

User Guide

SmartCounter Pulse WiFi

**Nuovo AG**

Barzloostrasse 20 • 8330 Pfäffikon ZH • Switzerland
Phone: +41 (0) 44 950 05 20 • Fax: +41 (0) 44 950 57 33
E-mail: info@nuovo.ch • URL: www.nuovo.ch

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2. INTRODUCTION

The SmartCounter is a small device with a touch display and built-in WiFi:

- Color TFT display with 320 x 240 resolution (2.4 inch or 3.2 inch).
- QR code generator.
- Resistive touch.
- WiFi 2.4 GHz (802.11 b/g/n/e/i).
- [Network time protocol system](#) (NTP).
- [Linked network system](#) (LiNK).
- Counter system.
- Interface for 24 volt PNP sensor (e.g. optical, laser, ultrasonic, inductive). 3-pin M8 socket for standard industrial cable.
- Interface for 24 volt DC power supply. 3-pin M8 socket for standard industrial cable.



Best is to connect the SmartCounter to a local WiFi network. Only this way all features can be used. But of course the SmartCounter works without a WiFi network too.

The SmartCounter supports two modes:

- [Master Mode](#)
The device is a counter device.
- [Slave Mode](#)
The device is an additional display for a master mode SmartCounter.

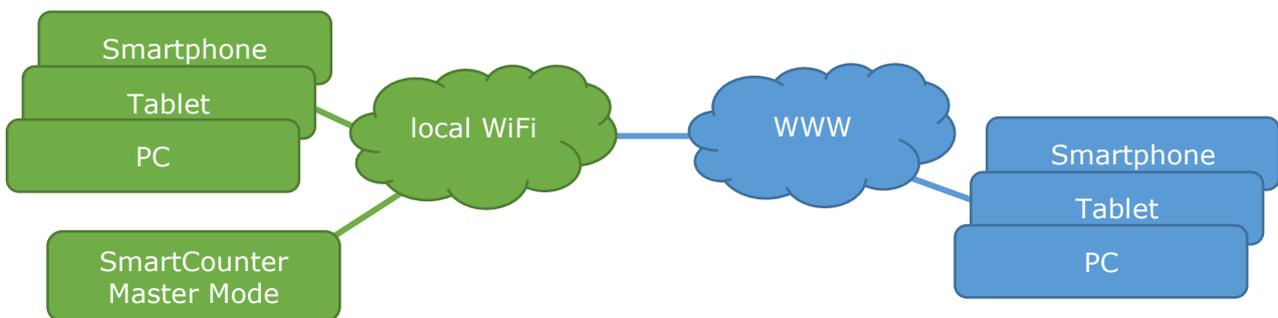
2.1 MASTER MODE

The SmartCounter is [configured](#) in master mode:

- It is plugged to the control unit of a series 20 or 23 printer.
Normally the case is placed away from printer e.g. where the eggs are printed.
- It counts the printed eggs with its own sensor.
- The user counter value is shown on the display.

2.1.1 LOCAL WiFi NETWORK

The SmartCounter is connected to a local WiFi network:



A) WEB INTERFACE

The [Web Interface](#) can be used with a smartphone, tablet, PC etc. within the local network:

- The user counter value is available.
- The SmartCounter can be managed.

B) WEB APPLICATION

The [Web Application](#) can be used with a smartphone, tablet, PC etc. anywhere in the world:

- The user counter value is available.
- The day counter value is available.
- The counter data per working day are available.
- The SmartCounter can be managed.

2.1.2 NO LOCAL WiFi NETWORK

The SmartCounter is not connected to a local WiFi network:



A) WEB INTERFACE

The [Web Interface](#) can be used with a smartphone, tablet, PC etc. within the device network only:

- The user counter value is available.
- The SmartCounter can be managed.

