

7300 Switching Power Supplies



Features

- Regulated 24VDC output voltage
- Five output capacities: 300mA, 600mA, 1.3A, 2.1A and 4.2A
- DIN rail or surface mount
- Universal AC input (85 to 264VAC)
- DC compatible input (105 to 370VDC)
- Fused input
- Auto resetting output overcurrent protection
- Unique spring-up, finger-safe terminals
- Short-circuit protection
- Output voltage adjust (+/- 10%)
- Light-weight plastic housing

Description

+GF+ SIGNET 7300 Switching Power Supplies provide regulated output voltage in compact and lightweight plastic housings that can be DIN Rail or surface mounted. The series includes five different output capacities from 300mA to 4.2A (7.5W to 100W), all of which

accept universal AC line voltage input and meet worldwide standards for performance and safety. These units meet the power requirements for a single system, multiple +GF+ SIGNET instruments or other devices requiring 24VDC operation.

Application

Perfect for use with:

- +GF+ SIGNET Instruments
- Electromagnetic Flow Sensors
- Vortex Flow Sensors
- Suitable for Electric Actuated Valves, including Solenoid
- Suitable for powering passive outputs and relays

System Overview

7300 Switching Power Supplies

Panel Mount +GF+ SIGNET Instrument (sold separately) 	Pipe, Tank, Wall Mount +GF+ SIGNET Instrument (sold separately) +GF+ SIGNET Universal Adapter Kit (3-8050) (sold separately) 	Integral Mount +GF+ SIGNET Instrument (sold separately) +GF+ SIGNET Integral Adapter Kit (3-8052) (sold separately) 	External Relay +GF+ SIGNET 8059 (sold separately) 	Vortex Sensor +GF+ SIGNET 7000 shown (sold separately) 	Electromagnetic Sensor +GF+ SIGNET 2550 shown (sold separately) 	8900 passive relays and outputs
+GF+ SIGNET sensor (sold separately) 	+GF+ SIGNET sensor (sold separately) 	+GF+ SIGNET sensor (sold separately) 				



Compatible Instruments

The +GF+ SIGNET 7300 Power Supply is compatible with the following instruments:

5075	5900	8550
5500	8059	8750
5600	8250	8850
5700	8350	8860
5800CR	8450	8900

Compatible Sensors:

2550	7000	7002
2560	7001	

See individual catalog pages for more information.

Specifications

	7300-7524	7300-1524	7300-3024	7300-5024	7300-1024
Output Capacity	300mA	600mA	1.3A	2.1A	4.2A

General

Operation Indicator	LED				
Dielectric Strength	Between input and output terminals: 3,000VAC, 1 minute				
	Between input terminals and housing: 2,000VAC, 1 minute				
	Between output terminals and housing: 500VAC, 1 minute				
Insulation Resistance	Between input and output terminals/input terminals and housing: 100M Ω min. (500VDC megger)				
Termination	Spring-up, fingersafe terminals with captive M3.5 screws				
Materials	Housing: PPHOX (polyphenylene oxide)				
Mounting	DIN Rail or Surface Mount				
Dimensions (L/W/H)	75/45/70mm	75/45/95mm	75/90/95mm	75/90/95mm	75/145/95mm
	2.9/1.7/2.7 in.	2.9/1.7/3.7 in.	2.9/3.5/3.7 in.	2.9/3.5/3.7 in.	2.9/5.7/3.7 in.
Package Dimensions (L/W/H)	108/82/51mm	133/89/51mm	133/95/89mm	133/95/89mm	209/101/89mm
	4.25/3.25/2.0 in.	5.25/3.5/2.0 in.	5.25/3.75/3.5 in.	5.25/3.75/3.5 in.	8.25/4.0/3.5 in.

Input

Input Voltage	100 to 240VAC nominal (85 to 264VAC), 50/60Hz (47 to 63Hz)				
	110 to 340VDC nominal (105 to 370VDC)				
Input Current (typical)	0.17A @ 100VAC	0.3A @ 100VAC	0.68A @ 100VAC	1.15A @ 100VAC	2.5A @ 100VAC
Internal Fuse Rating	2A	2A	3.15A	3.15A	4A
Inrush Current	50A maximum (at cold start at 200VAC)				
Leakage Current (at no load)	0.75mA maximum (60Hz, measured in conformance with UL, CSA, VDEI)				
Typical Efficiency	75% at 24V	79% at 24V	75% at 24V	79% at 24V	85% at 24V
Overvoltage Protection	Outputs turn off at 105% (typical)				

Output

Voltage & Current Ratings	24V, 0.3A	24V, 0.6A	24V, 1.3A	24V, 2.1A	24V, 4.2A
Voltage Adjustments	$\pm 10\%$ (V.ADJ screw on top)				
Output Holding Time	20 minutes maximum (at full rated input and output)				
Rise Time	200 minutes maximum (at full rated input and output)				
Fluctuation due to Input Voltage change	0.4% maximum				
Fluctuation due to Load Change	1.5% maximum				
Fluctuation due to Ambient Temperature Change	0.05% maximum				
Ripple Voltage	2% peak to peak maximum (including noise)				
Overload Protection	120% typical (Zener-limiting)				

Shipping Weight	.40 lbs. (.18kg)	.48 lbs. (.22kg)	.92 lbs. (.42kg)	.98 lbs. (.44kg)	1.54 lbs. (.70kg)
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Environmental

