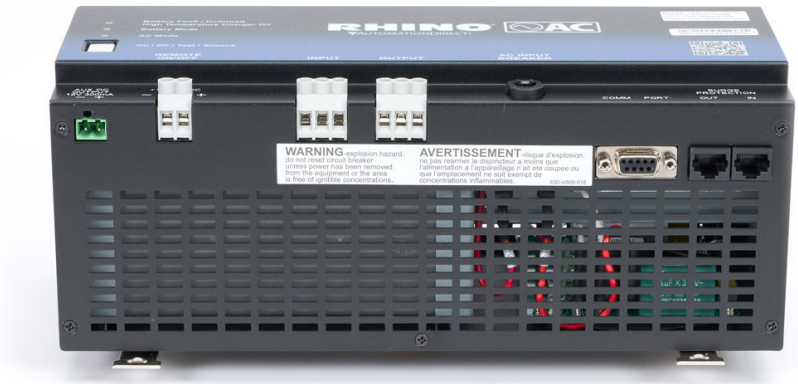
Rhino AC DIN Rail UPS



UPR-A300-120DSH



DIN Rail UPS bottom view showing terminals



DIN Rail UPS rear view showing mounting clips (UPR-A500-120DSH)

Rhino industrial-rated DIN Rail AC Uninterruptible Power Supplies feature a wide operational temperature range in a compact package. Using the latest microcontroller technology, these units provide protection from power quality issues that can adversely affect critical loads found in industrial automation, process control and other similar applications.

These UPS units are specifically designed to conveniently mount on a DIN Rail alongside similarly installed electronics such as PLCs, industrial computers, and process control equipment. Thanks to their compact size and relatively light weight, they can also be installed internal to automated devices which need basic protection against voltage dips and momentary power interruptions.

Features

- Compact design
- Rugged, industrially-rated enclosure
- Flexible mounting options
- Spring loaded mounting clips for secure and easy installation
- Designed to handle wide temperature ranges and harsh environments
- IP20-rated hardwire terminals for AC connections
- Included valve regulated lead acid (VRLA) battery features maintenance-free absorbent glass mat (AGM) technology and a wide operating temperature range
- High temp battery charger shut-off
- Easily removable battery
- Overload, overcharge and fault protection
- Fanless design - internal temperature maintained through natural convection
- Diagnostic data available via built-in ASCII / RS-232 communication interface
- Remote on/off input available for external control of the unit
- On-board RJ45 data line surge protection for peripheral equipment.

Rhino AC DIN Rail UPS Selection Guide

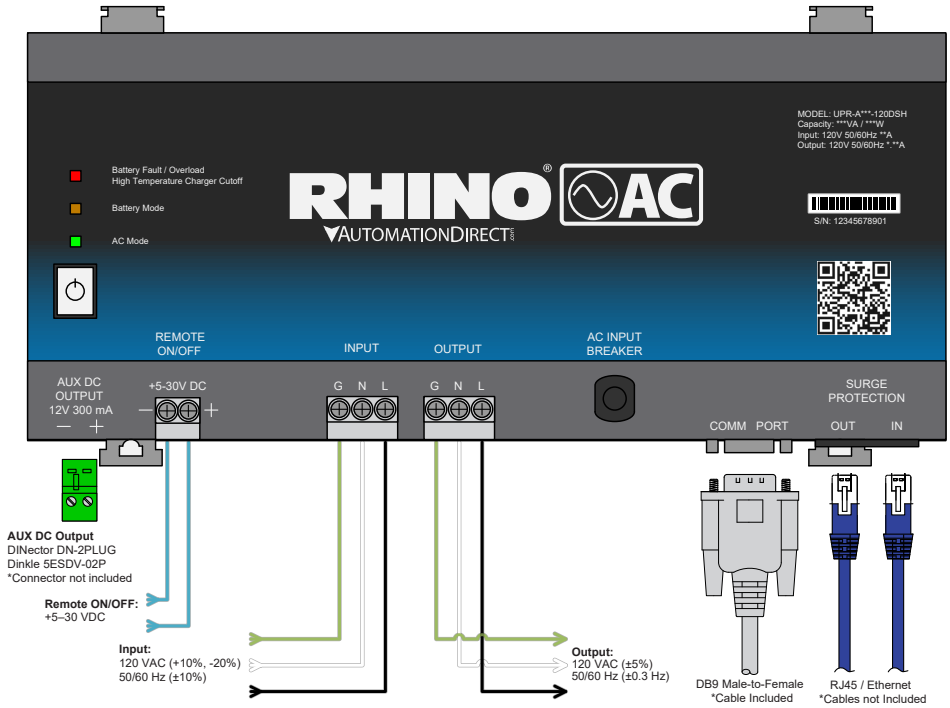
Part Number	Price	Input Voltage	Input Current Rating	Output Voltage	Output Power Rating	Output Current Rating	Drawing
UPR-A300-120DSH	$505.00	120 VAC	10A	120 VAC	500 VA / 300W	4.17A	PDF
UPR-A500-120DSH	$664.00	120 VAC	10A	120 VAC	850 VA / 510W	7.1A	PDF

