

NEMA 3R enclosure housing a SMART1548ET UPS system and extreme temperature batteries (available battery models: RBC12V9ET, RBC12V20ET, RBC12V55ET, RBC12V100ET)

## Eaton's Tripp Lite series SmartPro<sup>®</sup> extreme temperature network UPS systems & batteries, SmartRack<sup>®</sup> NEMA3R rack enclosures

### Power solutions designed for extreme temperatures

Unlike indoor network environments, the temperature in outdoor and remote network environments can fluctuate dramatically. Eaton Tripp Lite series extreme temperature network UPS systems and batteries are rated for operation in a wide range of temperatures, providing complete power protection in industrial, outdoor and transportation environments.

These TAA-compliant, pure sine wave UPS systems provide safe and reliable power to network equipment in traffic signals, parking ramp metering, oil fields and off-shore oil rigs, security systems, government and military facilities, tolling systems, railroad crossings, network closets at cell tower bases and other extremely hot or cold applications.

#### RAPID DEPLOYMENT

- All connections and controls are on the same side to provide ease of installation, use and maintenance.
- UPS external battery connectors accommodate a range of Eaton Tripp Lite series extreme temperature battery solutions. Multiple Ah capacities are available to meet the varying runtime and fitment needs for outdoor enclosures.
- Eaton Tripp Lite series SmartRack NEMA 3R racks and accessories offer the best protection for sensitive electronics that need to be stored in outdoor environments. Racks are available in various heights and colors.

#### ROBUST PERFORMANCE

- Line-interactive technology ensures continuous operation through environmental and power quality issues.
- Built-in thermal management extends battery life and lowers maintenance costs.
- Pure sine wave output in both AC and battery modes offers continuous operation in traffic management systems, telecom edge or surveillance equipment applications.

#### DURABLE CONSTRUCTION

- UPS and extreme temperature battery solutions provide reliable power protection in temperatures ranging from -40°F to +176°F (-40°C to +80°C).
- NEMA 3R-rated enclosures protect equipment against the ingress of water, solid foreign objects and ice forming on the outside of the enclosure.

#### COMPREHENSIVE MANAGEMENT AND MAINTENANCE

- LCD control panel offers a wide variety of UPS status and site power information, control options, UPS configuration settings and event logs.
- Remote management reduces on-site response requests.
- Dry contacts allow industrial control management.

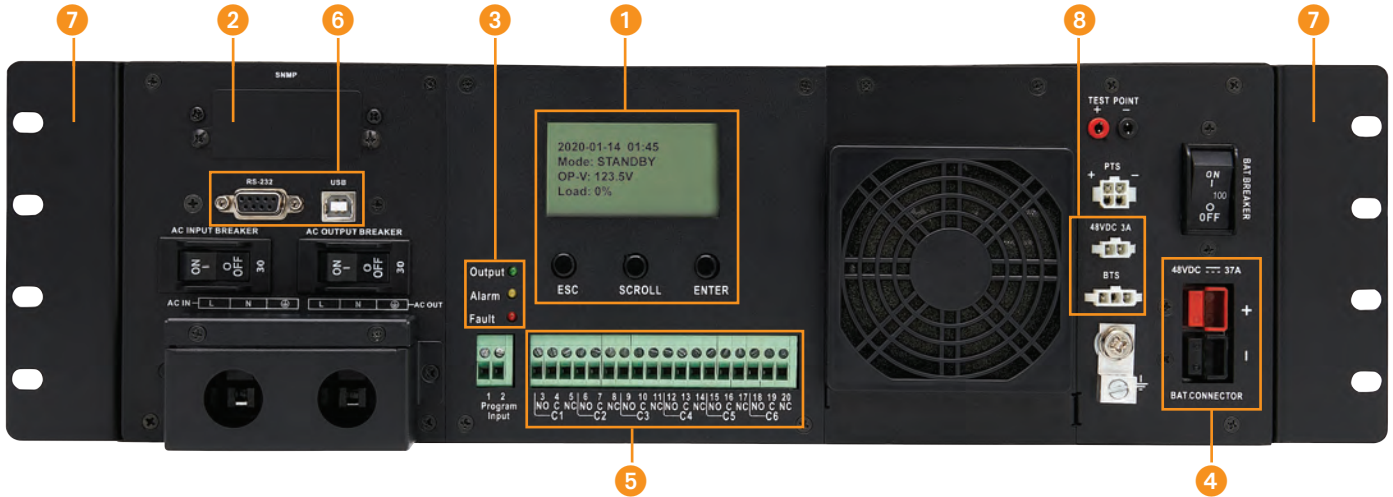
#### PRODUCT SUPPORT

- Eaton provides free product support via phone, email or chat. If you have a question or need to find a replacement battery, Eaton can help.

