



No Power = No Safety

LinkUPS™ Backup Power Systems for Railroad Communications and Signaling

The new Ventev LinkUPS™ outdoor backup power system is specifically designed to provide both primary and uninterrupted, reliable standby power for critical signaling equipment in harsh environmental applications. The durable NEMA 3R weatherproof enclosure has ample room for installation of systems gear, and contains environmentally hardened AC-DC power circuitry rated for long life in freezing and sun-baked environments. Temperature-compensated charge voltage ensures that backup batteries are ready when AC power fails and provides a minimum of 8 hours of backup for loads up to 200 watts.

Benefits:

- Pre-installed DIN rails for easy equipment mounting
- Wide operating temperature (-20 to +60°C)
- Auto-ranging input 85 VAC to 264 VAC
- 4 enclosure sizes to meet every requirement
- Built-in remote monitoring circuitry with LED indicators
- Deep-cycle gel batteries included
- 12, 24 120VAC and Now 48VDC PoE output options available
- Minimum backup time of 8 hours
- New panel mount option for existing hut enclosures

Application Solutions Supporting:

- Positive Train Control (PTC)
- AEI / RFID Systems Wayside Signaling
- Intermediate/Approach Lit Signals
- Repeater Locations
- Hot Box Detectors
- Grade Crossings
- Control Points

Supported Brands:

- Wester Cullen Hayes
- Safetran
- Union Switch & Signal
- General Signals
- GE - Harmon
- Sermi Products
- Alstom Signaling
- Railway Systems Supplies



LinkUPS Backup Power Systems for Remote Monitoring



Mega LinkUPS System for AEI/RFID Sites





Don't let power be the weak link in your network

PARAMETER	LinkUPS 12			LINKUPS 24			LINKUPS 120			LINKUPS 24/48 PoE			UNIT	
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.		
INPUT														
AC Input Voltage	85	-	265	85	-	265	85	-	265	85	-	265	Volts RMS	
Input Frequency	47	-	66	47	-	66	47	-	66	47	-	66	Hertz	
Power Factor Correction	0.95	-	-	0.95	-	-	0.95	-	-	0.95	-	-	n/a	
AC Input Current (note 1)	-	-	2.6	-	-	2.6	-	-	2.6	-	-	2.6	Amps RMS	
DC Input Voltage	110	-	370	110	-	370	110	-	370	110	-	370	Volts	
DC Input Current (note1)	-	-	2.0	-	-	2.0	-	-	2.0	-	-	2	Amps	
Input Fuse Trip Current	5	-	-	5	-	-	5	-	-	5	-	-	Amps	
OUTPUT - Battery & Load														
Battery & Load Voltage (note 2) At 25°C	13.7	13.8	13.9	27.4	27.6	27.8	13.7	13.8	13.9	27.4	27.6	27.8	Volts DC (note 4)	
Battery & Load Voltage (note 2) Over 0 - 60°C only (temp. comp range)	12.9 (60 C)	-	14.9 (0 C)	25.8 (60 C)	-	29.8 (0 C)	12.9 (60 C)	-	14.9 (0 C)	25.8 (60 C)	-	29.8 (60 C)	Volts DC (note 4) (ambient temperature)	
Converted Load Voltage	-	-	-	-	-	-	120/60 Hz	120/60 Hz	120/60 Hz	47.9	48	48.1	Volts	
Output Voltage Temperature Compensation (0 - 60°C only)	-	-0.025	-	-	-0.05	-	-	-0.025	-	-	-0.05	-	Volts / °C	
Battery Charging Current (no load)	50 W	10.0	-	5.0	-	-	10.0	-	-	5.0	-	-	Amps	
	100W													
Quiescent Battery Current (LINE-DOWN mode - no load)	-	-	0.02	-	-	0.02	-	-	0.25	-	-	0.02	Amps	
Load Current	50 W	-	-	5.0	-	-	2.5	-	-	5.0	-	-	2.5	Amps
	100W	-	-	10.0	-	-	5.0	-	-	10.0	-	-	5.0	Amps
Battery Run Time (at 25°C)	50 W	11.0		14.0			11.0			14.0	-	-	Hours (at full load)	
	100W	8.0		11.0			8.0			11.0	-	-		
Output Switching Noise (noise 3)	-	-	100	-	-	100	-	-	100	-	-	100	mV p-p	
General														
Operating Temperature	-20	-	60	-20	-	60	-20	-	60	-20	-	60	°C	
Operating Humidity	10	-	95	10	-	95	10	-	95	10.0	-	95	% R.H. non-condensing	
Efficiency	75	-	-	78	-	-	75	-	-	78.0	-	-	%	
EMC EMISSIONS														
Radiated Noise: 30mHz - 1 GHz per FCC Class B														
Conducted Noise: 150 kHz - 30mHz per FCC Class B														
ALARM CONTACTS														
DC Current Rating a 30 VDC max	-	-	1.0	-	-	1.0	-	-	1.0	-	-	1.0	Amps	
AC Current Rating at 120 VAC max	-	-	0.3	-	-	0.3	-	-	0.3	-	-	0.3	Amps	
Contact Isolation Voltage	-	-	500	-	-	500	-	-	500	-	-	500	Volts RMS	

NOTES

1. These values apply at minimum input voltage conditions.
2. The stated voltages refer to system in LINE-UP mode with a full charged battery. If the battery has been recently discharged the system will operate in current limited mode until the battery regains full charge. When the battery is less than fully charged, the output voltage will be lower than the stated values. In LINE-DOWN mode, the load voltage is roughly equal to the battery voltage. Battery voltage will be a function of state of charge, temperature and overall condition. In both modes of operation the LOAD voltage will be as much as 0.2 Volts (0.4 volts for 24 volt systems) lower than the battery voltage because of the parasitic voltage drop across the output circuit breaker.
3. The system battery has a significant damping effect on noise; typical output noise will be much lower.
4. The LinkUPS 120 system uses a 12 VDC battery string voltage. The LinkUPS 24/48PoE system uses a 24VDC battery string bus voltage.