Rhino AC DIN Rail UPS

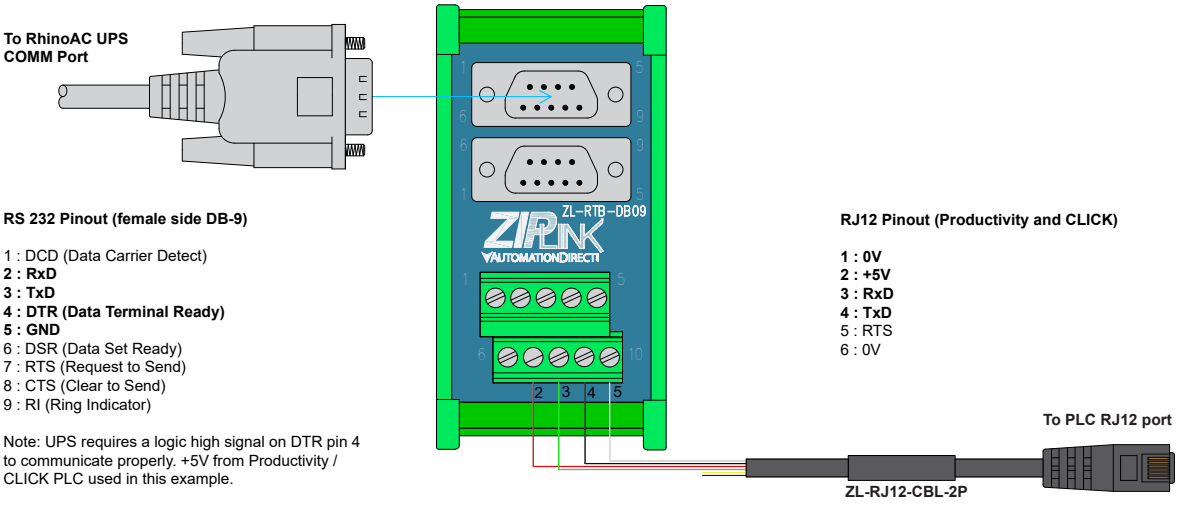
Rhino AC DIN Rail UPS Specifications										
Part Number	***UPR-A300-120DSH***					***UPR-A500-120DSH***				
Capacity	500 VA / 300W					850 VA / 510W				
Input										
Voltage	120V (+10%, -20%)									
Frequency	50 Hz ± 10%; 60 Hz ± 10%									
Maximum Input Current	10A									
Inrush Current	25A									
Transient Suppression	EN61000-4-5, L-N: 1 kV, L-G or N-G: 2 kV									
Short Circuit Protection	Yes									
Battery String Voltage	12 VDC									
Output										
Power Rating	500 VA / 300W					850 VA / 510W				
Output Voltage	120V ± 5%									
Frequency (On Battery)	50 / 60 Hz ± 0.3 Hz									
Output Power Factor	0.6									
Waveform	Stepped square wave									
Load Crest Factor	3:1									
Transfer Time	4 to 6 ms typical									
Overload Capacity	UPS auto power off if overload exceeds 105% of nominal at 20s; 120% at 10s; 130% at 3s									
Short Circuit Protection	UPS output cut off immediately									
Battery										
Type	Sealed, maintenance-free lead acid battery									
Battery Quantity	12V 7.2 Ah x 1					12V 9 Ah x 1				
Typical Recharge Time	8 hours to 90% capacity after full discharge									
Backup Time 500 VA / 300W										
Percent of Max Load (W)	10	20	30	40	50	60	70	80	90	100
Minutes	110	48	24	15	14	10	7	6	4	4
Backup Time 850 VA / 510W										
Percent of Max Load (W)	10	20	30	40	50	60	70	80	90	100
Minutes	73	32	17	13	8	6	5	3	2	2
General										
Dimensions (WxDxH)	11.1 x 4.6 x 4.9in [281 x 116 x 124mm]									
Weight	9.7 lb [4.4 kg]					10.8 lb [4.9 kg]				
Mounting	DIN rail or panel mount									
Input Connection	Hardwire terminal block									
Output Connection to Loads	Hardwire terminal block									
Cooling	Natural convection									
Transportation Compliance	Conforms to ISTA 2A									
Noise	< 40 dBA (1m from surface)									
Altitude	5000ft [1524m] without derating									
Operating Temperature	0–49 °C (± 2 °C) [32–120 °F]									
Storage Temperature	-15 to +60 °C [+5 to +140 °F]									
Humidity	<95%, non-condensing									
Approvals	Ordinary Locations: UL 1778, CSA C22.2 NO. 107.3-14 (cURus - UL file # E550237) Hazardous Locations: UL 121201, CSA C22.2 NO. 213-17 (cURus - UL file # E550236)									
TSCA Section 12b	Exempt									

