

# Manual

## USB-Hub Industry



**Release** 1.02, Jan.2012  
**Model** 33601

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Subject to errors and changes:

Since we can make mistakes, none of our information should be used without verification. Please tell us of any mistakes or unclear information so that we can remedy them as quickly as possible.

Perform work on or with W&T products only as described here and after you have read and understood the manual fully. Unauthorized actions may result in hazardous situations. We are not liable for the consequences of unauthorized actions. If in doubt please contact us or your dealer first!

## Introduction

Technology is unthinkable today without the USB interface. Even in industry the USB is gaining in significance. Accordingly, W&T has developed an industry-compatible USB hub. The „W&T USB -HUB Industry“ differs from commercial office USB hubs in that the device is housed in a DIN rail enclosure. In addition, the hub requires the industry standard voltage of 24 - 48V DC and can be used in an extended temperature range of from 0 - 70 °C.

The hub features four downstream USB ports to which any USB device can be simply connected using plug & play. The downstream ports as well as the uplink port are USB 2.0 (Highspeed) compatible. This means they are also compatible with USB 1.0 devices (Low- / Full-speed).

By cascading multiple hubs (max. 6 in a row) it is possible to connect up to 127 different USB devices to one USB host.

**Inhalt**

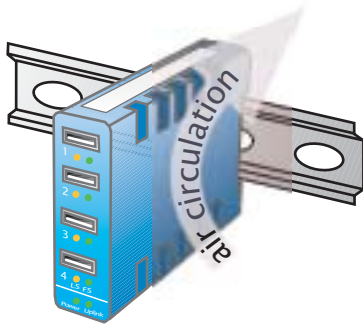
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## Overview

- Meets USB 2.0 Specification
- Downward compatible with USB 1.0 Specification
- Data rates: 1.5 / 12 / 480 Mbit/s
- Plug & Play
- Operating system neutral (no driver required)
- Protected against over-current/short-circuit
- One status indicator per port
- Multiple hubs can be cascaded
- DIN rail mount housing

## Mounting

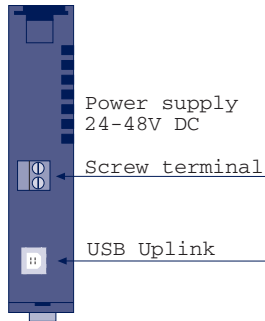
The housing of the W&T USB Hub and the arrangement of the vent.



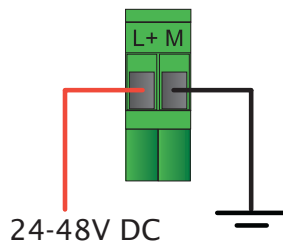
Especially in ambient operating conditions with elevated ambient temperature you must provide for adequate air circulation when using alternate mounting solutions.

## Installation

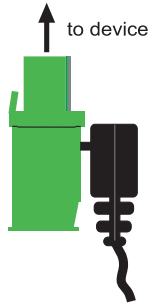
1. Connect the USB-Hub to a 24-48V DC power supply using the provided screw terminal. (Power LED is green)



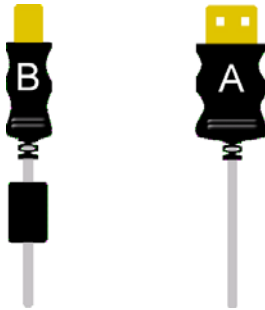
When connecting DC power supplies, please observe polarity as indicated on the screw terminal adapter:



If you are using the W&T power supply, screw the power supply connector on to the screw terminal adapter:



2. Plug the USB cable provided to the USB-B plug on the side of the USB-Hub and connect the USB-A plug on the cable to the computer.

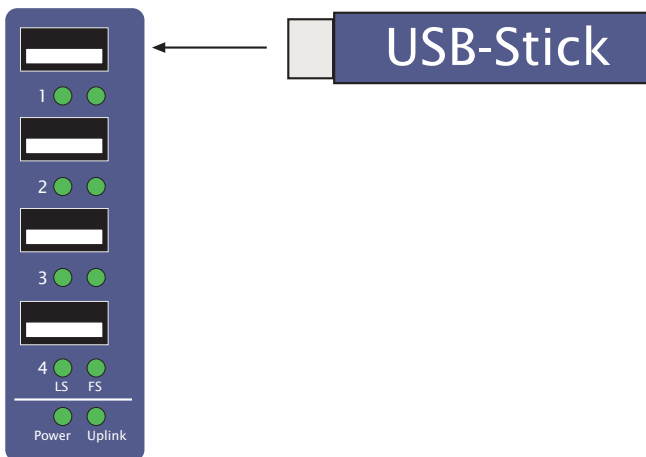


3. The operating system detects a new USB device and installs a new standard USB-Hub without asking for a driver.





4. Plug a USB device into one of the four USB ports on the front side of the USB-Hub. The associated driver is installed and the USB device is ready to use.



**Display Elements**

## Power LED

Off	No power
Green	Power OK

## Uplink Speed LED

Off	Fullspeed (FS) Device connected, max. speed 12 Mbit/s
Green	Highspeed (HS) Device connected, max. Speed 480 Mbit/s

## Port status LEDs (FS / LS)

Off	No device connected or device not ready
Green	Lowspeed (LS) device connected, max. speed 1.5 Mbit/s
Orange	Fullspeed (FS) Device connected, max. speed 12 Mbit/s
Orange and Green	Highspeed (HS) Device connected, max. speed 480 Mbit/s

## Technical Data

Upstream ports (USB-B)	1
Downstream ports (USB-A)	4
Power supply mode	External with power supply
Power supply	DC 24V .. 48V (+/-10%)
Port supply	DC 5V / 500 mA
No-load current	typ. 30 mA @24V
Max. current draw	480 mA @24V
Operating temperatures	
Storage	-40 ..... +85 °C
Non-cascaded	0 ..... +70 °C
Cascaded	0 ..... +60°C
Housing	Plastic compact housing for DIN rail mount per Din EN 50022-35
Dimensions	105x75x22mm
Weight	approx. 110g
Scope of delivery	USB-Hub USB A/B cable