

Micro-BDCBB

DC Battery Distribution Circuit Breaker Bay

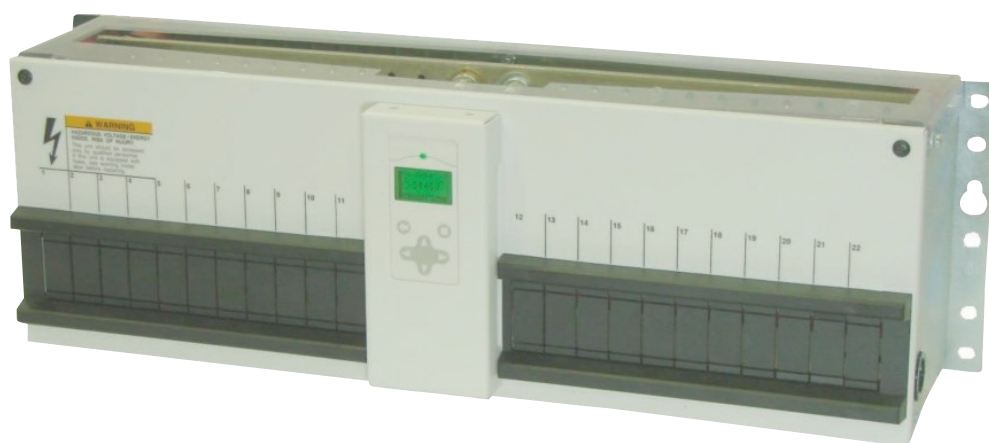


TABLE OF CONTENTS

03 – 03	Overview
04 – 06	Specifications
07 – 09	Ordering Guides Information

Micro-BDCBB

DC Battery Distribution Circuit Breaker Bay

Overview

The OmniOn Power™ Micro-BDCBB serves as a secondary power distribution center for +24Vdc or -48Vdc DC power delivered from a battery plant to the load equipment. The 4U (7 in.) tall configuration is versatile with 19" or 23" rack or wall mounted panels with fuse or circuit breakers options, single or dual (A/B) load bus, and 600A carrying capacity per panel (300A per bus in dual load bus configurations.) A digital meter monitors voltage and current of each load bus.

VIM1EC Intelligent Meter

Typical DC distribution panels have a simple 477C alarm card that indicates a breaker/fuse alarm with a visual red alarm light and an isolated closure for remote monitoring.

OmniOn Power™ provides a digital smart meter for more extensive monitoring and control plus the ability to monitor over Ethernet when used in a power plant that also includes a OmniOn Power™ Millennium 2 or Pulsar Plus controller. This is the same smart meter used in the large H569-445 BDFB.

Fuse / Circuit Breaker Panels

Distribution protector options include:

- 6 position GMT bullet fuse holder
- 6 position 0-125A TPS/TLS fuse holder
- 14 position 0-250A circuit breakers for 19" wide panels
- 22 position 0-250A circuit breakers for 23" wide panels

