

## Current display CUB5I



- Programmable input for direct current up to 200 mA
- free scaling
- 5-digit, 12 mm high brilliant LCD or red/green backlit display
- front side protection class IP65
- Easily programmable via front buttons
- minimum and maximum value memory
- Configurable physical unit of measurement
- Optional switching output
- Optional RS232/RS485 or USB interface

<https://www.wachendorff-prozesstechnik.de/en/CUB5I>

### Description

The CUB5I is a low-cost digital display for direct current. It is programmed via the two front buttons or optionally via software and was developed for rough industrial operation. The display is available as a standard LCD or with red/green backlighting. Thanks to the free scaling, the minimum and maximum value memory, the configurable unit and the optional upgrade with up to 2 switching outputs and serial interface, the CUB5I has a very good price/performance ratio.

### Product details

|                                                      |                                                                                                                                                                                                                                                        |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Display                                              | 5-digit brilliant LCD display with 12.2 mm high digits, standard LCD or with red/green switchable backlight. The backlighting is adjustable in intensity in 5 levels.                                                                                  |
| Display area                                         | -99999 to 99999                                                                                                                                                                                                                                        |
| Entrance                                             | 0 to 200 µA, 2 mA, 20 mA, 200 mA optionally adjustable via jumper. Response time of 500 msec.                                                                                                                                                          |
| Resolution                                           | 10 nA to 10 µA depending on the selected range.                                                                                                                                                                                                        |
| Accuracy                                             | 0.1 % of the set display range                                                                                                                                                                                                                         |
| Protection                                           | Power supply is not electrically isolated from the signal input.                                                                                                                                                                                       |
| Max. input current:                                  | 200 µA: 15 mA<br>2 mA: 50 mA<br>20 mA: 150 mA,<br>200 mA: 500 A                                                                                                                                                                                        |
| Scaling                                              | Freely scalable                                                                                                                                                                                                                                        |
| Indicators                                           | Min/Max, adjustable unit                                                                                                                                                                                                                               |
| Function inputs                                      | <b>User input:</b> Low active, delay time: 50 msec. when activating or deactivating, typ. 5 ms for all other functions. Programmable function (programming inhibit etc. see programming).<br>$V_{ILmax} = -1.0 V, V_{IHmin} = +2.4 V, V_{max} = +28 V$ |
| Operating modes                                      | Min./Max. Value memory                                                                                                                                                                                                                                 |
| Relay output card with one switching output (option) | Type: Form-C relay, 1 A at 30 VDC or 0.3 A at 125 VAC. Closing and opening delay: 4 mSec. max. 100,000 switching cycles min.                                                                                                                           |
| Transistor output card (option)                      | 2 outputs type: NPN Open Drain MOSFET with galvanic isolation, 100 mA max., max. 30 Volt.                                                                                                                                                              |

### Interface cards (option)

#### RS232:

Half-duplex (not isolated) 300 baud to 38400 baud.

#### RS485:

Transmission delay 2 mSec./min. or 50 mSec./min. adjustable.

2-wire/half-duplex (non-isolated), 300 baud to 38400 baud, up to 32 devices in the loop. Address 0 to 99.

#### USB:

Virtual COM port Baud rate: 300 baud to 38.4 kbaud. Connection type B, address: 0 to 99

### Setting

Programming and operation via 2 front buttons (lockable) + Crimson software.

**SEL:** Step to the next program section, save the programming or select the enabled display.

**RST:** Change parameters in the programming or reset minimum/maximum value or alarm output.

### Programming

Programming is carried out via the two front buttons or via software (only with interface card). The simple and logically structured menu navigation allows very fast commissioning. Access rights can also be assigned.

### Data backup

EEPROM

### Supply

Standard LCD display: 9 VDC to 28 VDC, max. 40 mA.

Backlit display: 9 VDC to 28 VDC, max. 125 mA.

230 VAC supply via directly screw-on power supply unit (see accessories).

### Protection class

Jet-proof and dust-tight to IP65 from the front.

### Ambient conditions

Operating temperature: Standard LCD: -35 °C to +75 °C, Backlit LCD: -35 °C to +35 °C/+75 °C (depending on display intensity) Storage temperature: -35 °C to +85 °C

### Dimensions: (W x H x D)

75 mm x 39 mm x 44 mm, Panel cut-out: DIN 68 mm x 33 mm

### Assembly

Fastening via mounting frame, screw connections (connection).

