

TYPE-B BATTERY DISCHARGE INDICATOR (CAN BUS)

QUICK START GUIDE

BATTERY MODELS

**AES LIFEPO₄ INDUSTRIAL
BATTERIES:**

12-48-6650
12-36-6700
14-24-2800
14-36-3000
14-48-3000

**AES PROFESSIONAL
BATTERIES:**

DLP-GC2-12V
DLP-GC2-24V
DLP-GC2-36V
DLP-GC2-48V

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1.0. INTRODUCTION

The Type-B Battery Discharge Indicator (BDI) communicates with Discover Lithium batteries over CAN Bus using the LYNK Port on AES PROFESSIONAL or AEBus Port on AES LiFePO₄ Industrial batteries. The TYPE-B BDI displays warnings, charging status, and state-of-charge (SOC) using incremental LED SEGMENTS. The BDI device is plug and play, deriving both power and battery status directly from the LYNK Port or AEBus Port. The TYPE-B BDI will provide the aggregate SoC for up to 20 Discover Lithium Batteries. The Type-B BDI is rated IP 30, with an installed frontal rating of IP 65.

1.1 Compatible Batteries

AES LiFePO₄ Industrial Batteries:

12-48-6650, 12-36-6700, 14-24-2800, 14-36-3000, 14-48-3000

AES PROFESSIONAL Batteries:

DLP-GC2-12V, DLP-GC2-24V, DLP-GC2-36V, DLP-GC2-48V

2.0 INSTALLATION OPTIONS AND REQUIRED MATERIALS

The Type-B Battery is available as a head unit (950-0034) and used with AES LiFePO₄ or AES PROFESSIONAL batteries. The installer must supply a cable of the appropriate length with a pinout and connector appropriate for either an AES LiFePO₄ Industrial battery or an AES PROFESSIONAL battery. Refer to section 6.0 Battery Pinout Assignments for details on connectors and pinouts.

A kit (950-0039) that includes both the TYPE-B head unit (950-0034) and an LYNK NETWORK BDI 1.8M cable (790-0079) is available from Discover for installation with AES PROFESSIONAL batteries.

3.0 LED INDICATORS

3.1 Normal Operation

Only 1 LED will be on during regular operation.

Position	Activity
LED 1	Flash - State of Charge 0% to 9 % Solid on - State of Charge range 10% to 19 %
LED 2	Solid on - State of Charge range 20% to 29 %
LED 3	Solid on - State of Charge range 30% to 39 %
LED 4	Solid on - State of Charge range 40% to 49 %
LED 5	Solid on - State of Charge range 50% to 59 %
LED 6	Solid on - State of Charge range 60% to 69 %
LED 7	Solid on - State of Charge range 70% to 79 %
LED 8	Solid on - State of Charge range 80% to 89 %
LED 9	Solid on - State of Charge range 90% to 94%
LED 10	Solid on - State of Charge range 95% to 100%

3.2 Charging Operation

The active State of Charge LED will slowly flash

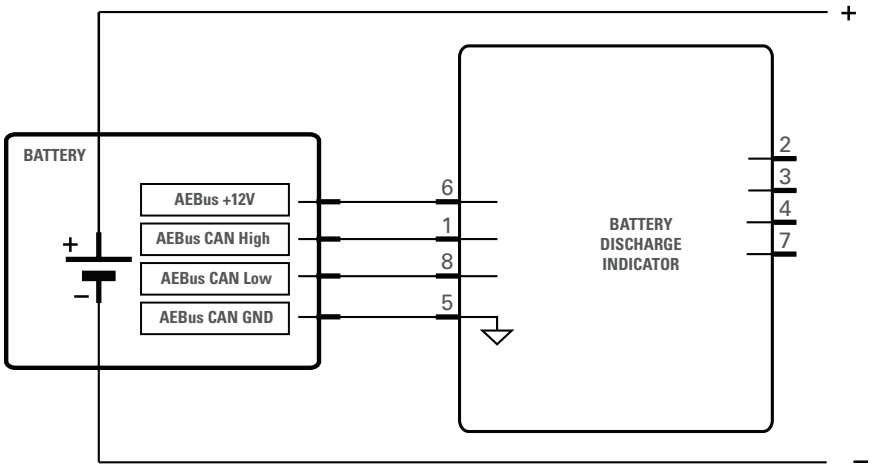
3.3 Battery Protection Indication

When a connected battery has active protection (faults), LED 1 through LED 10 will all flash at the same time.

