



## Features

- Built-in automatic voltage regulation enables a wide input voltage window to deliver power while preventing unnecessary battery drain
- Internal bypass switch provides power if UPS fails and prevents unnecessary shutdown of connected equipment
- Listed to UL 60950-22 standard for outdoor equipment
- Connectorized internal circuit board assemblies for easy repairs
- LED indicators show status of load and batteries
- Heavy-duty surge protection and noise filtering protects load and UPS
- Wide temperature, pure lead, gel batteries and internal cooling fan extend battery life and protect electronic components

## U01 Compact Series Outdoor UPS (AC/AC)

The Bourns® U01 Compact Series Outdoor Uninterruptible Power Supply (UPS) is equipped with wide-temperature, pure lead, gel batteries and is housed in a weather-protected enclosure. It offers line-interactive automatic voltage regulation, over / under voltage protection, surge protection with heavy-duty noise filtering, communications capability and optional extended battery back-up.

The U01 Series Compact Outdoor UPS provides automatic voltage regulation with surge protection and noise filtering, as well as overvoltage protection with a threshold of 136 V and undervoltage protection with a threshold of 96 V. In the event of a brownout, overvoltage, or loss of power, the UPS will transfer to battery power quickly, enabling uninterrupted operation of the critical load.

This Compact Outdoor UPS is ideal for the protection of outdoor telecommunications infrastructures, DAS Systems, perimeter surveillance, security / gate control systems, LED traffic light and roadway display systems.

### Characteristics

| Specification                           | Model<br>U01120-050-120   | Model<br>U01120-084-120 | Model<br>U01120-105-120         |
|---|---|-------------------------|---------------------------------|
| <b>INPUT</b>                            |   |                         |                                 |
| Nominal Voltage & Frequency             | 116 V, 60 Hz  |                         |                                 |
| Operating Voltage                       | 96 - 136 V  |                         |                                 |
| Current @ 96 V & Max. Charging          | 7.8 A   | 11.4 A                  | 14.2 A                          |
| Circuit Breaker                         | 10 A  | 15 A                    | 15 A                            |
| Surge Withstand and Let-through Voltage | ANSI/IEEE:<br>6 kV, 1.2 x 50 $\mu$ s / 3 kA, 8 x 20 $\mu$ s;<br>L-N: 450 V L-G: 300 V N-G: 300 V  |                         |                                 |
| <b>OUTPUT</b>                           |   |                         |                                 |
| Voltage                                 | 115 V $\pm$ 8 %   |                         |                                 |
| Output Power                            | 500 W   | 840 W                   | 1050 W                          |
| Crest Factor                            | 3 : 1   |                         |                                 |
| Waveform and THD                        | Sine wave, < 3 % THD with linear load   |                         |                                 |
| Power Efficiency                        | Line: 97 %, Inverter: 92 % under full load conditions   |                         |                                 |
| Power On / Off Switch                   | On / off rocker style power switch  |                         |                                 |
| Transfer Time                           | 0 to 8 milliseconds   |                         |                                 |
| <b>BATTERY</b>                          |   |                         |                                 |
| Type                                    | 8GU1  |                         | NP 18-12                        |
| Dimensions:<br>mm/(inches)              | 196 x 132 x 183 (7.71 x 5.18 x 7.22)  |                         | 180 x 76 x 167 (7.1 x 3 x 6.57) |
| Weight                                  | 23 lbs. / 10.5 kg   |                         | 13.7 lbs. / 6.2 kg              |
| Ah @ 20 hr Rate and Bus Voltage         | 31.6 Ah, 24 VDC   |                         | 17.2 Ah, 48 VDC                 |
| Number of Batteries                     | 2   |                         | 4                               |
| Battery Circuit Breaker                 | 30 A  | 40 A                    | 40 A                            |
| Battery Heater Pad BH 5                 | 34 W, one required  |                         | 34 W, two required              |
| Battery Back-up Time vs. Load           | 32 min.   | 17 min.                 | 27 min.                         |
| Recharge Time                           | Temperature compensated charger, charge to 90 % capacity after full discharge<br>7 hrs.   |                         |                                 |
| <b>INDICATORS AND ALARMS</b>            |   |                         |                                 |
| LED Status Indicators on Control Board  | Inverter on:<br>Amber: Low battery: Amber after inverter shut down following low battery after long outage;<br>Fault: Red for overload / red blinks for high temperature;<br>AC ok: Green when AC in buck, bypass or boost mode |                         |                                 |
| N/O or N/C Contacts                     | >44 V / <44 V / or >22 V / <22 V / On / Off,<br>Six position terminal block on control board assembly   |                         |                                 |

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

## Features (Continued)

- Compact design
- Quiet - ideal for use in locations with noise ordinances
- Pole or wall mounting options
- Precise output current limiting permits start-up of induction motors and other difficult loads

## Applications

- Perimeter surveillance cameras (CCTV)
- Wireless access points
- Industrial Remote Terminal Units (RTUs)

# U01 Compact Series Outdoor UPS (AC/AC)

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## Characteristics (Continued)

| Specification   | Model<br>U01120-050-120   | Model<br>U01120-084-120 | Model<br>U01120-105-120 |
|---|---|-------------------------|-------------------------|
| <b>PHYSICAL</b>   |   |                         |                         |
| Dimensions  | 419 mm (16.5 ") wide x 521 mm (20.5 ") high x 241 mm (9.5 ") deep                           |                         |                         |
| Aluminum Cabinet  | Outdoor type, power coated  |                         |                         |
| Input / Output Connections  | 3-position terminal block provided for 3 x 12 AWG, 7/8 " holes for 1/2 " conduit connectors |                         |                         |
| Weight with Batteries (lbs/kg)  | 100 / 45.4  | 103 / 46.8              | 110 / 49.8              |
| Mounting Options  | Wall mounting is standard; optional pole mounting bracket is available                      |                         |                         |
| <b>ENVIRONMENTAL</b>  |   |                         |                         |
| Operating Temperature   | +14 to +131 °F / -10 to +55 °C  |                         |                         |
| Maximum Operating Temperature   | -40 to +131 °F / -40 to +55 °C with BH5 optional battery heater                             |                         |                         |
| Cooling Method  | +149 °F / +65 °C  |                         |                         |
| Moisture Protection   | Thermostat controlled exhaust fan   |                         |                         |
|   | Conformal coating of electronic boards for moisture resistance                              |                         |                         |
| <b>SAFETY</b>   |   |                         |                         |
| cETLus  | UL 1778 Ed: 4, CSA C22.2 #107.3, UL 60950-1, UL 60950-22, CSA C22.2#60950-22                |                         |                         |

## Product Images



Front View



Rear View

## Mounting Options



Wall Mount



Pole Mount

## Latching Options



Standard Slotted Latch



Key Lock



Bellcore 216

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# U01 Compact Series Outdoor UPS (AC/AC)

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## How to Order



*Standard Offering: Wall mount, Standard latch, 1 string, heated/unheated.*

## U01 Compact Series UPS (AC/AC) Schematic



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REV. B 03/16

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## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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