

Intelligent Building Solutions

Installation Manual



CIF 20 SU

CIB-tech - USB interface

- Surface mounting

CIB-tech

Introduction

The CIF 20 SU connects the CIB-tech automation system to a host computer running the CIB-tech systems interface software¹.

Additional Equipment Required

1. Functional CIB-tech system

A minimal number of essential CIB-tech components to make a functional CIB-tech system²

2. USB cable

Standard USB-A to USB-B cable at a maximum length of 3 m is required for connecting the CIF 20 SU to the host computer.

Technical Specifications

Electrical characteristics

● Power Supply

Due to the galvanic isolation of the CIB-tech network from the host computer, the CIF 20 SU requires double power supply. It is powered both from the CIB-tech system's power supply via the CIB-tech connector and from the host computer via the USB connector.

- Power from CIB-tech system:
 - Operating voltage range: 20 to 28V DC (nominal 24V DC)
 - Supply current
 - Standby current : 21mA
 - Maximum current: 24mA
- Power from USB:
 - Operating voltage: 5V DC
 - Operating current: 50mA

USB specifications

- USB 2.0 device (full speed)
- USB-B connector
- USB serial converter

Mechanical characteristics

The CIF 20 SU has a white, flat, wall-mounted enclosure with ventilation slots.

- Dimensions: 71mm W x 71mm L x 28mm D
- Weight: 75g

Environmental characteristics

- Operating temperature: -10°C to 85°C
- Storage temperature: -25°C to 100°C

1 The ESS software system is an open source CIB-tech interface software that is available for download at IBS homepage: <http://www.ibs-smarthouse.com/>

2 See "CIB-tech installation manual" for details.

Installation

The CIF 20 SU is meant to be installed on a standard 60mm pattress box or on any flat surface such as a wall.

To install the device:

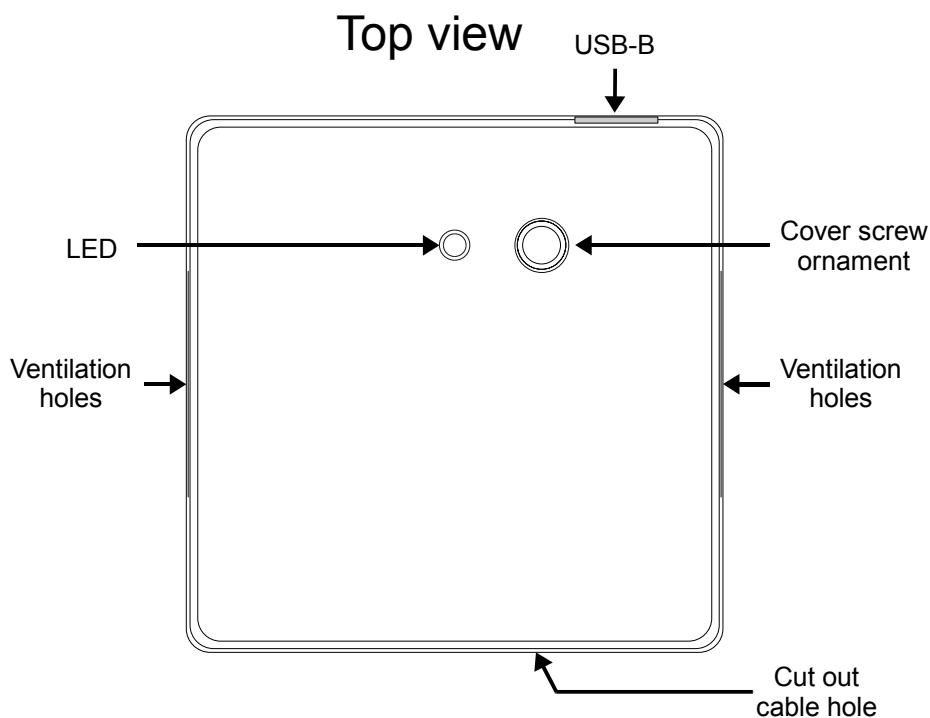
- remove the cover screw ornament, unscrew the cover screw and remove the top cover of the device;
- pull the cable through the cable hole on the base of the device or cut out the side cable hole;
- mount the base of the device via the two mounting holes;
- connect the wire to the device (see connection diagrams below);
- replace the top cover of the device, tighten the cover screw and replace the screw ornament.
- connect the device to the host computer via the USB cable²;

Part description

- **LED:** indicator LED for network attachment state
 - red: interface to the CIB-tech network is off-line
 - green: interface to the CIB-tech network is on-line)
- **Cover screw and ornament:**
 - fastening the top cover of the device
 - plastic ornament hiding the cover screw
- **Ventilation slots:**
 - slots on the sides of the enclosure
- **Cable hole:**
 - cable entry hole on the bottom of the device
- **Cut out cable hole:**
 - location where the plastic box can be cut out for an alternate cable entry point

