

# Outdoor UPS Backup “Nighttime Charging” Kits

Reliable 24/7 power designed for  
PoE/PoE+/HPoE powered security equipment  
where AC power is available only at night

## Product Description

The challenge of needing to mount surveillance equipment in remote locations where a network cannot be established using traditional methods has been a niche for which KBC has provided solutions for over 25 years. Many of those same applications also lack available and constant power. Light pole power is often unavailable when the lights are off. A clean, easy and affordable alternative is an engineered UPS power kit that is specifically designed to support all the devices needing power. Once batteries are installed, all the other needed components are built-in and ready to go for the electrician to wire in high voltage to charge the battery bank at night. The equipment load powers via battery operation during the daytime hours until the lights come on again in the evening to begin the battery recharge process.



## Product Features

- Fully assembled power kits ready to apply batteries and mount.
- Backplate with DIN Rail provided to mount additional equipment.
- AC to DC Battery Charger included and integrated;  
compatible with sealed lead acid or lithium iron phosphate batteries.
- Two different sizes of lockable enclosures available;  
Supports up to several days of stored power (variable based on power draw and battery bank installed).

## Included in the Kits

- Battery enclosure with integrated charger and other power assembly components
- DC low voltage output

## Part Numbers

| Kit Model No.      | Input      | Output | Battery wiring                 | Battery Space (in)      | Fits*    |
|--------------------|------------|--------|--------------------------------|-------------------------|----------|
| <b>KBC-UAL2-12</b> | 100-240VAC | 12VDC  | One 12V or two 12V in parallel | 12.5 d x 13.5 w x 9.5 h | 2x 100AH |
| <b>KBC-UAL2-24</b> | 100-240VAC | 24VDC  | Two 12V in series              | 12.5 d x 13.5 w x 9.5 h | 2x 100AH |
| <b>KBC-UAL5-12</b> | 100-240VAC | 12VDC  | One 12V or two 12V in parallel | 13 d x 21 w x 19 h      | 2x 250AH |
| <b>KBC-UAL5-24</b> | 100-240VAC | 24VDC  | Two 12V in series              | 13 d x 21 w x 19 h      | 2x 250AH |

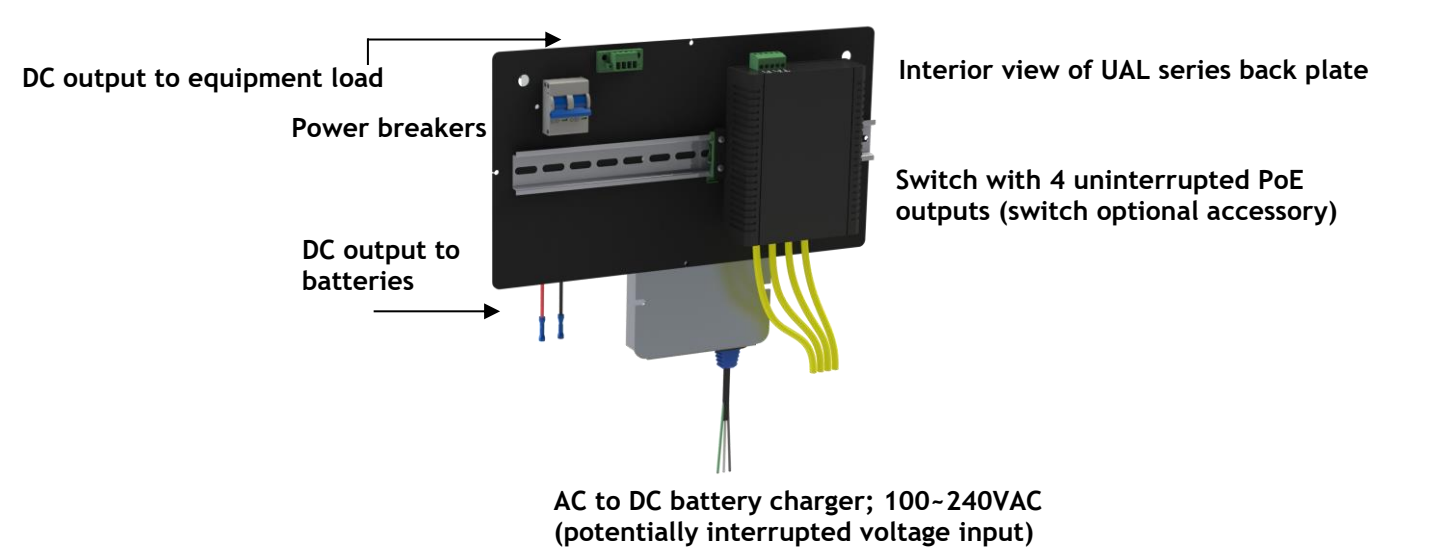
\*Most battery manufacturer’s sealed lead acid batteries; refer to the dimensions of your chosen battery to ensure that it/they will fit within the capacity dimensions shown. The enclosure will also fit and operate lithium iron phosphate batteries (typically equivalent amp hour spec).