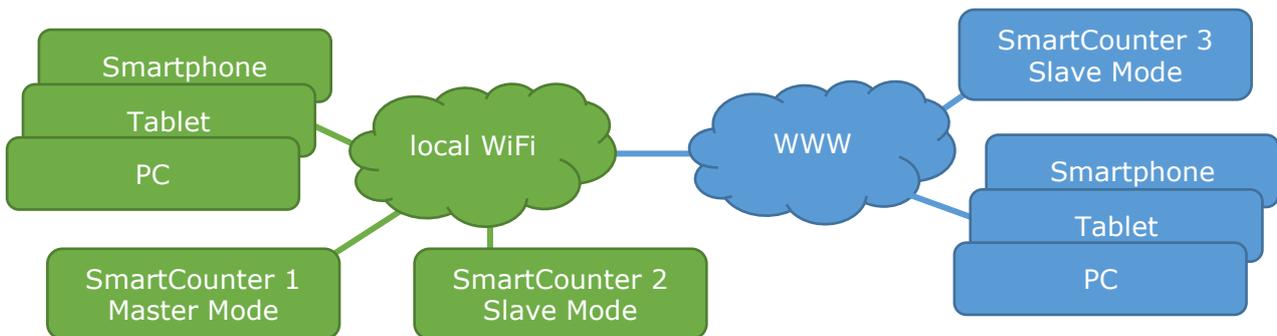
B) WEB APPLICATION

The [Web Application](#) is not available.

2.2 SLAVE MODE

The SmartCounter is [configured](#) in slave mode:

- It is connected to any local WiFi network.
The WiFi network has to be connected to the WWW.
- It is standalone and integrated in a small case.
The case can be placed away from printer e.g. where the printed eggs are collected.
- It is linked to a master mode SmartCounter.
Any number of slave mode SmartCounters can be connected to a master mode SmartCounter.
- It acts as an additional display for the master mode SmartCounter.
- It acts as a remote control for the master mode SmartCounter.
- The master mode SmartCounter user counter value is shown on the display.



A) WEB INTERFACE

The [Web Interface](#) can be used with a smartphone, tablet, PC etc. within the local network:

- The master mode SmartCounter user counter value is available.
- The SmartCounter can be managed.

B) WEB APPLICATION

The [Web Application](#) can be used with a smartphone, tablet, PC etc. anywhere in the world:

- The master mode SmartCounter user counter value is available.
- The master mode SmartCounter day counter value is available.
- The master mode SmartCounter counter data per working day are available.
- The SmartCounter can be managed.

3. SETUP

It is best if you use a smartphone or tablet to setup the SmartCounter.

3.1 SETUP 1 (LOCAL WIFI NETWORK)

This chapter describes how to connect the SmartCounter to a local WiFi network.

If the SmartCounter is already connected to a local WiFi network go to [Setup 2](#).

3.1.1 USING THE SMARTCOUNTER PRIVATE WIFI NETWORK

If you don't know how to create a hotspot this is the way to go step by step.

[STEP 1]

Connect your smartphone to the private SmartCounter WiFi network and open the SmartCounter web interface.

Please use the SmartCounter screen [Device Web](#) to do this.

[STEP 2]

Configure the access data for the local WiFi network.

Please see chapter [Station](#) how to do this.

[STEP 3]

Close the SmartCounter web interface (close the web browser tab).

The SmartCounter will connect to the local WiFi network within 60 seconds.

Please check the SmartCounter [Main Screen](#) status bar for WiFi.



WiFi LK NTP 25.08.2021 17:10:16

[STEP 4]

Open the SmartCounter web interface again.

Please use the SmartCounter screen [Local Web](#) to open it.

3.1.2 USING A HOTSPOT

If you know how to create a hotspot this is the way to go step by step.

[STEP 1]

Create a temporary hotspot with your smartphone:

- SSID: NuovoAP
- Key: e4Yb-6gH3-1BbZ-94ey

The SmartCounter will connect to it within 60 seconds.

Please check the SmartCounter [Main Screen](#) status bar for WiFi.



[STEP 2]

Open the SmartCounter web interface.

Please use the SmartCounter screen [Local Web](#) to open it.

[STEP 3]

Configure the access data for the local WiFi network.

Please see chapter [Station](#) how to do this.

[STEP 4]

Close the SmartCounter web interface (close the web browser tab).

Turn off the temporary hotspot.

The SmartCounter will connect to the local WiFi network within 60 seconds.

Please check the SmartCounter [Main Screen](#) status bar for WiFi.



[STEP 5]

Open the SmartCounter web interface again.

Please use again the SmartCounter screen [Local Web](#) to open it.

3.2 SETUP 2 (NTP + LINK)

This chapter describes how to configure the SmartCounter's [network time protocol system](#) (NTP) and [linked network system](#) (LiNK).