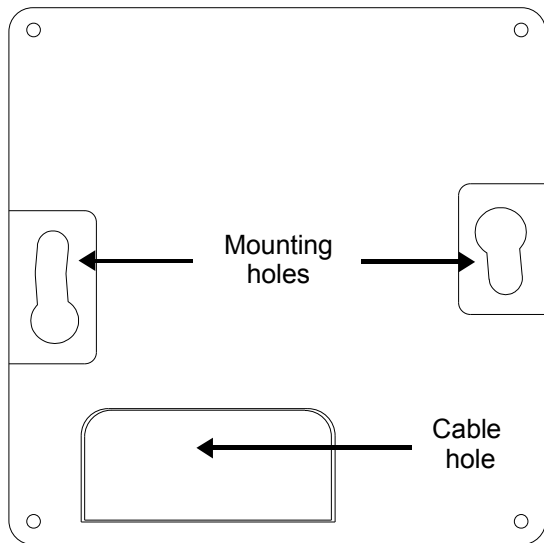
NOTE: This is only recommended if bottom cable entry is not possible

- **Mounting holes:**
 - holes for mounting the device on a standard 60mm pattress

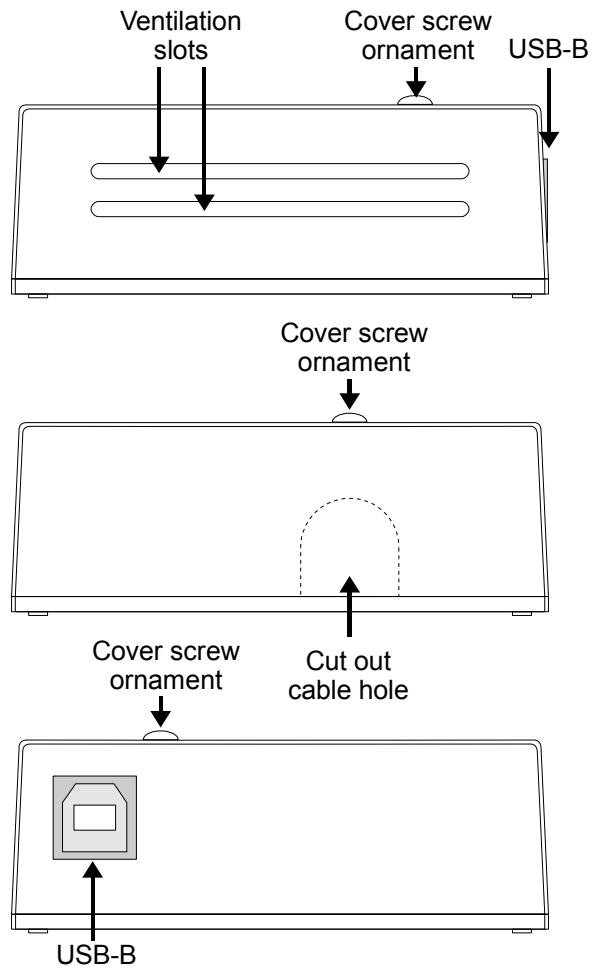


² USB driver for CIF 20 SU are available for download at IBS homepage: <http://www.ibs-smarthouse.com/>

