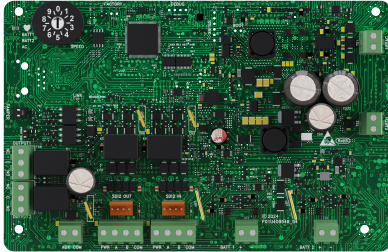


B532 Aux. power supply, SDI2 extender



- ▶ Provides 12V, 2A standby and alarm current combined for Commercial. Provides 12V, 2A standby + 2A alarm current for Commercial Burglary
- ▶ Supervises two 12 V 7-18 Ah batteries independently for up to 36 Ah of capacity
- ▶ Provides up to 80 hours of standby time
- ▶ Two configurable 3A relay outputs
- ▶ Extends SDI2 bus up to 1000 feet

This device is an auxiliary power supply expansion module that connects to compatible control panels through the SDI2 bus. This device is supervised and communicates all status changes to the control panel. It is ideal for installations in Industrial, commercial, and institutional facilities where additional power is required to support ancillary devices such as keypads, door controllers, and motion detectors.

With two programmable form-C relays, this device can be used to activate remote devices such as burglar alarm sirens.

The device can also function as a bus extender. Each power supply module can extend the SDI2 bus by 1000 feet. Eight power supply modules can be connected in series to provide up to an additional 8000 feet.

Functions

Supervision monitoring

This device monitors and communicates status information over the SDI2 bus for the following:

- Operation (Heartbeat)
- AC input power (OK, Low, Missing)
- Battery (1 & 2) status (OK, Low, Missing)
- Output 1, 2 status (Relay engaged, Relay is not engaged)
- SDI2 Broken wire detection

Output relays

The NO, C (COMMON), and NC terminals are available in each terminal. The silkscreen on the edge of the circuit board shows the function of each terminal and the relay

output number. The middle terminal of each output position is the COMMON and is labeled C. When the output is inactive, the NC (Normally Closed) terminal has continuity with the C terminal. When the output is active (energized), the NO (Normally Opened) has continuity with the C terminal

Indicators

- Heartbeat icon. Blue LED flashing On and Off when system is operating normally. A steady On or Off LED indicates a system fault. Triple flash indicates communication failure.
- BATT 1 LED. Green steady On LED indicates the battery status of BATT 1 is operating normally. Flashing indicates low battery. Triple flash indicates battery charger failure. Off LED indicates a missing battery.
- BATT 2 LED. Green steady On LED indicates the battery status of BATT 2 is operating normally. Flashing indicates low battery. Triple flash indicates battery charger failure. Off LED indicates a missing battery.
- AC LED. Green steady On LED indicates the AC power is operational. Flashing indicates low or failed AC.

Battery charging

Fully charged batteries, connected to the battery terminals, sustain power to the power supply module in the event that the AC power fails.

If AC power input for the power supply module fails (is absent, or low), the power supply module automatically switches from primary power (AC) to secondary power

(battery). When AC power is present, the power supply module performs periodic battery tests to ensure battery life and usability.

Regulatory information

Regions	
Canada	CAN/ULC S304 - Signal Receiving Centre and Premise Alarm Control Units
	CAN/ULC S545 - Residential Fire Warning System Control Units
	ICES-003 Issue 7 - Information Technology Equipment (including Digital Apparatus)
USA	UL 864 - Standard for Control Units and Accessories for Fire Alarm Systems
	UL 985 - Household Fire Warning System Units.
	UL 1023 - Household Burglar-Alarm System Units
	UL 1310 - Standard for Safety for Class 2 Power Units
	UL 2610 - Commercial Premises Security Alarm Units and Systems (Replaces UL 365, UL 609, UL 636, UL 1076, UL 1610)
	FCC 47 CFR Part 15 Subpart B, Class B

Region	Regulatory compliance/quality marks	
Europe	CE	EU DoC B532 Version 1 EU Declaration of Conformity
USA	UL	

Installation/configuration notes

Mounting considerations

You can mount the power supply module in a variety of enclosures.

The B8103 enclosure supports up to two 12 V, 18 Ah batteries. Mounting in the B8103 requires the B12 mounting plate.

The B10 supports either one 12 V, 18 Ah or up to two 12 V, 7 Ah batteries.

The B18 supports two 18 Ah batteries.

Wiring considerations

The power supply module connects to a control panel using the SDI2 IN connections (PWR, A, B, COM). Use 12 AWG to 22 AWG (1.5 mm to 0.6 mm) wires from the power supply to the control panel.

