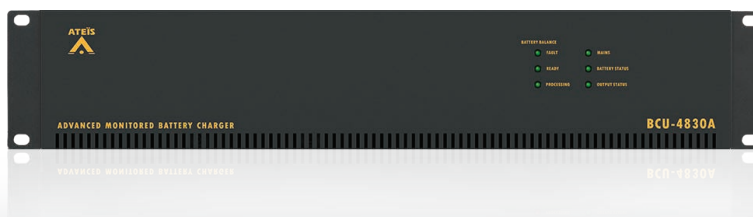


# BCU-4830A BCU-4875A



## Advanced Monitored Battery Charger

The BCU-4830A/BCU-4875A battery chargers (48 VDC) are designed for secured battery backup and power sharing to PA/VA system. The microprocessor-based design makes the charging process be programmed and optimized by sensing the battery status and temperature. With Battery Balance function, the capacity utilization of the battery cells can be maximized and increases the longevity as well.

The two (BCU-4830A)/six (BCU-4875A) 48V outputs provide the controllers or power amplifiers with a maximum current 30A (BCU-4830A)/75A (BCU-4875A) per unit, 20A per output. And three 24V outputs provide auxiliary or remote units with a maximum current 8A per unit, 3A per output. The maximum charging current of BCU-4830A is 3A and 6A for BCU-4875A. In addition, four fault contact outputs (GENERAL/MAINS/BATTERY/OUTPUT) are equipped for remote status monitoring, including the AC mains power fault and battery status: bad/voltage too high or too low/not present.