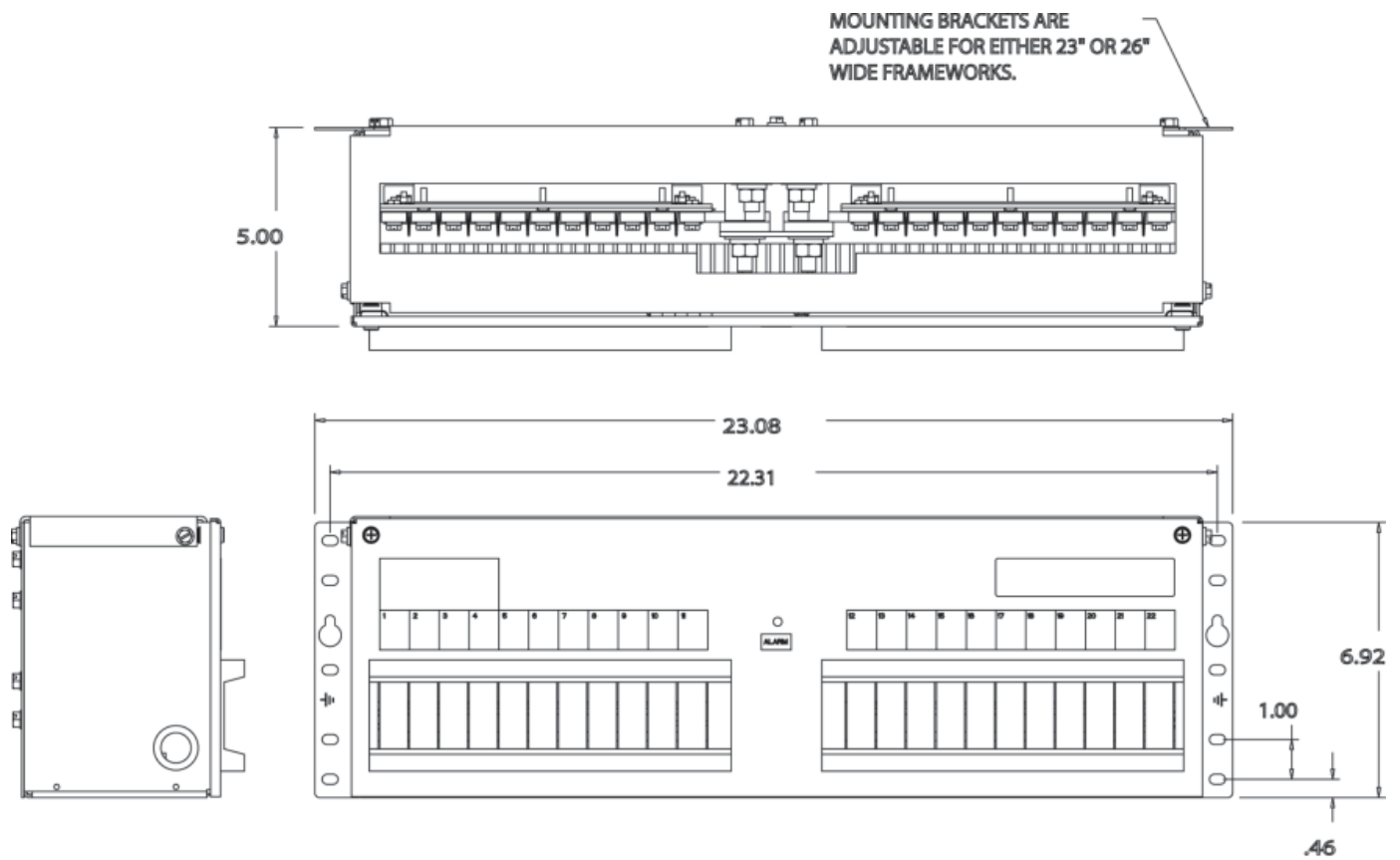
Advantages

- Ideal for customer premise power applications
- Digital meter interface
- 600 Amp capacity panels in a compact 4 RU size
- Small power distribution from battery plant to load equipment

Specifications

MECHANICAL	
Height	7 in. (175.7mm)
Width	19 in. (484mm) or 23 in. (586mm)
Depth	5 in. (127mm)
Weight	Approx 15.2 lbs (7kg)
AGENCY CERTIFICATIONS	
Telcordia	NEBS level 3 Compliant
UL	Canada/US UL60950/UL1801
CE	CE mark
EMI/EMC	CISPR class A conducted and radiated