Specifications

|                         | KBC-UAL2-12                                                                                                                             | KBC-UAL2-24 | KBC-UAL5-12                                                    | KBC-UAL5-24 |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------|-------------|
| Enclosure               |                                                                                                                                         |             |                                                                |             |
| Interior dimensions     | H: 21.5 in x W: 16 in x D: 13 in; 54.61 cm x 40.64 cm x 33.02 cm                                                                        |             | H: 30 in x W: 22 in x D: 13 in; 76.2 cm x 55.88 cm x 33.02 cm  |             |
| Material                | Powder coated aluminum                                                                                                                  |             |                                                                |             |
| Weight                  | 13 lbs; 5.9 Kg                                                                                                                          |             | 33 lbs; 14.97 Kg                                               |             |
| Mounting system         | Integrated pole/wall mounting system (included)                                                                                         |             |                                                                |             |
| Lockable                | Lockable by pad lock (not supplied)                                                                                                     |             |                                                                |             |
| Space for batteries     | H: 9.5 in x W: 13.5 in x D: 12.5 in; 31.75 cm x 34.29 cm x 24.13 cm                                                                     |             | H: 19 in x W: 21 in x D: 13 in; 48.26 cm x 53.34 cm x 33.02 cm |             |
| Power Assembly          |                                                                                                                                         |             |                                                                |             |
| Battery Charger         | 12, 24 or 48VDC @ 24 Amp, with pre-installed advanced charge algorithm                                                                  |             |                                                                |             |
| AC voltage input        | 100-240VAC (step down if power input is >256V)                                                                                          |             |                                                                |             |
| Power output*           | 12VDC                                                                                                                                   | 24VDC       | 12VDC                                                          | 24VDC       |
| Mounting surface        | The power assembly is pre-mounted to a back plate which also provides DIN Rail to mount additional accessories and other equipment      |             |                                                                |             |
| Operating temp          | -40° ~ +60° Celsius / -40° ~ +140° Fahrenheit      NOTE: SLA batteries lose up to 50% of stored energy in temperatures lower than 32° F |             |                                                                |             |
| Battery Bank            |                                                                                                                                         |             |                                                                |             |
| Included/excluded       | Batteries are sold separately                                                                                                           |             |                                                                |             |
| Battery type            | Sealed Lead Acid (SLA) or Lithium Iron Phosphate (LiFePo)                                                                               |             |                                                                |             |
| Batt Capacity, SLA      | 200 AH                                                                                                                                  |             | 500 AH                                                         |             |
| Batt Capacity, Lith     | 240 AH (equal to ~480AH of SLA)                                                                                                         |             | 480 AH (equal to ~960AH of SLA)                                |             |
| Battery wiring          | Parallel                                                                                                                                | Series      | Parallel                                                       | Series      |
| Recommended Accessories |                                                                                                                                         |             |                                                                |             |
| 100Ah Batteries         | 12V Sealed Lead Acid (max two in the UAL2 kits; max 4 in UAL5) use model number: KBC-B12100 per battery (add in pairs if 24V)           |             |                                                                |             |
| 250Ah Batteries         | 12V Sealed Lead Acid (max one in UAL2-12 kit; two in both UAL5 kits) use model number: KBC-B12250 per battery (add in pairs if 24V)     |             |                                                                |             |
| LiFePo4 Batteries       | 12V 100Ah LiFePo4 lithium iron phosphate (max two in UAL2 kits, max 4 in UAL5) use model number LIFEPO4-100A12V (add in pairs if 24V)   |             |                                                                |             |
| PoE Switch              | To provide 4-ports 802.3af/at (powered via 12-24VDC) ESUGS4-G1-L-B; To provide 8-ports 802.3af/at and fiber uplink: ESUGS8-P2-L-B       |             |                                                                |             |
| Hardened Injectors      | To provide passive 24vdc PoE: KBC-VE-DC/DC-24; to provide 48V 802.3af PoE: KBC-DC/DC-48M; to provide 70W: KBC-DC/DC-1256P-70W           |             |                                                                |             |
| HPoE Switches           | To power a device that requires 30+ watts at 52+Vdc use either ESUGH2-G1-L-B for 2 ports 90W or ESUGH4-G1-L-B (4 ports 180W budget)     |             |                                                                |             |
| Managed switch          | KBC offers a 9-36Vdc input managed PoE+ output (30W per port 180W budget) switch: ESMGS8-P2-L-B                                         |             |                                                                |             |

\*NOTE: There is no AC or outlet provided - inverters are not recommended but if plug-in devices are required in the application then an inverter can be used to provide an AC outlet that is electrified when batteries are charged. Inverters will add 15 to 20W or more to the load and can cause the power to be less efficient. KBC suggests using 9-36V input converting devices such as injectors or PoE output switches that power via 12/24Vdc input.

Typical Set Up



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