Bottom view



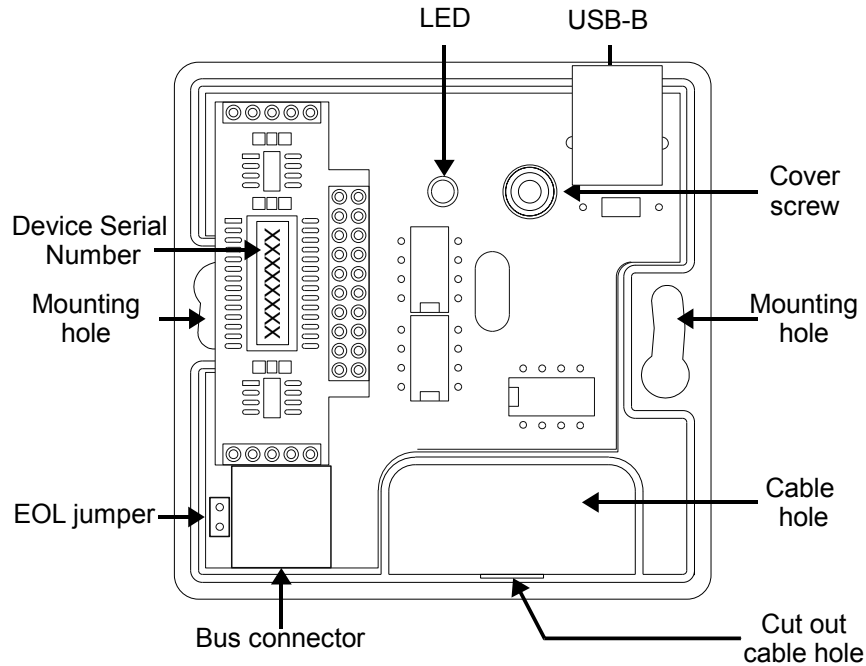
Side view



- **Bus connectors:**
 - 4P4C modular jack connectors for CIB-tech connection ¹
- **EOL jumper:**
 - CIB-tech system's End Of Line jumper¹
- **Device serial number:**
 - Unique serial number
 - used to identify every CIB-tech device
 - this number is also electronically encoded in the device
- **USB-B connector:**
 - USB device connector for connecting the CIF 20 SU to the host computer

¹ See "CIB-tech installation manual" for details.

Top view with removed cover



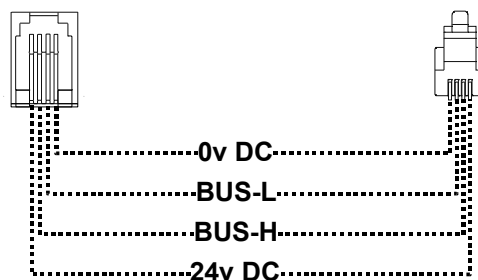
Wiring diagrams

Connection to CIB-tech system:

Use the CIF 20 SU device's 4P4C modular jack connector to connect it to the CIB-tech systems bus. This device is meant to be the last element of a CIB-tech bus line.

If the device must be used as not the last element in the CIB-tech systems (chain-like) bus, a Bus Linker¹ can be used. In such situations the EOL jumper must be removed²

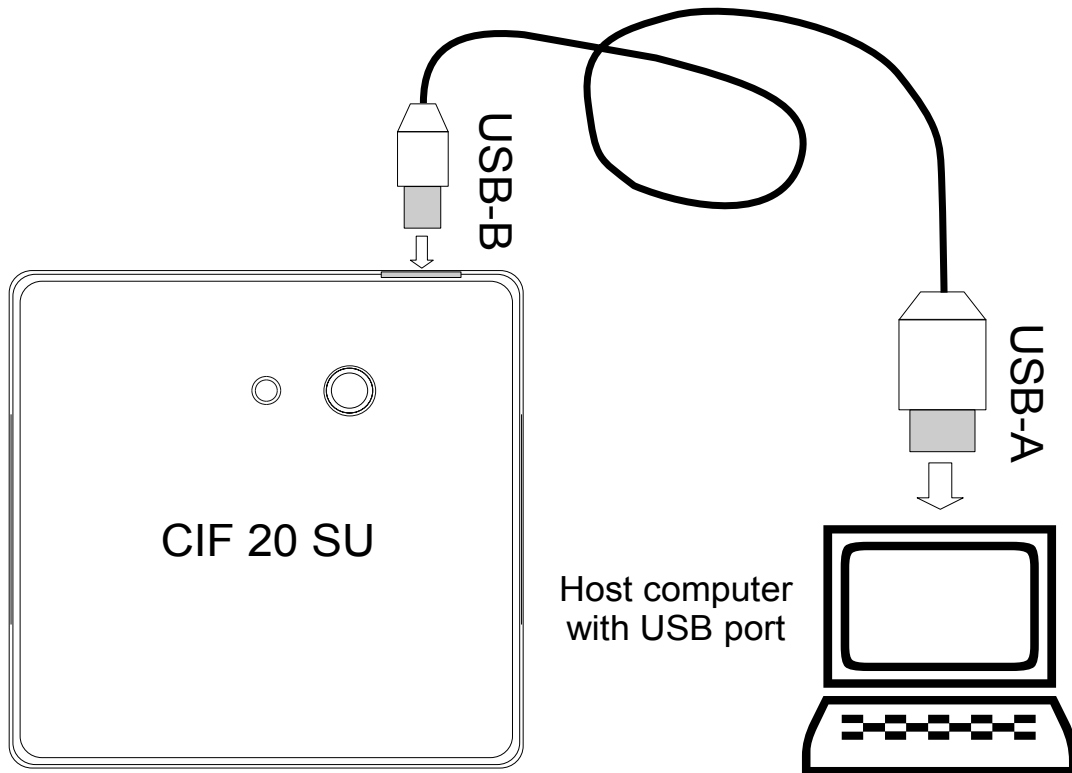
BUS connection



¹ IBS product BL-1C2RJ92RJ or compatible device can be used. See IBS product list for details.

² See "CIB-tech installation manual" for details.

Connecting to host computer:



NOTE: Use a USB-A to USB-B cable to connect the CIF 20 SU to the host computer.

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Technical Support:
<http://www.ibs-smarthouse.com/>
info@ibs-smarthouse.com

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