

### Features

- Provides back-up power to portable data acquisition products when the primary DC power source is interrupted
- Provides more than four hours of operation with typical portable data acquisition products

The DBK34A rechargeable lead-acid battery/UPS enables IOtech's data acquisition systems to be used in situations where the power is potentially interrupted during an acquisition. If no DC power is available, the DBK30A battery pack should be used instead of the DBK34A.

The DBK34A uses 14 to 28 VDC from the user-supplied primary voltage source to charge its internal lead-acid batteries and supply DC power to the data acquisition system. When the primary power source sags or is interrupted, the DBK34A immediately supplies the necessary power to the data acquisition equipment so that the acquisition can continue uninterrupted. For example, when a vehicle's battery is used to power the acquisition equipment, the DBK34A can be used to sustain power during engine cranking.

For applications where the primary power source can be interrupted for extended periods (e.g., >4 hours), an external auxiliary lead-acid battery can be attached to the DBK34A. While the primary power source is present, the DBK34A charges both its internal battery and the auxiliary battery while supplying power to the acquisition equipment. When the primary power is interrupted, the DBK34A powers the acquisition equipment equally from its internal and auxiliary batteries.

The DBK34A requires external power from either a DC source (such as a vehicle battery), or an optional TR-40U AC to DC power supply, which can be modified to connect to the external power screw-terminal connection.



The DBK34A UPS module provides DC-supply voltage to IOtech's portable data acquisition products when the primary source of power is interrupted

The DBK34's three LEDs clearly show the present state of the system. The *main power* indicator is illuminated whenever the primary power source is present. The *charging* indicator shows that the system is being powered by the primary power source and that the internal and/or auxiliary batteries are being charged. The *charging* indicator will go off when the batteries are completely charged. The *discharging* indicator illuminates when the primary power source is not present or its voltage is not adequate for energizing the acquisition equipment. During this state, the battery is being discharged by the acquisition equipment.

### Specifications

**Indicators:** Main Power, Charging, Discharging  
**Battery Type:** Sealed lead-acid  
**Charging Voltages:** 14 to 30V in 12V mode, 27.5 to 30V in 24V mode  
**Output Voltage**  
**When primary source is available:** Input voltage  
**When primary source is unavailable:** 10 to 12V in 12V mode, 20 to 24V in 24V mode  
**Fuses:** 15A for vehicle main battery, 7.5A for internal batteries and auxiliary battery  
**Internal Battery Amp-Hours:** 5A hours at 12V, 2.5A hours at 24V  
**Charging Time:** Approx. 300 minutes from 14 VDC source when fully discharged\*  
**Input Connector:** Terminal block, 12 to 22 AWG wire  
**Output Connector:** 5-pin DIN, locking  
**Dimensions:** 279 mm W x 216 mm D x 35 mm H (11" x 8.5" x 1.375")  
**Weight:** 7.2 lb (3.27 kg)

### Ordering Information

Description	Part No.
UPS module	DBK34A

### Accessories & Cables

External power supply, 100 to 240 VAC, 50W, 15 VDC; requires additional cable	TR-40U
USA version	CA-1
European version	CA-216
5-pin locking DIN to 5-pin locking DIN cable, for LogBooks, 6 in.	CA-169
5-pin non-locking DIN to 5-pin DIN cable for portable data acquisition products, except LogBooks	CA-170
Automobile cigarette lighter to bare, stripped leads, 6 ft.	CA-172

### Product Compatibility

- ✓ WaveBook
- ✓ ZonicBook
- ✓ LogBook
- ✓ DaqBook

\* Not recommended for continuous discharge cycle applications or left discharged for long periods of time