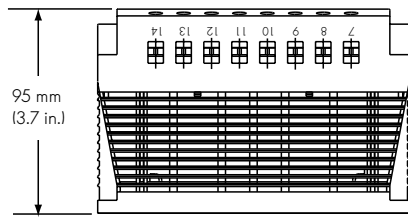
Operating Temperature	-10°C to 60°C (14°F to 140°F) - see derating curves
Storage Temperature	-30°C to 85°C (-22°F to 185°F)
Operating Humidity	20% to 90% relative humidity (no condensation)
Vibration Resistance	45m/s ² , 10 to 55Hz, 2 hours on each of 3 axes
Shock Resistance	294m/s ² , 3 shocks in each of 6 directions

Standards and Approvals

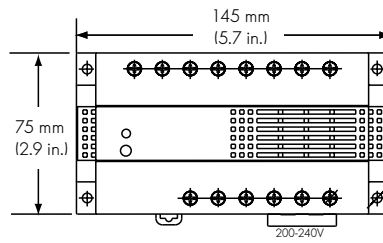
- EN50081-2
- EN50082-2
- EN60529
- EN60950
- CE, UL, UL508 Listed

Dimensions

7300-1024



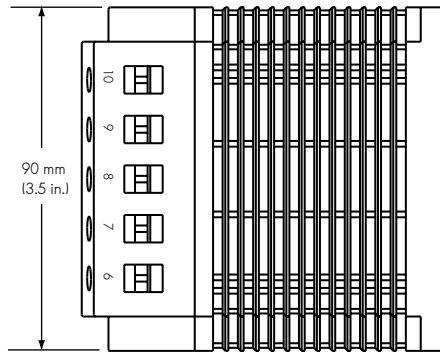
Top View



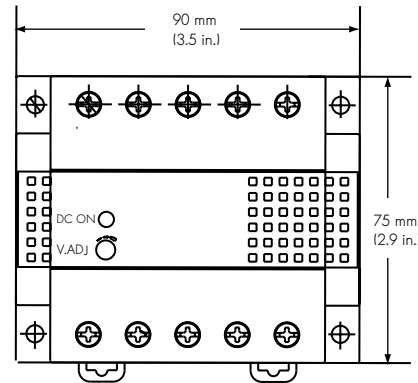
Front View

7300-3024

7300-5024

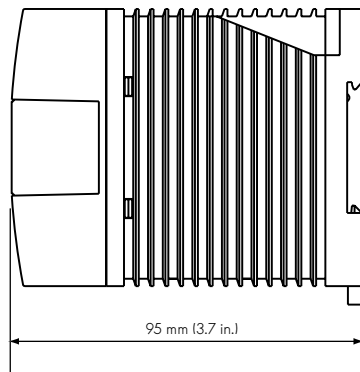


Top View

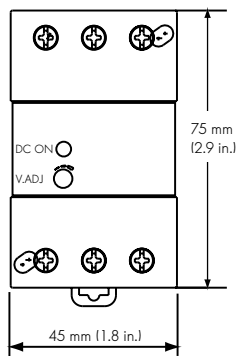


Face View

7300-1524

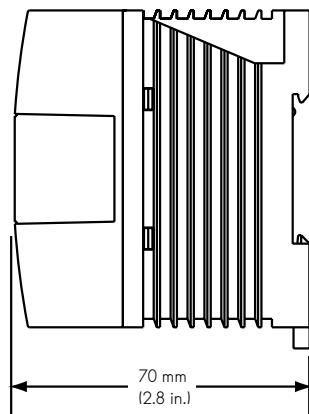


Side View

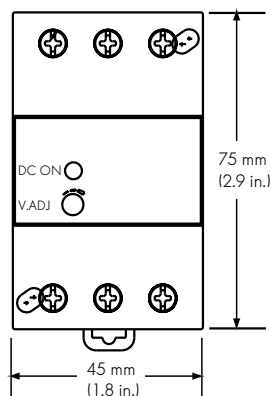


Face View

7300-7524



Side View



Face View

Ordering Information

Part Number	
7300	24 VDC Power Supply
	Power and Input Current Options - Choose one
-7524	7.5 W, 300 mA
-1524	15 W, 600 mA
-3024	30 W, 1.3 A
-5024	50 W, 2.1 A
-1024	100 W, 4.2 A
7300	-3024 Example Part Number

Mfr. Part No.	Code	Mfr. Part No.	Code
7300-7524	159 000 687	7300-5024	159 000 690
7300-1524	159 000 688	7300-1024	159 000 691
7300-3024	159 000 689		

Accessories and Replacement Parts

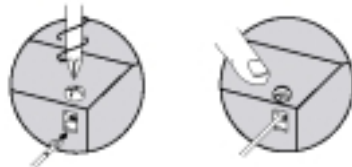
DIN rail, in one meter lengths (1000mm), and DIN rail clips are available. The standard packaging of these power supplies are to be fastened to DIN rails, and accessory clips will keep the supplies from sliding if the rail itself is mounted vertically, for example. Contact the factory for more details.

Mfr. Part No.	Code	Description
6205-0002	159 000 858	1-meter length DIN Rail
6205-0003	159 000 859	End clips for DIN Rail

Other
Products

Installation

The innovative terminals on these +GF+ SIGNET power supplies use a special spring-loaded screw. This makes installation as easy as pushing down and turning with a screwdriver. Installation time is cut in half since the screws do not need to be backed out to install wiring. The screws are held captive once installed and are 100% finger-safe. Screw terminals accept bare wire or ring or fork connectors.



- 1) Insert the wire connector into the slot on the side of the power supply.
- 2) Using a Phillips screwdriver, push down and turn the screw.