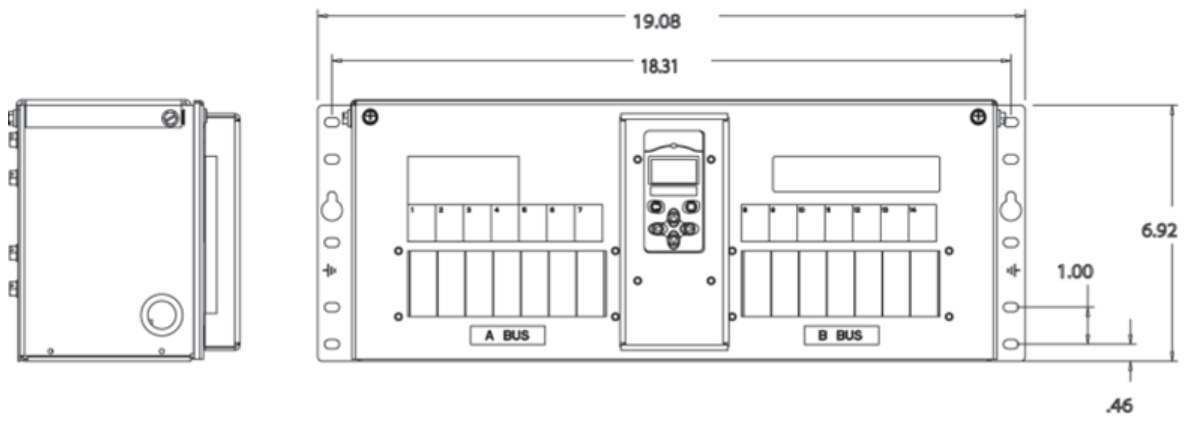
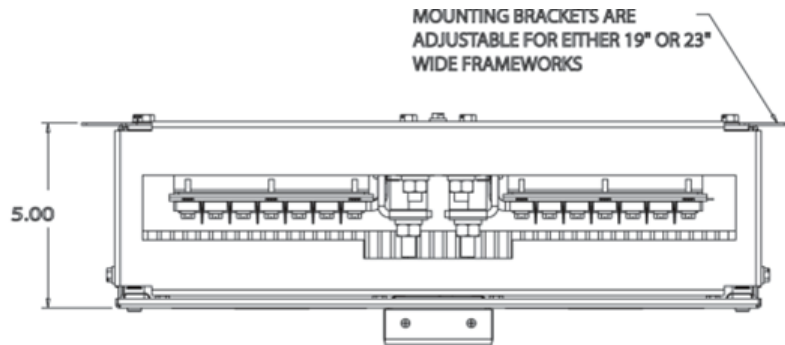
OUTLINE DRAWING



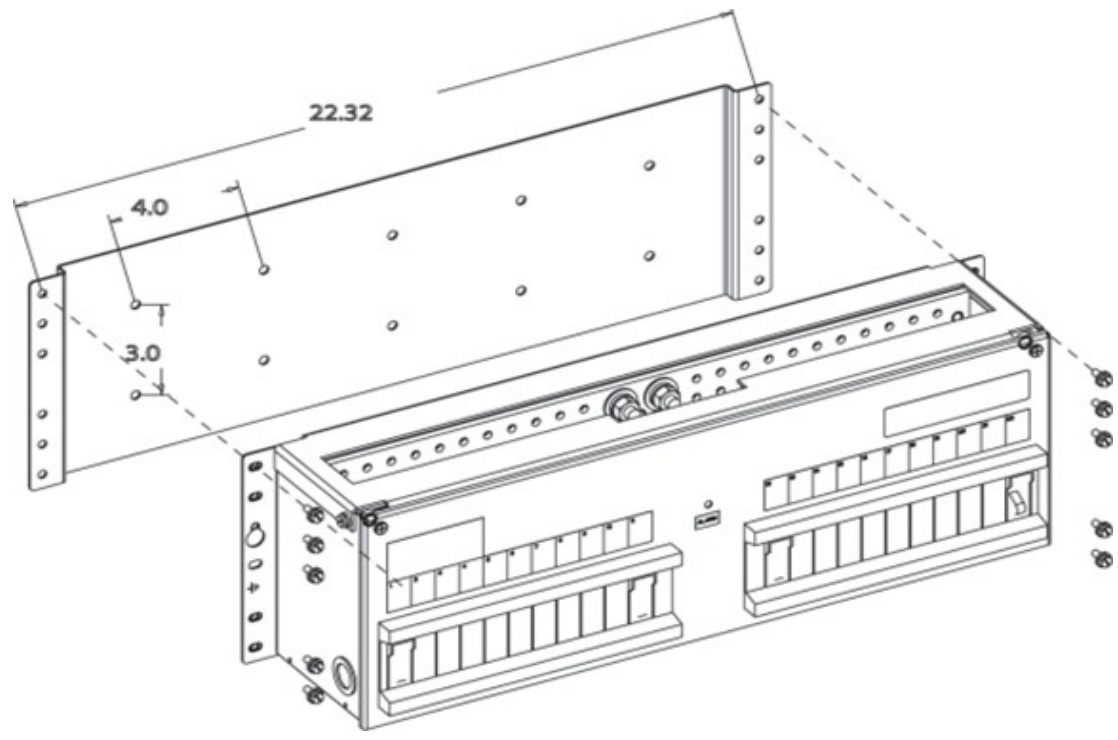
23" DC Distribution Panel with 477C alarm card

