

Product Details and Certifications

Cross Reference RA Part Number: 1609-S350NS A

 Product: **1609-S350NS**

Description: 1609-S Panel Mount, Line Interactive UPS, 350VA/280W, 120V AC



Representative Photo Only (actual product may vary based on configuration sections)

POWER SUPPLY DATA

Bulletin Number	1609 Power Supplies
Power Supply Type	Line Interactive, Panel Mount Uninterruptible
Rated Output Power	350VA (208 W)
Output Voltage	120V AC
Battery Type	40 °C Battery

CERTIFICATIONS AND APPROVALS

UL
CE
CSA
FCC

For UL Certifications Directory:

<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

Industrial Uninterruptible Power Supply

Catalog Number Explanation/ Product Selection/ Accessories



Bulletin 1609-S Series — Industrial Uninterruptible Power Supply

- DIN Rail or back-of-panel mountable
- Line interactive
- Pure sine wave output
- Intelligent battery management system
- Serial communication
- High power capacity

Standards Compliance

UL 1778
CE
CSA C22.2, No. 107
FCC

Certifications

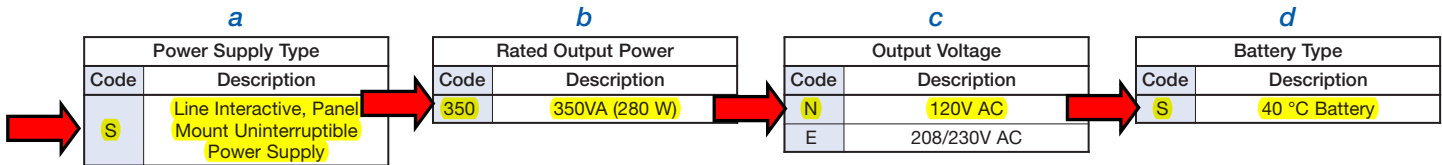
UL Listed (File No. E190749, Guide YEDU)
CSA Certified (File LR1234)

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Catalog Number Explanation

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Product Selection

Output Power	Input Voltage	Cat. No.
350VA (280 W)	120V AC	1609-S350NS
350VA (280 W)	208/230V AC	1609-S350ES

Accessories

Description	Output Power	Cat. No.
40 °C replacement battery	500VA (325 W)	1609-500SBAT
Remote start cable		1609-RSC
DIN Rail kit		1609-SDK1
Dry contact I/O communication cable		1609-SDC1

Industrial Uninterruptible Power Supply

Specifications



		1609-S350NS	1609-S350ES
Input	Wiring	Touch-proof terminal block	
	Nominal Voltage	120V	208/230V
	Voltage Range, Default	81...143V	160...287V
	Voltage Range, Widest, On Line	75...153V	150...300V
	Nominal Current	2.9 A	1.5 A
	Capacity	350VA/280 W	
	Frequency	47...63 Hz	
	PFC	None, load power factor is reflected in the input line current	
On Line Output	Wiring	Touch-proof terminal block	
	Nominal Voltage	120V	208/230V
	Voltage Range, Default	106...127V	208...253V
	Voltage Range, Widest, On Line	97...136V	196...265V
	Transfer Point Accuracy	+/- (2% of transfer voltage + 1.3)	+/- (2% of transfer voltage + 2.6)
	Overload Protection	Alarm at 107% of rated load input circuit breaker	Alarm at 107% of rated load Premises branch protection 10 A or less
	Efficiency	96% @ 100% resistive load	
	Surge Protection	Per EN50091-2	
On Battery Output	Frequency	Nominal +/- 3 Hz (Locked), Nominal +/- 0.5 Hz (Free-running)	
	THD	< 5% at full (linear) load	
	Voltage Regulation	+/- 5%, + 5...-15% after low battery warning	
	Crest Factor	2.5:1	
	Efficiency	77% @ 100% resistive load	
	Overload Protection	Overload indication and shutdown @ 107% of rate load or electronic current limit and shutdown under short circuit condition	
	Battery Pack	Run Time	12 minutes (full load) 24 minutes (50% full load)
Type		Sealed lead acid, valve-regulated hot-swappable, user-replaceable	
Voltage		24V	
Charger		Temperature-compensated, current-limited, float charger	
Recharge Time		Less than 3 hours to 90% capacity	
Lifetime		3...5 years @ 25 °C ambient Lifetime cut in half for every 10 °C above 25 °C	
Environment		Temperature	0...40 °C (operating), -15...45 °C (short-term storage)
	Altitude	10 000 ft (operating)	
	Humidity	0...95% non-condensing (operating)	
	Heat Output	On line, full load: 137 BTU per hour On line, full load, charging: 190 BTU per hour On battery, full load: 1706 BTU per hour	
	Audible Noise	<45 dB @ 1 m (full load)	
Communication	Serial	Serial RS232 DB-9	
	Options	Dry contact I/O communication cable	
Indicators and Controls	Status LEDs	On line (green) AVR low line (yellow) AVR high line (yellow) On battery (yellow) Overload and fault (red) Bad battery (red) Load percentage of full rating bar graph (green) Battery state of charge bar graph (green) Measured input voltage indicated by load bar graph when recessed switch is held	
	Control Buttons	On/self-test/alarm silence/cold start Output off	
	Audible Alarms	On Battery: 4 short beeps repeats about 20 seconds (mute capability) Low Battery: persistent 0.5 second beep every 1 second (mute capability) Disconnected Battery: continual chirping Failure: continuous tone Replace Battery: occasional On/off change: single beep	

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ATTENTION



- Wiring of the UPS should be performed by a qualified electrician. Use appropriate size wires.
- In 230V AC applications, the UPS must be protected with a circuit breaker that complies with European standards for branch rated protection per the country of installation.
- In 208V AC applications, the UPS must be protected by a dual-pole, 10 A branch rated, UL 489 circuit breaker.
- The 120V AC 1609-S350NS has supplementary circuit breaker protection. The unit should be protected by a single-pole, 15 A branch rated, UL 489 circuit breaker.
- Allen-Bradley part number 1492-MCAA115 is suggested.
- **The branch circuit breaker must be off prior to wiring the unit.**

