulation	< 0.1%
Line regulation	< 0.1%
Short circuit tolerance	Indefinite
Compliance	
EMC Emissions	EN55022-A
EMC Immunity	EN50082-1
Safety	EN60950
Mains isolation	250Vac
Isolation test voltages	
Mains to output	3000Vac, 50Hz
Mains to earth	1500Vac, 50Hz
Ambient drift	$\leq \pm 0.01\%/^{\circ}\text{C}$ FSO typical
RF immunity	< 1% effect FSO typical
Operating temperature	0~60°C
Storage temperature	-20~80°C
Operating humidity	5~85% RH max
Mounting	35mm symmetrical DIN rail
Dimensions	79x30x68mm (HxWxD)

**Product Liability.** This information describes our products. It does not constitute guaranteed properties and is not intended to affirm the suitability of a product for a particular application. Due to ongoing research and development, designs, specifications, and documentation are subject to change without notification. Regrettably, omissions and exceptions cannot be completely ruled out. No liability will be accepted for errors, omissions or amendments to this specification. Technical data are always specified by their average values and are based on Standard Calibration Units at 25C, unless otherwise specified. Each product is subject to the 'Conditions of Sale'.

**Warning:** These products are not designed for use in, and should not be used for patient connected applications. In any critical installation an independent fail-safe back-up system must always be implemented.

## WIRING.

- 1) All power and signals must be de-energised before connecting any wiring, or altering any Jumpers or Dip Switches.
- 2) A readily accessible disconnect device and a 1A, 250Vac overcurrent device, must be in the power supply wiring.



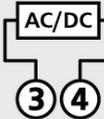
### KEY

③ + Ph	⑨ + 24Vdc
④ $\bar{N}$	⑩ + 24Vdc
⑦ EARTH	⑬ - NEG
⑧ EARTH	⑭ - NEG

### LED INDICATOR

LED On Output exceeds 18Vdc  
LED Off No output

POWER  
85~265V



**CAUTION: Dangerous Voltages may be present. The PSW-2-F has no user serviceable parts. Protective enclosure only to be opened by qualified personnel. Remove ALL power sources before removing protective cover.**



## MOUNTING.

- 1) Mount in a clean environment.
- 2) Draft holes must have minimum free air space of 20mm. Foreign matter must not enter or block draft holes.
- 3) Do not subject to vibration, excess temperature or humidity variations.
- 4) Avoid mounting near power control equipment.
- 5) Allow 10mm minimum clearance between the PSW-2-F terminals and ANY conductive material.
- 6) To maintain compliance with the EMC Directives the PSW-2-F is to be mounted in a fully enclosed steel fire cabinet. The cabinet must be properly earthed, with appropriate input / output entry points and cabling.

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