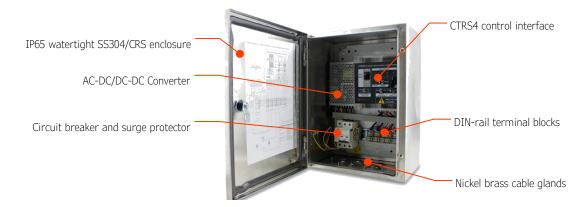
# **CTRS4CBSP-DUAL Control Box for Obstruction Lights**

AC/DC input and DC output control box



#### OVERVIEW

The CTRS4CBSP-DUAL is an obstruction lighting control box designed for controlling and monitoring RedDot LED low intensity and medium intensity aviation obstruction lights. Incorporated a power converter, CTRS4CBSP-DUAL allows users to input two types of voltage and converts to lower voltage for electrical safety works. The user-friendly interface is intuitive for users to monitor operation status and easily configure functions.

There are four light outputs (max. 1A load/output). Practically, for example, for input voltage 220VAC & 48VDC, each output connects one OM2K or F864 medium intensity light, or up to eight OL32/OL100 low intensity lights.

With a Form C dry alarm relay (NO&NC), the control box is capable of transmitting the obstruction lighting system's failure to users' alarm devices, when light failure, power-off or photocell failure.

A PHC01 photocell is used for automatically switching on and off the obstruction lighting system from dusk to dawn. Bypass switch on the interface panel allows users to bypass the photocell for permanently lightening or testing.

DIN-rail terminal blocks save wiring time and enhance wiring safety. A 2P circuit breaker is effective in protecting converters from overload. A surge protector enhances protection against voltage fluctuation and lightning strikes.

#### **FEATURES**

- Dual voltage input: AC & DC48V/24V/12V, DC48V & DC24V/12V, 24VDC & 12VDC
- DC output: 48VDC, 24VDC, 12VDC
- High-quality power converter, efficiency>80%
- On/Off main power switch
- LED indicators for light, power and photocell
- "Service+Service"/"Service+Standby" adjustable when double lights used
- Four light-outputs, 1-4 selectable upon actual application
- Each light output load maximum 1A
- Steady/Flashing adjustable
- External photocell with prewired shielded cable, easy to maintain
- Bypass switch to photocell for testing or 24/7 operation
- One dry contact relay (From C, NO&NC) for alarm output of lights, power and photocell
- DIN-rail terminal blocks save wiring time and enhance wiring safety
- · Circuit breaker against overload and shortcircuit
- Surge protector against voltage fluctuation and lightning strikes

#### **■ APPLICABLE OBL MODELS**

OL32S, OL32D, OL100S, OL100D, OL200, OM2K, OM2C-D, F864



## SPECIFICATIONS

| Item                    |                         | CTRS4CBSP-DUAL Specifications                 |          |          |             |             |             |  |  |  |
|-------------------------|-------------------------|---|----------|----------|-------------|-------------|-------------|--|--|--|
|                         | Input voltage           | AC&48VDC                                      | AC&24VDC | AC&12VDC | 48VDC&24VDC | 48VDC&12VDC | 24VDC&12VDC |  |  |  |
| POWER SUPPLY            | Output voltage          | 48VDC   | 24VDC    | 12VDC    | 24VDC       | 12VDC       | 12VDC       |  |  |  |
|                         | Power Consumption       | 5W  |          |          |             |             |             |  |  |  |
|                         | Converter Power         | 15W - 240W, depends on total lights' power    |          |          |             |             |             |  |  |  |
| OPERATION               | Numbers of Light Output | 4   |          |          |             |             |             |  |  |  |
|                         | Max.Load/Output         | 1A  |          |          |             |             |             |  |  |  |
|                         | Flash Rate              | Steady/Flashing(20FPM), adjustable            |          |          |             |             |             |  |  |  |
|                         | Photocell sensitivity   | 200Lux  |          |          |             |             |             |  |  |  |
|                         | Photocell bypass        | Auto/Manual adjustable                        |          |          |             |             |             |  |  |  |
|                         | Alarm type              | Form C, NO & NC, dry contact relay            |          |          |             |             |             |  |  |  |
|                         | Numbers of Alarm Output | 1*alarm relay for lights, power and photocell |          |          |             |             |             |  |  |  |
| MECHANICAL<br>STRUCTURE | Enclosure Type          | Outdoor                                       |          |          |             |             |             |  |  |  |
|                         | Enclosure Material      | •SS304 •Cold-rolled steel                     |          |          |             |             |             |  |  |  |
|                         | Protection              | IP65  |          |          |             |             |             |  |  |  |
|                         | Weight                  | 5KG   |          |          |             |             |             |  |  |  |
|                         | Dimension (H*W*Depth)   | 422mm*300mm*150mm                             |          |          |             |             |             |  |  |  |
|                         | Operaton Temperature    | -40°C~+60°C                                   |          |          |             |             |             |  |  |  |
|                         | Operation Humidity      | 0-95% RH non-condensing                       |          |          |             |             |             |  |  |  |
|                         | Mounting                | Wall mounting or U-bolt mounting              |          |          |             |             |             |  |  |  |

## **■ ORDERING CODE**

| Series    | Dual voltage<br>type | Input voltage 1         | Input voltage2 &<br>output voltage | Numbers of<br>lights on top | Converter Type<br>(Note3) | Converter<br>Power (Note4) | Enclosure<br>material         |
|-----------|----------------------|-------------------------|------------------------------------|-----------------------------|---------------------------|----------------------------|-------------------------------|
| CTRS4CBSP | I (Dual)             | <b>A220</b> (85-265VAC) | <b>D48</b> (48VDC)                 | <b>T1</b> (Note1)           | ENC (Enclosed)            | Variable                   | <b>SS</b> (SS304)             |
|           |                      | <b>D48</b> (48VDC)      | <b>D24</b> (24VDC)                 | <b>T2</b> (Note2)           | DIN (DIN-rail)            |                            | CRS<br>(Cold-rolled<br>steel) |
|           |                      | D24 (24VDC)             | <b>D12</b> (12VDC)                 |                             |                           |                            |                               |

Notes: 1) T1: one light is on top of a structure or the light functions differently from other lights, adjustable Service+Service+Standby NOT applicable.

2) T2: two lights on top of structure or two lights functions coordinately but differently from other lights, adjustable Service+Service+Standby applicable.

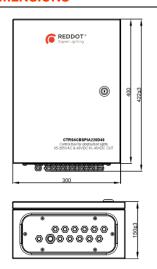
**MOUNTING** 

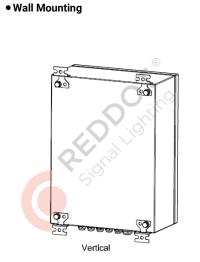


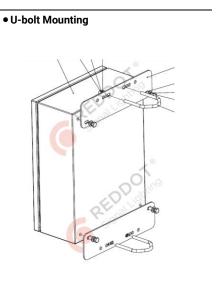
3) Enclosed type:
4) The converter's power depends on lights' power connected to the control box. REDDOT will offer the most suitable to customers.

E.g.: CTRS4CBSPIA220D48T2-ENC100-SS = Dual voltage input control box, 85-265VAC & 48VDC input, 48VDC output, Service+Service+Standby applicable, with enclosed converter 100W, SS304 enclosure

#### DIMENSIONS







## **APPLICATION EXAMPLES**

• One medium intensity beacon and three low intensity obstruction lighting AC & 48VDC system

