

CS141 USB2NANOEU / US HW161

Wi-Fi USB dongle



- ✓ **Chipset RTL 8188 EU Industrial Standard**
Complies with IEEE 802.11b/g/n with data transfer speeds of up to 150 Mbps at 2.4 GHz
- ✓ **Compact and stylish design**
Extremely compact
- ✓ **Wi-Fi security**
High-level WLAN security supported by WPA3-SAE (Personal), WPA2, WPA and WEP
- ✓ **Easy connection:**
Supports software WPS (Wi-Fi Protected Setup)
- ✓ **Plug-and-Play**
Supports Plug-and-Play
- ✓ **Green WiFi**
Energy saving mode saves up to 50% power

Application:

For the integration of the CS141 HW161 / BACS WEBMANAGERS into existing WLAN infrastructures.



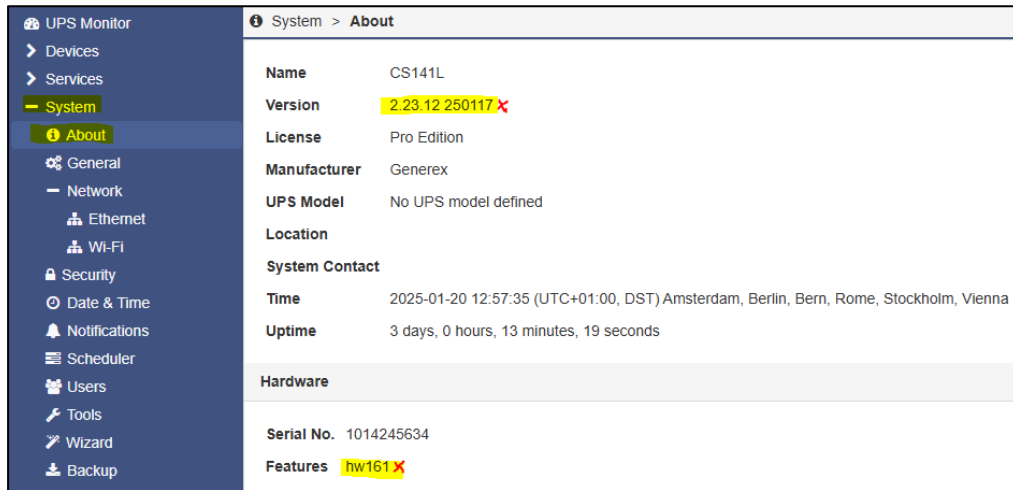
General Hints according to W-LAN Networks

- ✓ General safety guidelines:
 - Safe storage:
Keep the system and dongle in a safe place to prevent unauthorized access.
 - Regular check:
Check regularly for firmware updates to ensure operational reliability
 - Automated updates:
If possible, set up automatic updates to ensure the system is always up to date.
 - Regular training
Regularly train both your own and external employees on how to handle WLAN-capable devices and the use of WLAN infrastructures within security-sensitive areas
- ✓ Shielding:
 - Hide SSID:
If possible, shield the system to minimize the risk of radio interference and potential attacks.
- ✓ Strong WPA2 passwords:
 - Complex passwords:
Use passwords that are as long and complex as possible and contain a combination of upper- and lower-case letters, numbers and special characters.
 - Restricting access:
If possible, restrict access to the network to known devices.
- ✓ Network segmentation:
 - Insulation:
If possible, isolate the embedded system in a separate network segment to minimize the risk of attacks.
- ✓ Logging and monitoring:
 - Activity logs:
Enable network activity logging to detect unusual events.
 - Regular check:
Check logs regularly for signs of compromise.
- ✓ Security guidelines:
 - Access permissions:
Restrict access to the system and network to authorized persons.
 - training courses:
Educate employees about the importance of network security and the risks of phishing attacks.
- ✓ Incident Response:
 - emergency plans and procedures
Develop a contingency plan in case the system is compromised.

System requirements:

- **CS141 HW161 / BACS Kit HW161 with USB port and firmware 2.22.[...] or higher:**

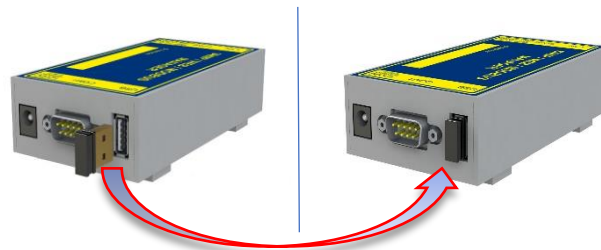
Check the following parameters under System>About:



