SB3024DiL : 40A/30A MPPT Charge Controller by Blue Sky



Price: CAD \$519.00 - CAD \$639.00

Product Categories: Charge Controllers, MPPT - Max Power Point Tracking, MPPT : 30A-39A, MPPT : 40A-59A, Shop Product Tags: blue sky, charge control, MPPT, SB3024DiL, SB3024DiL canada Product Page: https://www.modernoutpost.com/product/sb3024dil-40a-30a-mppt-charge-controlle r-by-blue-sky/

Product Variants

- : 40A/30A MPPT Charge Controller by Blue Sky Standard ()
- SB3024DiL : 40A/30A MPPT Charge Controller by Blue Sky DUO ()

Product Summary

The SB3024DiL is a 40A/30A MPPT Charge Controller by Blue Sky Energy. Great for mid-sized systems, the SB3024 charge controller family, featuring our patented MPPT technology, handles up to 800 W of PV power when charging at 24V.

Product Description

The SB3024DiL is a 40A/30A MPPT Charge Controller by Blue Sky Energy. Great for mid-sized systems, the SB3024 charge controller family, featuring our patented MPPT technology, handles up to 800 W of PV power when charging at 24V. SB3024DiL Features

- 97% Peak Efficiency - MPPT Technology - Multi-stage charging battery -Integrated LED display - PV array overload protection - Reverse battery and panel protection - Load output (LVD) - IPN for network and remote display -Lithium compatible - ETL certified, CE, RoHS, FCC compliant

This controller is ideal for RVs and Marine applications with its auxiliary output for charging a second battery and can utilize a remote display with its IPN connectivity. The SB3024DiL will manage up to a 20A DC load output and provides basic battery and solar data through its onboard display. When programmed with the IPN ProRemote, BT Connect, or UCM, it can be used for PV street lighting, utilizing its smart dusk-to-dawn load control feature. Its IPNNetwork interface can communicate with other Blue Sky Energy charge controllers as a single charging system, allowing increased flexibility and optimization in system design.

OPTIONAL: The DUO Option upgrade allows an SB3024DiL-DUO to provide PWM charge control for hydroelectric, wind, or similar DC generators that require diversion-type charge control while at the same time providing MPPT charge control for the main PV system.

SB3024DiL w/ onboard display and programmed for 12/24V Lead Acid or 4S/8SLiFePO4 batteries(*)SB3024DiL-DUO programmed with DUO option

Specification SB3024(D)iL @12V SB3024(D)iL @24V

Maximum PV Power:1 540W with 36-cell PV panel 400W with 60/72-cell PV panel 800W with 72-cell PV panel

Rated Battery (Output) Current:1 40A with 36-cell PV panel 30A with 60/72-cell PV panel 30A with 72-cell PV panel

Conversion Efficiency: 97% (typical @28V/24A output) 97% (typical @28V/24A output)

Power Consumption: 0.35W (typical standby) 0.35W (typical standby) Product data have been exported from - $\underline{Modern\ Outpost}$ Export date: Mon Nov 25 17:44:36 2024 / +0000 GMT

Recommended Max Panel Voc at STC: 45.6V (Max Panel Input 57V) 45.6V (Max Panel Input 57V)

Battery Type:2 Lead Acid (default) or LiFePO4 (set by microswitch) Lead Acid (default) or LiFePO4 (set by microswitch)

Charge Profile: Multi-Stage (plus Equalization if enabled) Multi-Stage (plus Equalization if enabled)

Absorption Voltage:2 14.4V 28.8V

Float Voltage:2 13.2V 26.4V

Equalization Voltage (if enabled):2 15.2V 30.4V

Auxiliary Output:

- A) Auxiliary Battery Charge 2A (2nd battery)
- B) Load Control w/ LVD
- C) Dusk-to-Dawn w/ LVD (by IPN Remote, BT Connect)
- A) Auxiliary Battery Charge 2A (2nd battery)

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B) Load Control w/ LVD

C) Dusk-to-Dawn w/ LVD (by IPN Remote, BT Connect)

Load (LVD) Disconnect/Reconnect Voltage:2 11.5V / 12.6V 23.0V / 25.2V

Maximum Auxiliary Output Current (B or C): 20A 20A

Display: Only version SB3024DiL or w/ remote display Only version SB3024DiL or w/ remote display

Temperature Compensation (by optional Battery Temperature Sensor): -5.00mV/°C/cell correct factor (range 0.00mV/°C/cell to -8.00mV/°C/cell) -5.00mV/°C/cell correct factor (range 0.00mV/°C/cell to -8.00mV/°C/cell)

Operating Temperature: -40°C - 40°C -40°C - 40°C

Maximum Full Power Ambient: 40°C 40°C

Environmental Protection: IP20

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IP20
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Weight: 3.95lb (1.8kg) 3.95lb (1.8kg)

Dimensions: 6.86" x 6.6" x 3.38" (17.4cm x 16.8cm x 8.6cm) 6.86" x 6.6" x 3.38" (17.4cm x 16.8cm x 8.6cm)

Warranty:

5 years

5 years

36-cell panels are typically referred to as "12V panels" providing Vmp/Voc of ~18V/22V at STC, 60-cell panels refers to "20V panels" (Vmp/Voc ~30V/37V),
72-cell panels refers to "24V panels" (Vmp/Voc ~36V/44V).

2. Factory default voltages unless programmed with an IPN ProRemote display, BT Connect, ProTouch, or UCM.

Document Downloads <u>Manual SB3024(D)iL (pdf)</u> <u>Datasheet SB3024(D)iL (pdf)</u> <u>Manual SB3024(D)iL-DUO</u> <u>Addendum (pdf)</u> <u>Datasheet SB3024(D)iL-DUO (pdf)</u> <u>Blue Sky Energy Product</u> <u>Selection Guide (pdf)</u> <u>Warranty (pdf)</u>

Product Attributes

- Dimensions: 20 × 20 × 10 cm
- Weight: 1.9 kg

- Model: Standard, DUO

Product Gallery



Selectable Multi-Stage Charge Profiles for AGM, GEL, Flooded Lead-Acid & Lithium