The power supply module provides auxiliary power to expansion modules via the SDI2 OUT (PWR, A, B, COM), or AUX Power (AUX PWR) connections using the screw terminal strip, or by using the interconnect wiring connection. Use 12 AWG to 22 AWG (1.5 mm to 0.6 mm) wires from the module to the SDI2 expansion module(s).

i Notice

Wiring restrictions

Do not exceed 1000ft of wiring distance from the control panel to the first power supply module. Each power supply can support up to 1000 ft of wiring on the SDI2 output.

Compatibility

Control panels	B9512G (Up to 8 modules) B8512G (Up to 4 modules) B6512 (Up to 4 modules) B5512 (Up to 4 modules) B4512 (Up to 2 modules) B3512 (Up to 2 modules) D9412GV4 v 2.xx (Up to 8 modules) D7412GV4 v2.xx (Up to 8 modules)
Enclosures	B18 Large Universal Enclosure B8103 Universal Enclosure D8108A Attack Resistant Enclosure B10 Medium Enclosure B12 Mounting Plate BATB-40 Enclosure D8004 Transformer Enclosure* *The D8004 Transformer Enclosure is required when the B532 and TR1850 (18 VAC, 50 VA) Transformer are used in UL 864 Fire, or Combination Burg and Fire applications.
Transformer power supplies	TR1850 (18 VAC, 50 VA) TR1850-CA (18 VAC, 50 VA) for Canada
SDI2 interconnect cables	B501-10 (10 per pack)

Parts included

Quantity	Component
1	Power supply module
1	Hardware pack
1	Quick installation guide

Technical specifications

Mechanical

Dimensions (H x W x D) (cm)	11.44 cm x 17.65 cm x 2.9 cm
Dimensions (H x W x D) (in)	4.5 in x 6.94 in x 1.15 in
Transformer wiring	12-18 AWG
Terminal wire size	12-22 AWG

SDI2 wiring	<p>Maximum distance - Wire size: (Unshielded wire only) 305 m (1000 ft) - 22 AWG (0.6 mm) 305 m (1000 ft) - 18 AWG (1 mm)</p> <p>Do not exceed 1000ft of wiring distance from the control panel to the first power supply module.</p> <p>Each power supply can support up to 1000 ft of wiring on the SDI2 output.</p>
Environmental	
Operating temperature (°C)	0 °C – 49 °C
Operating temperature (°F)	32 °F – 120 °F
Storage temperature (°C)	-20 °C – 60 °C
Storage temperature (°F)	-4 °F – 140 °F
Operating relative humidity, non-condensing (%)	5% – 93% at +32° C (+90° F) non-condensing
Electrical	
Output voltage (VDC)	12 VDC, nominal
AC line input voltage frequency	18 VAC, 50 VA
Relay outputs	Dry contacts rated for .001 - 3.0 A at 5 -24 VDC (resistive load).
Current available (maximum)	2.0 A SDI2 out and aux power (combined) (up to 4.0 A of alarm current for intrusion application)
Commercial Fire	2.0 A max standby and alarm combined
Commercial Burg	2.0 A max standby 4.0 A max standby and alarm combined
B532 quiescent current	Standby 75mA, Alarm 110mA
Battery input	2 supervised 12 V lead acid batteries (7-18 Ah). Maximum combined capacity of 36 Ah..
Transformer power supply	TR1850 (18 VAC, 50 VA) TR1850-CA (18 VAC, 50 VA) for Canada
Transformer input	120V 0.48A, 60Hz

Ordering information

B532 Aux. power supply, SDI2 extender

Provides auxiliary power to 12 VDC devices or SDI2 modules. Extends SDI2 bus up to 1000 feet.

Order number **B532 | F.01U.421.380**

Accessories

B532-B Aux. power supply kit w/B10, SDI2

B532 power supply kit. Includes a TR1850 transformer, and a B10 Medium Control Panel Enclosure.

Order number **B532-B | F.01U.436.294**

B532-C Aux. power supply kit w/B8103, SDI2

B532 power supply kit. Includes a TR1850 transformer, and a B8103 enclosure.

Order number **B532-C | F.01U.436.295**

B532-B-CA Aux power supply w/B10, TR1850-CA

B532 power supply kit. Includes a TR1850-CA transformer, and a B10 Medium Control Panel Enclosure.

Order number **B532-B-CA | Z.01X.002.409**

B532-C-CA Aux power supply kit w/B8103, TR1850-CA

B532 power supply kit. Includes a TR1850-CA transformer, and a B8103 enclosure.

Order number **B532-C-CA | Z.01X.002.410**



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