

# SSL20 Series

Single, Dual and Triple Output

- 4.21 x 2.24 x 0.98 inch enclosure
- 15-20 W external power supply
- Molded UL94V-0 plastic enclosure
- Stand alone 'listed' equipment
- Overvoltage and short circuit protection
- EN55022, EN55011, FCC conducted and radiated emissions level B
- UL, CSA and VDE safety approvals
- Available RoHS compliant



The SSL20 series is a 15-20 W universal input ac-dc external Class II power supply in a 4.21 x 2.24 x 0.98 inch plastic enclosure. The SSL20 is a low cost series with five single output and two multiple output models in a very small package providing a pre-approved external power solution for a host of worldwide low power portable and desktop applications. The SSL20 provides up to 20 W of output power with free air convection cooling. Standard features include universal input, overvoltage, short circuit protection and EN55022 conducted emissions level B. The series, with full international safety approval and the CE mark, provides pre-approved SELV outputs without the need for further safety approval or mechanical integration into the application system. The SSL20 series is designed for use in low power, portable and desktop data networking, computer and industrial applications requiring low cost external power adapters in a small package.



CE (LVD & EMC)

2 YEAR WARRANTY

All specifications are typical at nominal input, full load at 25 °C unless otherwise stated

## SPECIFICATIONS

### OUTPUT SPECIFICATIONS

Total regulation (Line and load)	Main output	±2.0%
	Auxiliary outputs	±5.0%
Overshoot/undershoot	At turn on	2.0%
Transient response	Main output 50% to 100% full load step	±5.0% max. dev., 1ms recovery to 1.0%
Temperature coefficient		±0.02%/°C, max.
Overvoltage protection	Main output	See table
Short circuit protection		Continuous with auto-restart
Minimum output current		See table

### INPUT SPECIFICATIONS

Input voltage range	Universal input	90-264 Vdc
Input frequency range		47-440 Hz
Input current	90 Vac	0.6 Arms max.
	230 Vac	0.3 Arms max.

### EMC CHARACTERISTICS

Radiated emissions	EN55022/11, FCC part 15	Level B
Conducted emissions	EN55022/11, FCC part 15	Level B

### GENERAL SPECIFICATIONS

Hold-up time	110 Vac @ full load	8 ms
Efficiency	110 Vac @ full load	70% typ.
Isolation voltage	Input/output	3000 Vac
Switching frequency	Fixed	60 kHz, ±10 kHz
Approvals and standards	EN60950, IEC950, UL1950 BAPT, CSA C22.2 No. 950	
Case Material	General Electric Lexan, black	
Flammability rating	UL94V-0	
Weight	120 g (4.5 oz)	
MTBF	MIL-HDBK-217F	150,000 hours min.

### ENVIRONMENTAL SPECIFICATIONS

Thermal performance	Operating, full load	0 °C to +40 °C
	Non-operating	-40 °C to +85 °C
	0°C to +40°C ambient, Full load convection cooled	
	Peak	(See Note 1)
Relative humidity	Non-condensing	5% to 95% RH
Altitude	Operating	10,000 feet max.
	Non-operating	30,000 feet max.
Vibration (See Note 6)	5-500Hz	2.4 G rms
Shock	per MIL-STD-810E	516.4 Part IV

### International Safety Standard Approvals

	VDE0805/EN60950/IEC950 File No. 104722
	UL1950 File No. E136005
	CSA C22.2 No. 950 File No. LR41062
	Certification pending

# SSL20 Series

Single, Dual and Triple Output

For the most current data and application support visit [www.artesyn.com/powergroup/products.htm](http://www.artesyn.com/powergroup/products.htm)

OUTPUT VOLTAGE	OUTPUT CURRENTS			RIPPLE (2)	OVP THRESHOLD (5)	TOTAL REGULATION (3)	MODEL NUMBER (7,8,9)
	MIN	MAX (7)	PEAK (1)				
+5 V (V <sub>A</sub> )	0 A	4.0 A	4.5 A	50 mV	5.6-6.9 V	±2.0%	SSL20-7605J
+12 V (V <sub>A</sub> )	0 A	1.67 A	1.9 A	120 mV	14-16.7 V	±2.0%	SSL20-7612J
+15 V (V <sub>A</sub> )	0 A	1.33 A	1.5 A	150 mV	17.5-21 V	±2.0%	SSL20-7615J
+24 V (V <sub>A</sub> )	0 A	0.83 A	1.0 A	150 mV	29-34.2 V	±2.0%	SSL20-7624J
+48 V (V <sub>A</sub> )	0 A	0.42 A	0.5 A	150 mV	55-64 V	±2.0%	SSL20-7617J
+5 V (V <sub>A</sub> )	0.2 A	1.2 A	1.5 A	50 mV	5.6-6.9 V	±2.0%	SSL20-7629J
+12 V (V <sub>B</sub> )	0.1 A	0.8 A	1.2 A	120 mV	--	±5.0%	
+5 V (V <sub>A</sub> )	0.2 A	1.0 A	1.5 A	50 mV	5.6-6.9 V	±2.0%	SSL20-7607J
+12 V (V <sub>B</sub> )	0.1 A	0.8 A	1.2 A	120 mV	--	±5.0%	
-5 V (V <sub>C</sub> )	0 A	0.1 A	1.0 A	50 mV	--	±5.0%	

