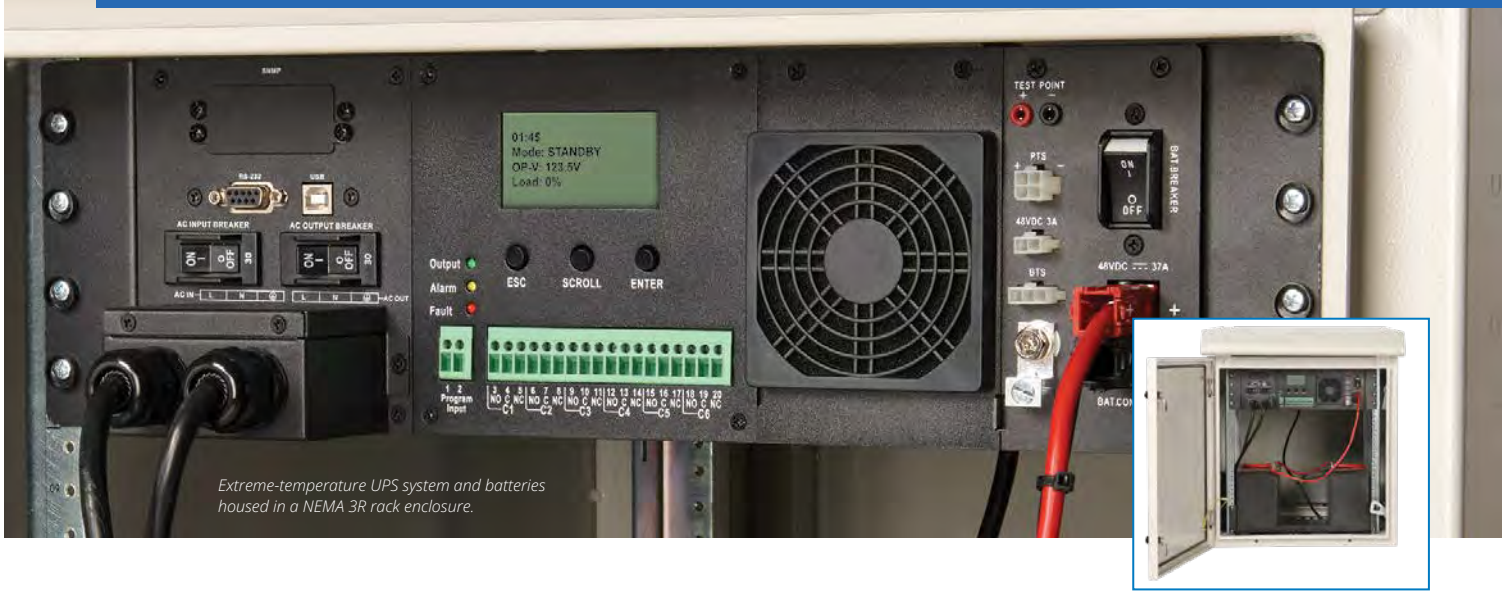
Product brochure

TRIPP LITE SERIES



Extreme-temperature UPS system and batteries housed in a NEMA 3R rack enclosure.

Extreme temperature network UPS systems, batteries and NEMA 3R rack enclosures

Power solutions designed for extreme temperatures

Temperatures in outdoor and remote network environments can fluctuate dramatically. Eaton Tripp Lite series SmartPro® 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. They are perfect for installation in Eaton Tripp Lite series SmartRack® NEMA 3R rack enclosures.

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 capacities are available to meet a variety of runtime and fitment needs.
- NEMA 3R rack enclosures and accessories offer the best protection for sensitive electronics that need to be stored in outdoor environments. Enclosures 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 supports 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 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 capability reduces on-site response requests.
- Dry contacts allow industrial control management.