# EATON

Powering Business Worldwide

## Feature focus



**1 Front-Panel LCD**

**2 Network Card Slot**  
Install a WEBCARDLXMINI (sold separately) for remote monitoring and control.

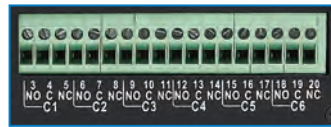


**3 Indicator LEDs**

**4 Battery Connector**  
Connect a Tripp Lite by Eaton extreme temperature battery (sold separately) or a user-supplied 24V or 48V DC battery system.



**5 Output Dry Contacts**  
Set up customizable status alerts with six sets of dry output contacts.



**6 Management Options**  
Configure the UPS via RS-232/USB ports and a connected computer running Windows® HyperTerminal.



**7 Removable Mounting Brackets**

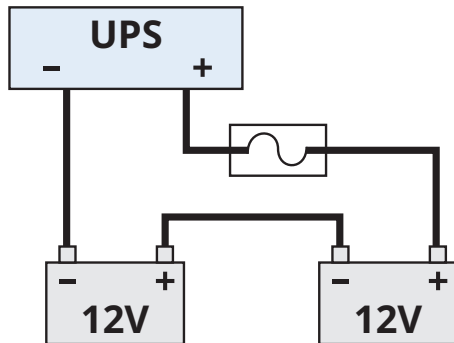
**8 Environmental Connections**  
Connect a user-supplied external fan and a battery temperature sensor cable.

**NEMA 3R Enclosures**  
(x16) Tripp Lite by Eaton models protect 6U-12U of equipment.



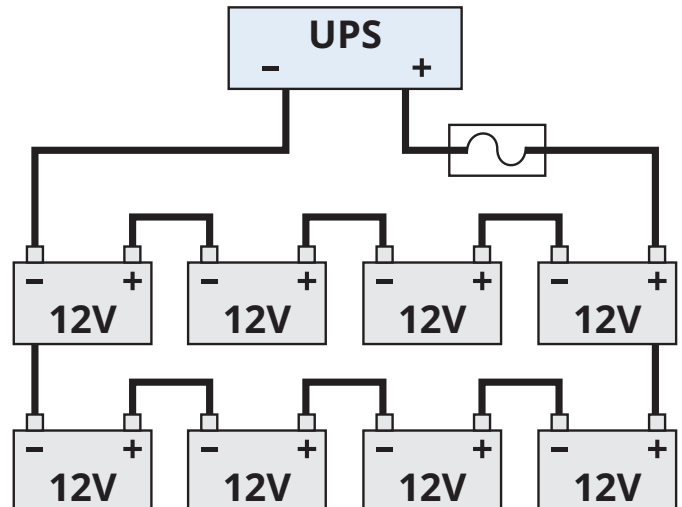
### Wired series battery system for 24V UPS

Connecting with a wired series of batteries increases the DC voltage:



### Wired series-parallel battery system for 48V UPS

Connecting with a series-parallel battery configuration increases the DC voltage and amp hour:



## SPECIFICATIONS

Model	VA/ Watts*	Input/Output Voltage	Supported Battery System	Input/Output Connection	Operating Temperature	Rack Size	Dimensions (HxWxD)	Unit Weight
SMART1524ET	2000/1600	120V	24V (User-supplied)	Hardwire	-40°F to +176°F (-40°C to +80°C)	3U	5.2 x 15.8 x 9.5 in. (13.2 x 40.1 x 24.1 cm)	32.4 lb. (14.7 kg)
SMART1548ET	2000/1600	120V	48V (User-supplied)	Hardwire	-40°F to +176°F (-40°C to +80°C)	3U	5.2 x 15.8 x 9.5 in. (13.2 x 40.1 x 24.1 cm)	32.4 lb. (14.7 kg)

### Note:

- UPS unit comes with ANDERSON PA75 DC Connection kit
- Battery temperature sensor cable protects the battery system from overcharging in high-temp environments.