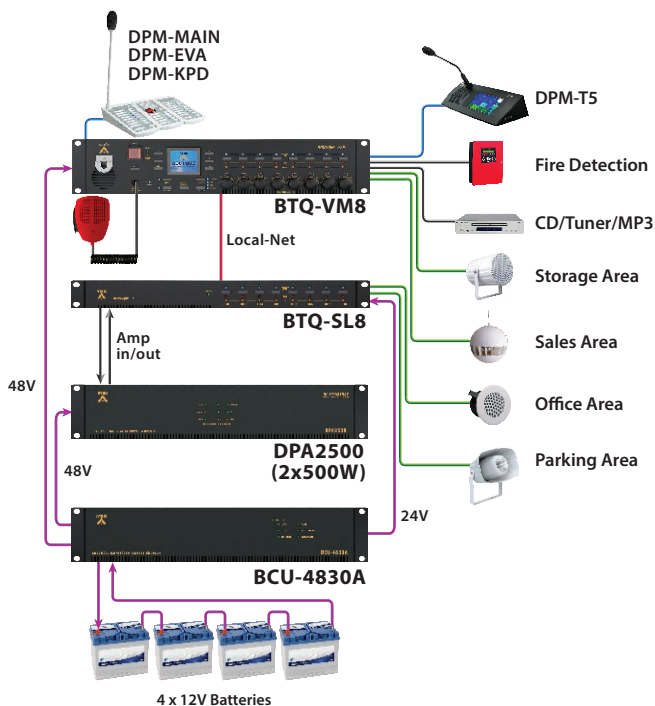


BCU-4830A Rear Panel

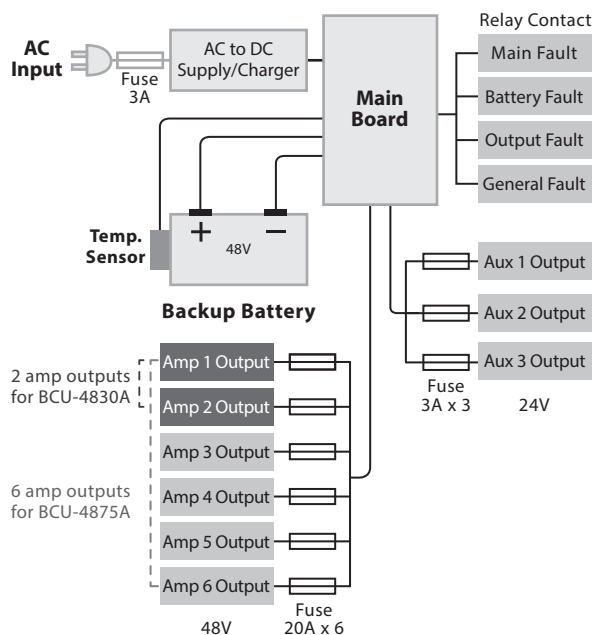


BCU-4875A Rear Panel

### APPLICATION EXAMPLE - BOUTIQUE



### BLOCK DIAGRAM



# BCU-4830A/BCU-4875A

## Advanced Monitored Battery Charger

### CONTROLS AND INDICATORS

#### ■ Front

- Mains LED, battery status LED, output status LED
- Battery balance LEDs: fault, ready, processing

#### ■ Back

- AC power cord socket
- Battery terminal
- Monitor DIP switch
- Temperature sensor
- Battery balance terminal
- Contacts outputs (general fault, mains status, battery status, output voltage status)
- 2 mains output terminals (BCU-4830A)
- 6 mains output terminals (BCU-4875A)
- 3 auxiliary output terminals (24V)

### AC POWER INPUT

- Voltage: 100 VAC ~ 240 VAC, 50/60 Hz

### POWER CONSUMPTION (AC)

model	standby mode	full power
<b>BCU-4830A</b>	5W	220W
<b>BCU-4875A</b>	8W	410W

### POWER CONSUMPTION (DISCHARGING)

model	standby mode	full power
<b>BCU-4830A</b>	4W	1440W
<b>BCU-4875A</b>	6.5W	3600W

### CERTIFICATIONS AND APPROVALS

Europe	Voice Alarm	EN54-4 (1438-CPR-0969) EN54-16 (1438-CPR-0947)
Europe	CE/EMI	EN55032 (In process)
Europe	CE/EMS	EN61000-4-2 (ESD) (In process)
Europe	CE/LVD	EN60065 (In process)
USA	Mass Notification Systems	UL2572 (Pending)
USA	Safety	UL60065 (Pending)

### CHARGING

- Voltage: 48 VDC
- Maximum charging current
  - BCU-4830A: 3A
  - BCU-4875A: 6A

### MAX. OUTPUT CURRENT

model	48V (per unit)	48V (per output)	24V (per unit)	24V (per output)
<b>BCU-4830A</b>	30A	20A	8A	3A
<b>BCU-4875A</b>	75A	20A	8A	3A

\* Note: 24V voltage range: 21 ~ 29V  
48V voltage range: 43 ~ 56V

### BATTERIES

- Battery capacity (4 x 12V)
  - BCU-4830A: 10 Ah to 65 Ah
  - BCU-4875A: 26 Ah to 120 Ah
- Recommended brands: Yuasa NPL Series, Power-Sonic GB Series, ABT TM Series, EnerSys VE Series, Effekta BTL Series, Long GB Series

### MECHANICAL

- Dimensions (W x H x D)
  - BCU-4830A: 437 x 88 x 270 mm (17.2 x 3.5 x 10.6 inch)
  - BCU-4875A: 437 x 88 x 270 mm (17.2 x 3.5 x 10.6 inch)
- Weight
  - BCU-4830A: 5.5 kg (12.1 lbs)
  - BCU-4875A: 6 kg (13 lbs)
- Mounting: 19" 2U rack
- Colour: RAL 7016

### ENVIRONMENTAL

- Operating temperature: -5 °C ~ +55 °C (+23°F ~ +131°F)
- Storage temperature: -40 °C ~ +70 °C (-40 °F ~ +158 °F)
- Relative humidity: 20% to 95%
- Air pressure: 600 to 1100 hPa
- Heat dissipation
  - BCU-4830A: 102 BTU/hr
  - BCU-4875A: 205 BTU/hr

### ORDERING INFORMATION

- BCU-4830A: Advanced Monitored Battery Charger 3amp/30amp
- BCU-4875A: Advanced Monitored Battery Charger 6amp/75amp