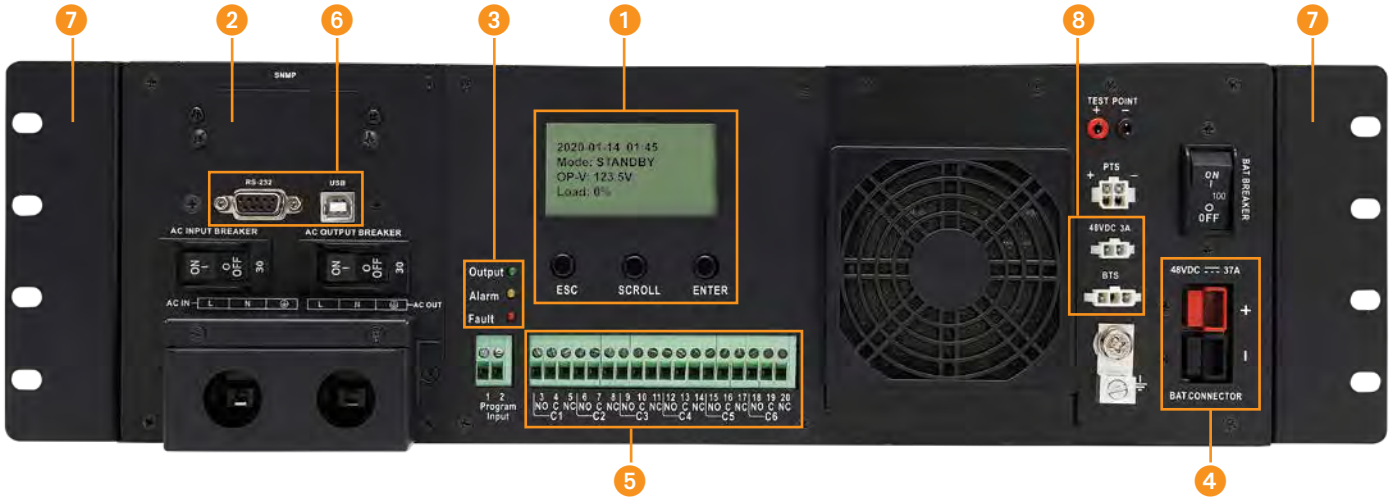
Product support

- 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 WEBCARDLXMINI (sold separately) for remote monitoring and control.

3. **Status LEDs**

4. **Battery connector**
Connect Eaton Tripp Lite series extreme temperature batteries (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 serial and USB ports and a connected PC running a terminal emulation program.

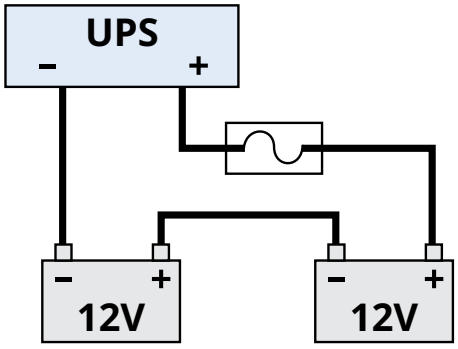
7. **Removable mounting brackets**

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

NEMA 3R rack enclosures
16 different Eaton Tripp Lite series models are available to protect 6U to 18U of equipment.

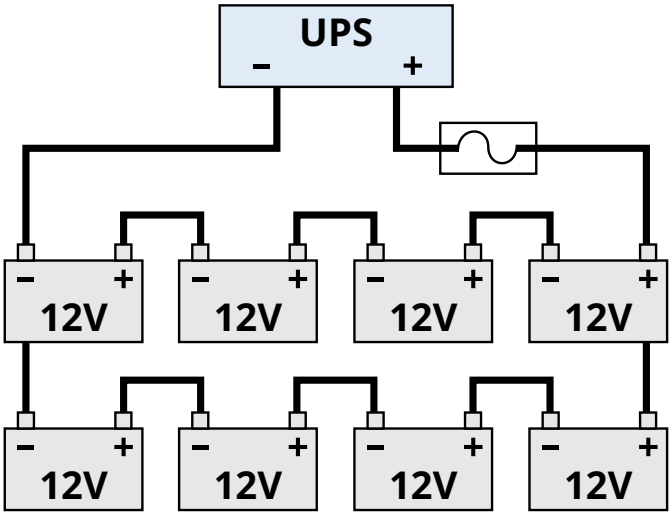
Wired series battery system for 24V UPS

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 hours:



Specifications

Model	Output capacity*	Input/output voltage	Battery system voltage	AC input/output connection	Operating temperature	Rack size	Unit dimensions (HxWxD)	Unit weight
SMART1524ET	2000VA / 1600W	120V AC	24V DC (Batteries sold separately)	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	2000VA / 1600W	120V AC	48V DC (Batteries sold separately)	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)

Notes:

1. The UPS comes with an ANDERSON PA75 DC connection kit. Batteries are sold separately. Battery cabling and fusing are user-supplied. See below for more information.
2. Included battery temperature sensor cable helps protect the battery system from overcharging in high-temperature environments.

* UPS output capacity depends on the max operating temperature by load:

Max operating temperature by load: -40°C to +55°C Output capacity: 2000VA/1600W	Max operating temperature by load: +55°C to +75°C Output capacity: 1500VA/1200W	Max operating temperature by load: +75°C to +80°C Output capacity: 1200VA/1000W

Extreme temperature batteries (Sold separately)

Model	Ampere hour rating	Battery voltage	Battery system voltage	Input/output connection	Operating temperature	Rack size	Unit dimensions (HxWxD)	Unit weight
RBC12V55ET	55 Ah	12V DC	Connect multiple batteries of the same Ah rating in series or series-parallel to match the UPS system's battery system voltage and the application's runtime requirement (Max 200 Ah per UPS)	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	100 Ah	12V DC		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)

User-supplied battery cabling and fusing

For SMART1524ET	Recommended battery cable gauge for connecting batteries to UPS is 6 AWG with a maximum length of 6.56 ft. (2 m). Requires a DC fuse bank rated for 24V/150A installed 18 in. (0.45 m) from the battery system's positive connection wire to the UPS.
For SMART1548ET	Recommended battery cable gauge for connecting batteries to UPS is 8 AWG with a maximum length of 6.56 ft. (2 m). Requires a DC fuse bank rated for 48V/70A installed 18 in. (0.45 m) from the battery system's positive connection wire to the UPS.