\* Each UPS can provide the below output capacity based on ambient operating temperatures shown below:

Output capacity: 2000VA/1600W Ambient operating temperature: -40°C to +55°C	Output capacity: 1500VA/1200W Ambient operating temperature: 55°C to 75°C	Output capacity: 1200VA/1000W Ambient operating temperature: 75°C to 80°C
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### Extreme Temperature Batteries (sold separately)

Model	Ampere Hour Rate	DC Voltage	Supported Battery	Input/Output Connection	Operating Temperature	Rack Size	Dimensions (HxWxD)	Unit Weight
RBC12V9ET	8.5Ah	12V	Connect multiple batteries of the same AH in series/parallel to match UPS system voltage and application AH requirement (Max 200AH per UPS)	T2	-40°F to +167°F (-40°C to +75°C)	-	3.88 x 5.94 x 2.55 in. (9.9 x 15.1 x 6.5 cm)	5.77 lb. (2.6 kg)
RBC12V20ET	20Ah	12V		I1 (M5 bolt)	-40°F to +167°F (-40°C to +75°C)	-	6.5 x 7.12 x 2.99 in. (16.5 x 18.1 x 7.6 cm)	14 lb. (6.4 kg)
RBC12V55ET	55Ah	12V		I2 (M6 bolt)	-40°F to +167°F (-40°C to +75°C)	-	8.12 x 8.98 x 5.45 in. (20.6 x 22.8 x 13.8 cm)	39.45 lb. (17.9 kg)
RBC12V100ET	100Ah	12V		I2 (M6 bolt)	-40°F to +167°F (-40°C to +75°C)	-	8.41 x 12.15 x 6.65 in. (21.4 x 30.9 x 16.9 cm)	66.56 lb. (30.2 kg)

### Accessories (User supplied)

SMART1524ET - Connecting the Batteries to UPS recommended battery cable gauges are 6 AWG with a maximum recommended length of 6.56 ft. / 2 m.

SMART1548ET - Connecting the Batteries to UPS recommended battery cable gauges are 8 AWG with a maximum recommended length of 6.56 ft. / 2 m.

SMART1524ET - Requires a 24V 150A rated fuse bank. Recommended DC fusing should be installed 18 in. / 0.45 m from the battery system's positive connection wire to the UPS.

SMART1548ET - Requires a 48V 70A rated fuse bank. Recommended DC fusing should be installed 18 in. / 0.45 m from the battery system's positive connection wire to the UPS.

### NEMA 3R Outdoor Enclosures (Sold Separately)

Model	Cabinet Type	Fan Voltage	Equipment Mount	Input/Output Connection	Equipment Depth (Max)	Rack Size	Dimensions (HxWxD)	Cabinet Weight
SRN3RG12US	NEMA 3R	120V	Front	NEMA 5-15P	30 in. (76.2 cm)	12U	28.49 x 25.17 x 32.13 in. (72.4 x 63.9 x 81.6 cm)	146.44 lb. (66.4 kg)
SRN3RG12UHD	NEMA 3R	120V	Side	NEMA 5-15P	34 in. (86.4 cm)	12U	28.65 x 26.06 x 36.16 in. (72.7 x 66.2 x 91.8 cm)	216.84 lb. (98.4 kg)
SRN3RG18UHD	NEMA 3R	120V	Side	NEMA 5-15P	34 in. (86.4 cm)	18U	40.32 x 26.91 x 36.16 in. (102.4 x 68.4 x 91.8 cm)	259.55 lb. (117.7 kg)