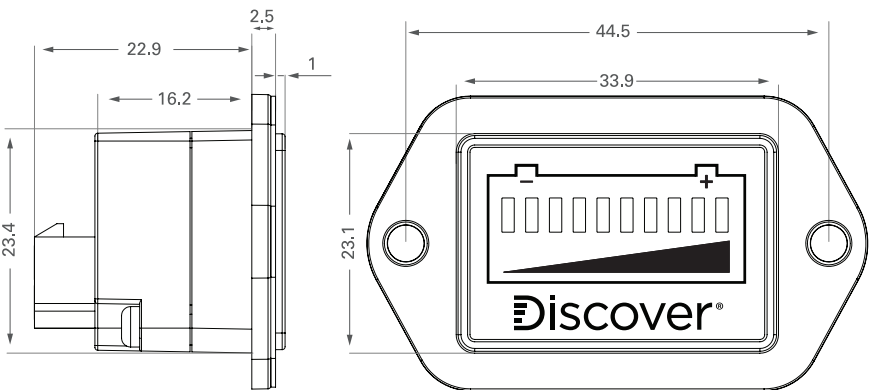
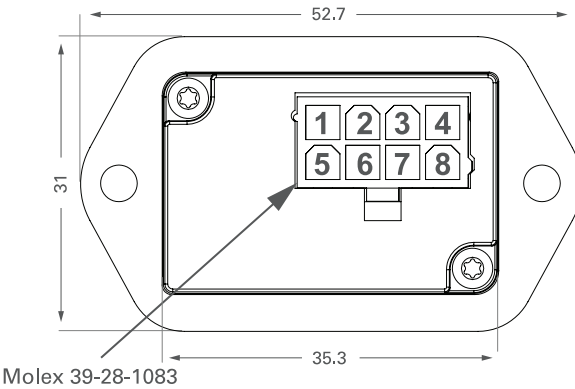
3.4 No Battery Detected

The LED interface will continuously cycle through all LEDs when the BDI-B is powered on, but no batteries are detected.

4.0 ELECTRICAL OVERVIEW



5.0 MECHANICAL (mm)

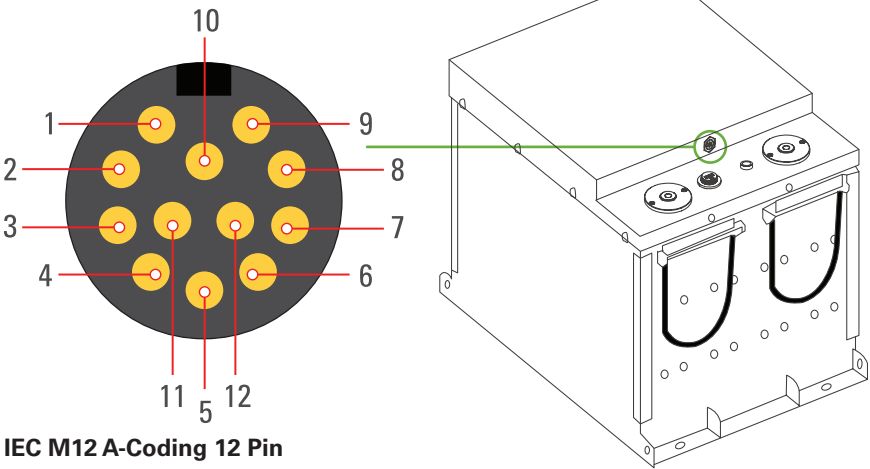


5.1 Pinout Assignments for BDI (MOLEX 39-28-1083)

Pin 1	LYNK Bus (AEBus) CAN High
Pin 5	LYNK Bus (AEBus) CAN GND
Pin 6	LYNK Bus (AEBus) CAN +12V *
Pin 8	LYNK Bus (AEBus) CAN Low