NEMA 3R outdoor rack enclosures (Sold separately)

Model	Cabinet type	Fan voltage	Equipment mounting	Input/output connection	Maximum equipment depth	Rack size	Unit dimensions (HxWxD)	Unit 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)

Estimated runtime for SMART1524ET UPS + RBC12V100ET batteries (Sold separately)

		SMART1524ET UPS + (2) RBC12V100ET batteries wired in series	SMART1524ET UPS + (4) RBC12V100ET batteries wired in series-parallel
Max operating temperature by load	**Load**	**Backup runtime @ 24V DC, 100 Ah**	**Backup runtime @ 24V DC, 200 Ah**
+75°C to +80°C	150W	692 min.	1402 min.
	300W	352 min.	742 min.
	400W	258 min.	520 min.
	600W	154 min.	341 min.
	800W	113 min.	259 min.
	900W	89 min.	203 min.
	1000W	80 min.	184 min.
+55°C to +75°C	1050W	76 min.	176 min.
	1200W	69 min.	163 min.
-40°C to +55°C	1350W	59 min.	138 min.
	1400W	57 min.	133 min.
	1450W	54 min.	128 min.
	1500W	52 min.	123 min.
	1600W	43 min.	115 min.

Estimated runtime for SMART1524ET UPS + RBC12V55ET batteries (Sold separately)

		SMART1524ET UPS + (2) RBC12V55ET batteries wired in series	SMART1524ET UPS + (4) RBC12V55ET batteries wired in series-parallel
Max operating temperature by load	**Load**	**Backup runtime @ 24V DC, 55 Ah**	**Backup runtime @ 24V DC, 110 Ah**
+75°C to +80°C	150W	364 min.	1540 min.
	300W	196 min.	393 min.
	400W	126 min.	292 min.
	600W	88 min.	176 min.
	800W	54 min.	128 min.
	900W	49 min.	113 min.
	1000W	47 min.	98 min.
+55°C to +75°C	1050W	35 min.	93 min.
	1200W	30 min.	74 min.
-40°C to +55°C	1350W	31 min.	62 min.
	1500W	28 min.	55 min.
	1600W	18 min.	47 min.

Estimated runtime for SMART1548ET UPS + RBC12V100ET batteries (Sold separately)

		SMART1548ET UPS + (4) RBC12V100ET batteries wired in series	SMART1548ET UPS + (8) RBC12V100ET batteries wired in series-parallel
Max operating temperature by load	**Load**	**Backup runtime @ 48V DC, 100 Ah**	**Backup runtime @ 48V DC, 200 Ah**
+75°C to +80°C	160W	1174 min.	2348 min.
	320W	751 min.	1581 min.
	400W	431 min.	862 min.
	640W	331 min.	760 min.
	800W	269 min.	538 min.
	960W	221 min.	508 min.
	1000W	212 min.	487 min.
+55°C to +75°C	1120W	189 min.	435 min.
	1200W	122 min.	355 min.
-40°C to +55°C	1280W	161 min.	335 min.
	1440W	139 min.	295 min.
	1600W	117 min.	257 min.

Estimated runtime for SMART1548ET UPS + RBC12V55ET batteries (Sold separately)

		SMART1548ET UPS + (4) RBC12V55ET batteries wired in series	SMART1548ET UPS + (8) RBC12V55ET batteries wired in series-parallel
Max operating temperature by load	**Load**	**Backup runtime @ 48V DC, 55 Ah**	**Backup runtime @ 48V DC, 110 Ah**
+75°C to +80°C	160W	882 min.	1765 min.
	320W	421 min.	842 min.
	400W	273 min.	552 min.
	640W	188 min.	377 min.
	800W	125 min.	263 min.
	960W	117 min.	234 min.
	1000W	95 min.	221 min.
+55°C to +75°C	1120W	84 min.	184 min.
	1200W	75 min.	161 min.
-40°C to +55°C	1280W	71 min.	149 min.
	1440W	63 min.	132 min.
	1600W	54 min.	105 min.

Learn more at
TrippLite.Eaton.com

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Powering Business Worldwide

Printed in USA
Publication No. BR153206EN / 25-02-181
March 2025

Follow us on social media to get the latest product and support information.