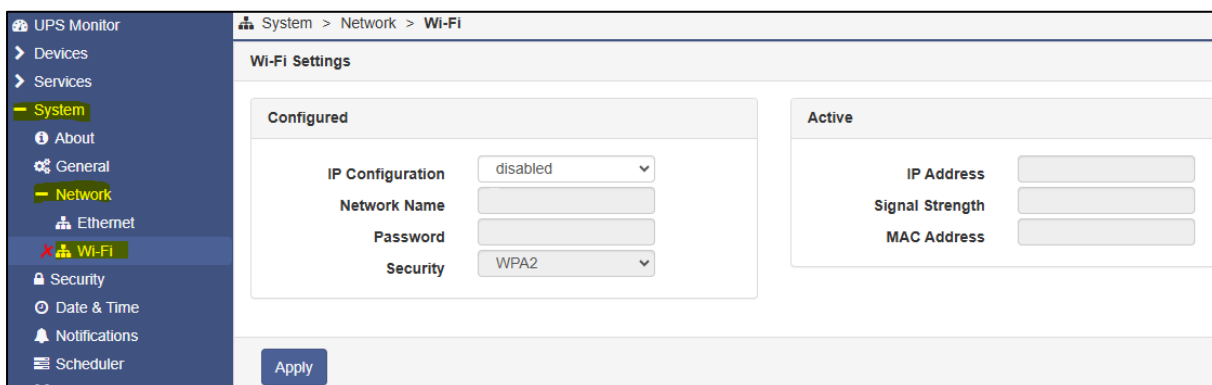
- Firmware Version: 2.22.XX [...] or higher.
- hardware platform HW161

Installation

1. Insert the USB dongle into the USB port.



2. As soon as the CS141 HW161 has recognized the device, it is automatically integrated, and the corresponding configuration menu is displayed under Network.
3. Open the menu "System>Network" and click Wi-Fi:



4. Set IP Configuration to DHCP

Configured	
IP Configuration	DHCP
Network Name	disabled
Password	DHCP
Security	WPA2

The following settings are possible:

- Disabled: Disables the Wi-Fi interface
- DHCP: Enables the Wi-Fi interface and sets it to DHCP

5. Network Name set the SSID

Under Network Name, enter the SSID you want to use.

Configured	
IP Configuration	DHCP
Network Name	Trikorder
Password	.
Security	WPA2

6. Set up password

Configured	
IP Configuration	DHCP
Network Name	Trikorder
Password
Security	WPA2

7. Click Apply

Configured	
IP Configuration	DHCP
Network Name	Trikorder
Password	Password
Security	WPA2

Active	
IP Address	192.168.159.197
Signal Strength	good
MAC Address	00:AD:A7:01:C3:AD

The access data is adopted. The current IP address, the signal strength and the MAC address of the Wi-Fi dongle are then displayed under "Active".



Technical data:

HARDWARE	
interface	<ul style="list-style-type: none"> • 1 x USB 2.0 Type A
LED display	<ul style="list-style-type: none"> • 1 x Link/Activity LED
antenna	<ul style="list-style-type: none"> • 1 x indoor antenna (1T1R)
Dimensions	<ul style="list-style-type: none"> • 7.1(H) x 14.9(W) x 17.5(D) mm
Weight	<ul style="list-style-type: none"> • 10 g
WIRELESS	
standards	<ul style="list-style-type: none"> • 2.4GHz: IEEE 802.11b, 802.11g, 802.11n
frequency band	<ul style="list-style-type: none"> • 2.4 GHz: 2.4000 - 2.4835GHz* (Industrial Scientific Medical Band)*Subject to local regulations
Max. data rate / speed	<ul style="list-style-type: none"> • 11b: 1/2/5.5/11 Mbit/s • 11g: 6/9/12/24/36/48/54Mbps • 11n (20MHz): MCS0-07, up to 72Mbps • 11n (40MHz): MCS0-07, up to 150 Mbit/s
output power	<ul style="list-style-type: none"> • 11b: 17±1.5 dBm • 11g: 16±1.5 dBm • 11n: 13 dBm ± 1.5 dBm
Security	<ul style="list-style-type: none"> • WPA2
MISCELLANEOUS	
installation	<ul style="list-style-type: none"> • Simple, multilingual setup wizard with automatic configuration
system requirements	<ul style="list-style-type: none"> • CS141 HW161
Environment	<ul style="list-style-type: none"> • Temperature: <ul style="list-style-type: none"> ○ In operation: 0-40°C ○ Storage: -20 - 65°C • Humidity: • In operation: 10 - 90% (non-condensing) • Storage: max. 95% (non-condensing)
Certification	<ul style="list-style-type: none"> • CE (Europe) • FCC (US) • NCC (Taiwan) • BSMI (Taiwan)