Specifications (continued)

OUTLINE DRAWING



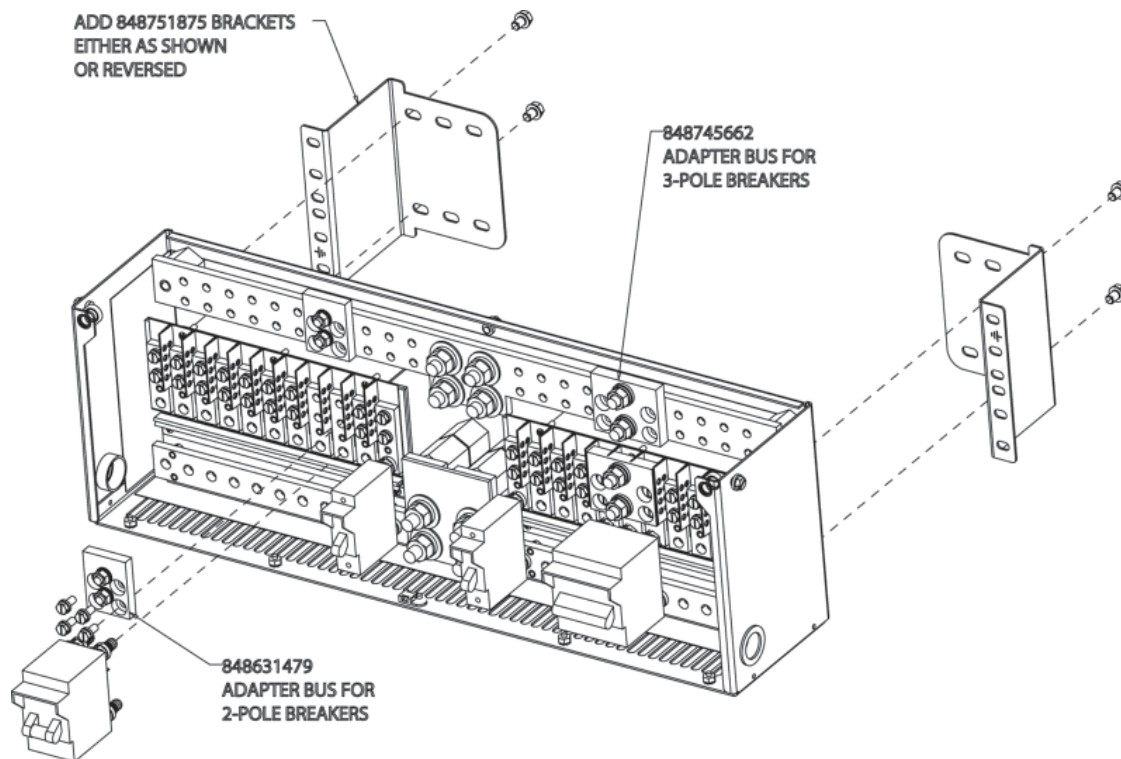
19" Micro-BDFB with smart meter



CC848786401 Wall Mounting Bracket for any Panel

Specifications (continued)