## EATON TRIPP LITE SERIES EXTREME TEMP BATTERY RUNTIME CHART

SMART1524ET (24V)		Configuration: 2x RBC12V100ET wired in a series configuration for a 24V 100Ah battery system.		Configuration: 4x RBC12V100ET wired in a series-parallel configuration for a 24V 200Ah battery system.			
Operating Temp	Max Wattage Output	Load (Watts)	Backup Time @ 24VDC 100Ah (min)	Backup Time @ 24VDC 200Ah (min)			
75°C to 80°C		150	800	1680			
		300	350	800			
		450	235	520			
		600	145	350			
		750	113	285			
		900	101	235			
		1000	91	212			
		55°C to 75°C		1050	86	183	
				1200	68	145	
				1350	60	126	
-40°C to +55°C		1400	57	122			
		1450	55	117			
		1500	54	113			
		1600	50	106			
		Configuration: 2x RBC12V55ET wired in series parallel configuration for a 24V 55Ah battery system		Configuration: 4x RBC12V55ET wired in series-parallel configuration for a 24V 110Ah battery system			
Operating Temp	Max Wattage Output	Load (Watts)	Backup Time @ 24VDC 55Ah (min)	Backup Time @ 24VDC 110Ah (min)			
75°C to 80°C		150	299	599			
		300	150	301			
		450	106	211			
		600	79	158			
		750	63	127			
		900	53	106			
		1000	48	95			
		55°C to 75°C		1050	45	91	
				1200	40	79	
		-40°C to +55°C		1350	35	70	
1400	34			68			
1450	33			66			
1500	32			63			
1600	30			59			

# EATON TRIPP LITE SERIES EXTREME TEMP BATTERY RUNTIME CHART

			Configuration: 2x RBC12V20ET wired in series configuration for a 24V 20Ah battery system	Configuration: 4x RBC12V20ET wired in series-parallel configuration for a 24V 40Ah battery system		
	Operating Temp	Max Wattage Output	Load (Watts)	Backup Time @ 24VDC 20Ah (min)	Backup Time @ 24VDC 40Ah (min)	
SMART1524ET + RBC12V20ET	75°C to 80°C		150	192	218	
			300	96	109	
			450	64	77	
			600	48	58	
			750	38	46	
			900	32	38	
	55°C to 75°C		1000	29	35	
			1050	27	33	
			1200	24	29	
	-40°C to +55°C		1350	21	26	
			1400	21	25	
			1450	20	24	
			1500	19	23	
			1600	18	22	
	<b>SMART1548ET (48V)</b>			Configuration: 4x RBC12V100ET wired in a series configuration for a 48V 100Ah battery system.	Configuration: 8x RBC12V100ET wired in a series-parallel configuration for 48V 200Ah battery system.	
	Operating Temp	Max Wattage Output	Load (Watts)	Backup Time @ 48VDC 100Ah (min)	Backup Time @ 48VDC 200Ah (min)	
SMART1548ET + RBC12V100ET	75°C to 80°C		160	1581	3161	
			320	751	1581	
			480	491	1054	
			640	331	760	
			800	268	615	
			960	221	508	
	55°C to 75°C		1000	212	487	
			1120	189	435	
			1200	176	406	
	-40°C to +55°C		1280	136	335	
			1440	120	295	
			1600	106	257	
				Configuration: 4x RBC12V55ET wired in a series configuration for a 48V 55Ah battery system.	Configuration: 8x RBC12V55ET wired in a series-parallel configuration for 48V 110Ah battery system.	
		Operating Temp	Max Wattage Output	Load (Watts)	Backup Time @ 48VDC 55Ah (min)	Backup Time @ 48VDC 110Ah (min)
	SMART1548ET + RBC12V55ET	75°C to 80°C		160	561	1123
			320	282	564	
			480	198	396	
			640	149	297	
			800	119	238	
			960	99	198	
55°C to 75°C			1000	95	190	
			1120	85	170	
			1200	79	158	
-40°C to +55°C			1280	74	149	
			1440	66	132	
			1600	59	119	
			Configuration: 4x RBC12V20ET wired in a series configuration for a 48V 20Ah battery system.	Configuration: 8x RBC12V20ET wired in a series-parallel configuration for 48V 40Ah battery system.		
		Operating Temp	Max Wattage Output	Load (Watts)	Backup Time @ 48VDC 20Ah (min)	Backup Time @ 48VDC 40Ah (min)
SMART1548ET + RBC12V20ET		75°C to 80°C		160	204	408
			320	103	205	
			480	72	144	
			640	54	108	
			800	43	86	
			960	36	72	
	55°C to 75°C		1000	35	69	
			1120	31	62	
			1200	29	58	
	-40°C to +55°C		1280	27	54	
			1440	24	48	
			1600	22	43	

Learn more at [TrippLite.Eaton.com/SmartProUPS](https://TrippLite.Eaton.com/SmartProUPS)



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 Printed in USA  
 23-08-129  
 January 2024

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