6.0 BATTERY PINOUT ASSIGNMENTS

6.1 Pinout Assignments for AES LiFePO₄ Industrial Batteries



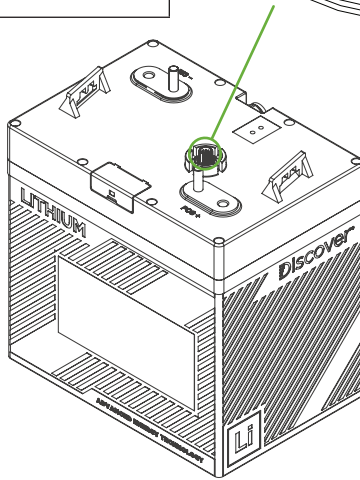
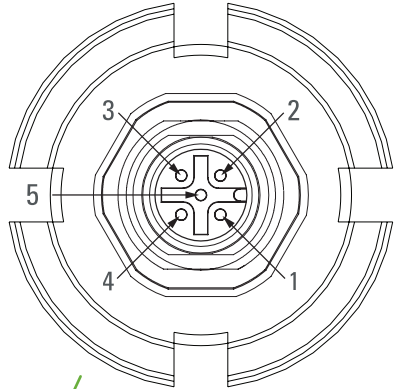
Pin 3	LYNK Bus (AEBus) CAN GND
Pin 4	LYNK Bus (AEBus) CAN High
Pin 5	LYNK Bus (AEBus) CAN Low
Pin 12	LYNK Bus (AEBus) CAN +12V *

* Not all models are equipped with an internal 12V power supply.

6.2 Pinout Assignments AES PROFESSIONAL Batteries

IEC M12 A-Coding 5 Pin

PIN Number	Function
1	ON/OFF Switch
2	LYNK Bus CAN L
3	LYNK Bus CAN H
4	LYNK Bus 12V +
5	LYNK Bus GND



7.0 BDI TYPE-B ENVIRONMENTAL SPECIFICATIONS

Operation: -40°C to 85°C (-40°F to 185°F)

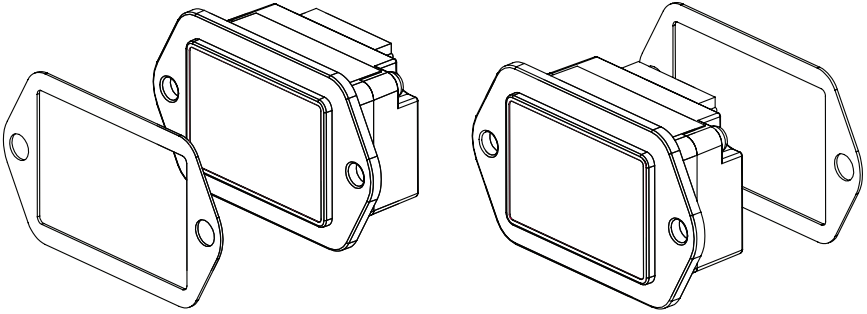
Storage: -50°C to 90°C (-58°F to 194°F)

Humidity: 95 % RH non-condensing at 38°C (100°F)

Rated IP 30, with an installed frontal rating of IP 55 when installed with the provided gasket.

8.0 INSTALLATION

8.1 Gasket Mounting - Front or Back



Secure BDI with M 2.5 bolts or screws.

8.2 Connect Harness

Connect the cable harness to either the LYNK Port or AEBus Port on the battery, then connect to TYPE-B BDI.

NOTES