OUTLINE DRAWING



19" Micro-BDFB with smart meter

VIM1EC Intelligent Meter

The VIM1EC monitor, or smart meter, has an alarm sensitive back-lit display that changes color from green to red on alarm. Current, voltage and alarm information for the A and B buses are accessed thru the display. There are three primary alarms:

Power Loss/Under Voltage: Generates an alarm when power is lost to either the A or B bus; or when a user configurable low voltage threshold is reached.

Overload: Generates an alarm when a user configurable current threshold is reached. A configurable time delay may also be set to avoid nuisance alarms due to bus transients.

Breaker/Fuse: Generates an alarm when either a circuit breaker trips or a fuse blows.

The VIM1EC digital meter includes an audible alarm with a user configurable on/off feature. There is a form-C relay for each of the three alarms for remote monitoring - power loss/under voltage, current overload/threshold exceeded, and blown fuse/breaker trip.

A connection over the OmniOn Power™ propriety GP bus to an Millennium 2 or Pulsar Plus controller allows remote monitoring via ethernet. There are two RJ45 type connectors on the board that allow 16 VIM1EC boards to be daisy chained for monitoring over a single IP connection



ALARM CABLE PINOUTS AND DESCRIPTION

Pin	Form-C Alarm	Wire Color
7	Fuse NO	Blue
1	Fuse NC	White/Blue
2	Fuse C	Slate
10	OVL NO	White/Slate
4	OVL NC	Orange
5	OVL C	White/Orange
12	PL NO	Yellow
6	PL NC	White/Yellow
11	PL C	White

REMOTE MONITORING WEB PAGE EXAMPLE









Secondary DC Distribution (BDCBB) Ordering Information

Step 1: Select Micro-BDCBB Panel


ORDERING CODE	DESCRIPTION
108991056	Group 1: 23" distribution panel, single bus, no shunt, no meter, 22 breaker/fuse positions
CC109145463	Group 2: 23" distribution panel, dual bus, dual shunt, smart meter, 22 breaker/fuse positions
108992070	Group 3: 19" distribution panel, single or dual bus, no shunt, no meter, 14 breaker/fuse positions, - 48V Only
CC109145455	Group 4: 19" distribution panel, dual bus, dual shunt, smart meter, 14 breaker/fuse positions
CC109145430	Group 6: 23" distribution panel, single bus, single shunt, smart meter, 22 breaker/fuse positions
CC109145447	Group 8: 19" distribution panel, single bus, single shunt, smart meter, 14 breaker/fuse positions
150042938	NE843G_S rack mount Controller/Network interface where VIM1EC does not connect to a OmniOn Power™ Millennium 2 or Pulsar Plus Controller
CC848786401	Bracket for mounting panels to a wall
848751875	Bracket for staggering multiple panels for cable access. (Order two per panel)

Step 2: Select Circuit Breakers and Accessories

Bullet Style Load Circuit Breakers

ORDERING CODE	AMPERAGE	CB POSITIONS	MIN. WIRE GAUGE	PHOTO	
407998137	3	1	10		
407998145	5	1	10		
407998152	10	1	10		
407998160	15	1	10		
407998178	16	1	10		
407998186	20	1	10		
407998194	25	1	10		
407998202	30	1	10		
408213486	40	1	8		
407998210	45	1	8		
407998228	50	1	6		
407998236	60	1	6		
407998244	70	1	2		
407998251	80	1	2		
407998269	90	1	2		
407998277	100	1	2		
CC848808551	100	2	2		
408185353	125	2	2		
408185346	150	2	1/0		
408564941	200	3	2/0		
CC408573975	225	3	4/0		
408535752	250	3	4/0		
848631479	2-pole adapter bus kit (includes bus for 1/4" hole lug on 5/8" centers and hardware), order one per breaker				
848745662	3-pole adapter bus kit (includes bus for 5/16" hole lug on 1" centers and hardware), order one per breaker				