## Notes

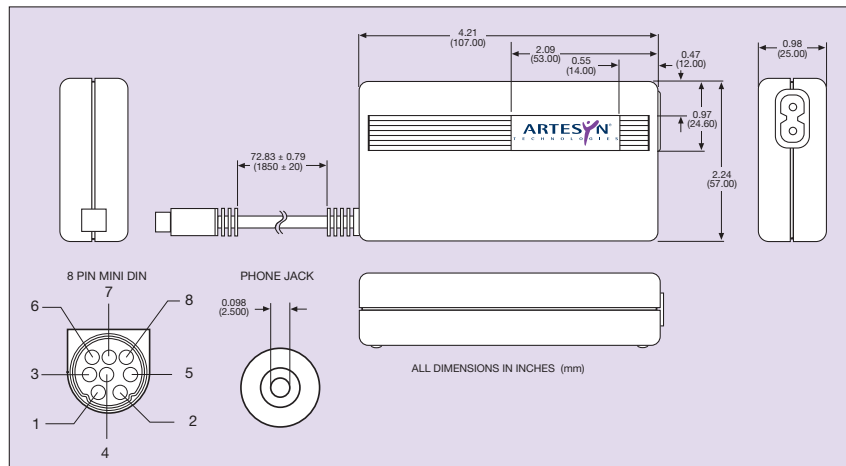
- 1 Peak output current lasting less than 60 seconds with duty cycle less than 5.0%. During peak loading, output voltage may exceed total regulation limits.
- 2 20 MHz bandwidth, peak to peak, measured using a 12 inch twisted pair, terminated with 47  $\mu$ F electrolytic capacitor.
- 3 Total regulation is defined as the static output regulation at 25 °C, including initial tolerance, line voltage within stated limits, load currents within stated limits, and output voltages adjusted to their factory settings.
- 4 To help maintain the power supply safety approvals, the IEC320/C7 input connector cable must be rated minimum 3.0 A and approved by an applicable safety agency for the intended country of use. National and international variations on mains plugs, adapters and customer preference to lead length prevents Artesyn from supplying an IEC320/C7 (or compatible) input connector cable. The IEC320/C7 input (or compatible) connector cable can be sourced locally, e.g. Newark, Qual Electronics, Radio Shack, etc. or other non affiliated distributors.
- 5 Main output voltage protected by Zener diode.
- 6 Three orthogonal axes random vibration, 10 minute test for each axis.
- 7 Maximum output power of 20 Watts for single output models and 15 Watts for multiple output models.
- 8 The 'J' suffix indicates that these parts are Pb-free (RoHS 6/6) compliant. TSE RoHS 5/6 (non Pb-free) compliant versions may be available on special request, please contact your local sales representative for details.
- 9 NOTICE: Some models do not support all options. Please contact your local Artesyn representative or use the on-line model number search tool at <http://www.artesyn.com/powergroup/products.htm> to find a suitable alternative.

## MULTIPLE OUTPUT PIN CONNECTIONS MINI DIN PLUG

OUTPUT PIN NO.	DUAL OUTPUT	TRIPLE OUTPUT	MATING CONNECTOR
1	V <sub>A</sub>	V <sub>A</sub>	
2	V <sub>A</sub>	V <sub>A</sub>	
3	V <sub>A</sub>	V <sub>A</sub>	
4	V <sub>B</sub>	V <sub>B</sub>	
5	Return	V <sub>C</sub>	
6	Return	Return	
7	Return	Return	
8	Return	Return	

## SINGLE OUTPUT PIN CONNECTIONS 2.5 MM JACK PLUG

Inner	V <sub>A</sub>		SWITCHCRAFT Power Jack, P/N 712A or equiv.
Outer	Return		



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