Rhino AC DIN Rail UPS

Connection Example



PLC Connection Example



RS 232 Pinout (female side DB-9)

1 : DCD (Data Carrier Detect)
2 : RxD
3 : TxD
4 : DTR (Data Terminal Ready)
5 : GND
6 : DSR (Data Set Ready)
7 : RTS (Request to Send)
8 : CTS (Clear to Send)
9 : RI (Ring Indicator)

Note: UPS requires a logic high signal on DTR pin 4 to communicate properly. +5V from Productivity / CLICK PLC used in this example.

RJ12 Pinout (Productivity and CLICK)

1 : 0V
2 : +5V
3 : RxD
4 : TxD
5 : RTS
6 : 0V

DIN Rail UPS Mounting Instructions

Start by tilting the UPS unit as shown below, with the upper edge of the UPS leaning forward. Installation of the UPS unit on the 35mm DIN rail can then be accomplished using the following procedure:

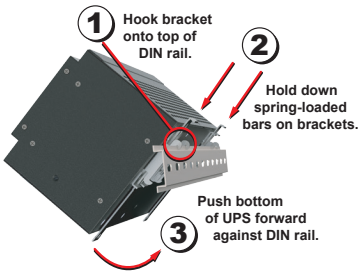
Step 1: Place upper hooks of DIN rail brackets onto upper edge of DIN rail.

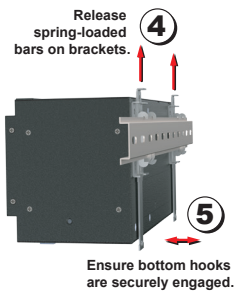
Step 2: Push and hold down the spring-loaded bars on the DIN rail brackets.

Step 3: Then push bottom of UPS forward against the DIN rail.

Step 4: Finally, release the spring-loaded bars on the brackets.

Step 5: Slightly pull bottom of UPS outward to ensure that the spring-loaded hooks are securely engaged onto lower edge of the DIN rail.





Recommended ventilation space allowance: 2in [50mm] top and bottom.