Bullet Style Fuse Holder and TPS/TLS Fuses

ORDERING CODE	AMPERAGE	PHOTO
406700567	3	
406700583	5	
406700591	6	
406700609	10	
406700617	15	
406700625	20	
406700633	25	

Step 2: Select Circuit Breakers and Accessories (continued)

ORDERING CODE	AMPERAGE	PHOTO
406700641	30	
406700658	40	
406700674	50	
406700682	60	
406700690	70	
CC408618020	80	
CC408618037	90	
CC408618045	100	
CC408618061*	125	
402328926	0.18 Alarm Fuse	
408548944	Bullet Fuse Holder, TFD-101-011-09 (Alarms on Blown Fuse or Fuse Head Removal)	
CC408617410	Bullet Fuse Holder, TFD-101-011-10 (Alarms on Blown Fuse Only)	

Bullet Style GMT Fuse Holder and GMT Fuses

ORDERING CODE	AMPERAGE	PHOTO
405006222	0.25A	
3150439	0.5A	
405673146	1.33A	
405181983	2A	
406976985	3A	
406159061	5A	
405725433	7.5A	
406159236	10A	
407854197	12A	
406473959	15A	
CC109103157	6-pos GMT Bullet Fuse Holder, requires 2 positions	
408515823	Fuse Puller	

*Maximum of 3 125A fuses per side. A space must be left between each fuse.

ORDERING CODE	MISC REPLACEMENT PARTS
CC109151420	Digital Meter Replacement

Reliability

- Delivers decades of service
- High availability architecture
- NEBS level 3 certified

Intelligence

- Industry leading digital smart monitor
- Network interface for remote access
- Visual, audible and remote alarms

Investment Protection

- Backward compatibility
- Flexible upgrade options
- Seamless integration with GPS plants

On Time Delivery

- Standard building blocks
- 4 - 6 week availability
- 24/7 technical support

Management Visibility

Galaxy Manager* software is the centralized visibility and control component of a comprehensive power management system designed to meet engineering, operations and maintenance needs. The Galaxy Manager client-server architecture enables remote access to system controllers across the power network.

- Dashboard display with one-click access to management information database
- Trend analysis
- Scheduled or on demand reports
- Fault, configuration, asset, and performance management

Training

OmniOn Power™ offers on-site and classroom training options based on certification curriculum. Technical training can be tailored to individual customer needs. Training enables customers and partners to more effectively manage and support the power infrastructure. We have built our training program on practical learning objectives that are relevant to specific technologies or infrastructure design objectives.

Service & Support

OmniOn Power™ field service and support personnel are trusted advisors to our customers always available to answer questions and help with any project, large or small. Our certified professional services team consists of experts in every aspect of power conversion with the resources and experience to handle large turnkey projects along with custom approaches to complex challenges. Proven systems engineering and installation best practices are designed to safely deliver results that exceed our customers' expectations.

Warranty

OmniOn Power™ is committed to providing quality products and solutions. We have developed a comprehensive warranty that protects you and provides a simple way to get your products repaired or replaced as soon as possible.

For full warranty terms and conditions please go to

[omnionpower.com](https://www.omnionpower.com)

OmniOn Power Inc.

601 Shiloh Rd.
Plano, TX USA

omnionpower.com

We reserve the right to make technical changes or modify the contents of this document without prior notice. OmniOn Power™ does not accept any responsibility for errors or lack of information in this document and makes no warranty with respect to and assumes no liability as a result of any use of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of OmniOn Power™. This document does not convey license to any patent or any intellectual property right. Copyright© 2025 OmniOn Power Inc. All rights reserved.