### Connection

About screw terminals

### Weight

approx. 100 g

### Scope of delivery

Device, fixing material, seal, operating instructions.

|                        |               |
|------------------------|---------------|
| Customs tariff number: | 9030 33 70    |
| Manufacturer           | Red Lion, USA |

#### Products Order no.

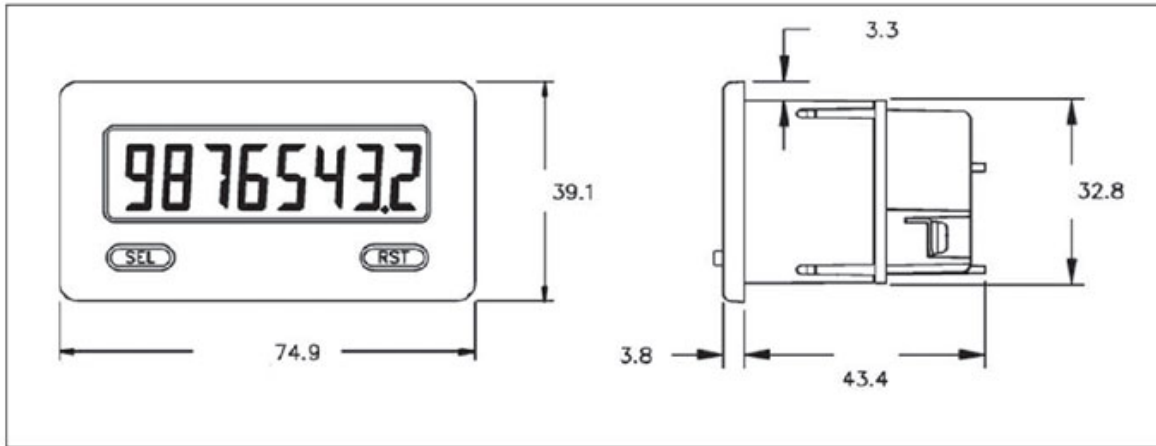
|          |                                            |
|----------|--------------------------------------------|
| CUB5IR00 | Power display with standard LCD            |
| CUB5IB00 | Power indicator with red/green backlit LCD |

#### Accessories Order no.

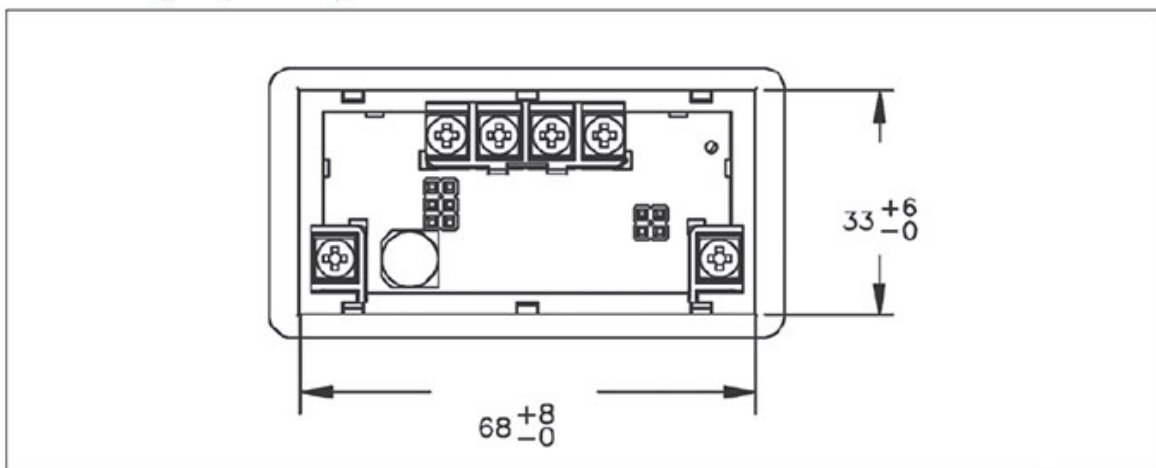
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|----------|----------------------------------------------------------------------------------------|
| BMK11000 | DIN rail adapter for CUB5 series and MLPS                                              |
| CUB5COM1 | RS485 serial interface                                                                 |
| CUB5COM2 | Serial interface RS232                                                                 |
| CUB5RLY0 | Relay output card (option)                                                             |
| CUB5SNK0 | Transistor output card                                                                 |
| CUB5USB0 | USB interface                                                                          |
| KABUSB21 | USB cable, USB 2.0 A to USB 2.0 B, 1.8 m length                                        |
| ENC80000 | Steel housing, W: 114 mm x H: 101 mm, D: 89 mm                                         |
| ENC8A000 | Plastic housing, W: 130 mm x H: 80 mm, D: 77 mm                                        |
| ENC8B000 | Plastic housing, W: 120 mm x H: 122 mm, D: 96 mm<br>for devices with power supply unit |
| PMK6A000 | Adapter plate for 96 mm x 48 mm cut-out                                                |
| MLPS2000 | MPLS power supply unit: Input 85 VAC to 250 VAC<br>Output: 24 VDC, max. 200 mA         |
| MLPS1000 | MPLS power supply unit Input: 85 VAC to 250 VAC<br>Output: 12 VDC, max. 400 mA         |

Drawings

Dimensions (mm)



Abmessungen ( in mm )



Rückseite ( Maße in mm )



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