If the SmartCounter is not connected to a local WiFi network go back to [Setup 1](#).

[STEP 1]

Open the SmartCounter web interface.

Please use the SmartCounter screen [Local Web](#) to open it.

[STEP 2]

Configure the NTP system.

Please see chapter [NTP](#) how to do this.

[STEP 3]

Configure the LiNK system.

Please see chapter [LiNK](#) how to do this.

3.3 SETUP 3 (COUNTER)

This chapter describes how to configure the SmartCounter's display and counter system.

If the SmartCounter is not connected to a local WiFi network go back to [Setup 1](#).

[STEP 1]

Two possibilities:

- Open the SmartCounter web interface.
Please use the SmartCounter screen [Local Web](#) to open it.
- Open the web application.
Please use the SmartCounter screen [Web App](#) to open it in administrator mode.

[STEP 2]

Configure the display orientation.

Please see chapter [Orientation](#) how to do this.

[STEP 3]

Configure the counter mode.

Please see chapter [Mode](#) how to do this.

[STEP 4]

Configure the counter SMS.

Please see chapter [SMS](#) how to do this.

[STEP 5]

Configure the counter e-mail.

Please see chapter [E-mail](#) how to do this.

[STEP 6]

Configure the counter increment.

Please see chapter [Increment](#) how to do this.

4. TOUCH DISPLAY

4.1 HOW TO USE

USER INTERFACE

The user interface is based on a touch display:

- It shows the graphical user interface.
- It can be operated with the finger.
- If no button is visible the whole screen is one big button.
- All touch objects turn blue when pressed.
- The displayed QR codes can be scanned with a smartphone.



RESISTIVE TOUCH

Unlike a smartphone touch display the SmartCounter resistive touch display must be operated with a little force.

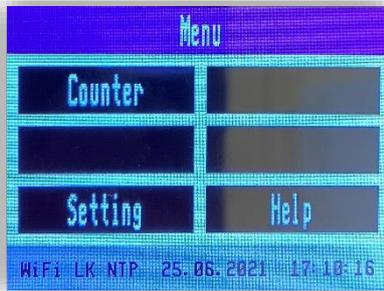
The advantages are:

- It can be operated with a normal pen.
- It can be operated with gloves.
- It is not sensitive to moisture (liquid).

It is best if a fingernail is used.



4.2 MAIN SCREEN



TITLE - BAR

This shows the screen title.

If the SmartCounter is [configured](#) in slave mode, the title bar shows addition information about the name of the master SmartCounter and the status of the connection.

COUNTER

This button opens the [Counter Screen](#).

SETTING

This button opens the [Setting Screen](#).

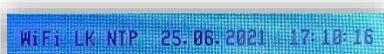
HELP

This button opens the [Help Screen](#).

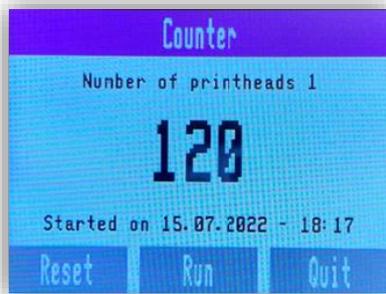
STATUS - BAR

This shows information about the SmartCounter systems:

- WiFi, if the SmartCounter is connected to a local WiFi network.
- LK, if the linked network system (LiNK) is ready (requires WiFi).
- NTP, if the network time protocol system (NTP) is ready (this requires WiFi).
- Date, the current date (this requires WiFi and NTP).
- Time, the current time (this requires WiFi and NTP).



4.3 COUNTER SCREEN



4.3.1 TITLE BAR

This shows the screen title.

If the SmartCounter is [configured](#) in slave mode, the title bar shows addition information about the name of the master SmartCounter and the status of the connection.

4.3.2 QUIT

This button brings back the [Main Screen](#).

4.3.3 DATA – FIELD



The data filed shows user counter information on three lines and it functions as a button.

NUMBER OF PRINTHEADS

The first line shows the [configured](#) number of print heads (increment). For correct counting this configuration must correspond with the number of print heads the printer is equipped with.

CURRENT COUNTER VALUE

The second line shows the current user counter value with large characters.

STARTED ON...

The third line shows date and time when the user counter has started after [reset](#).

4.3.3.1 SCAN DATA CSV



Scan the QR code and the current counter data are transferred to your device.

The data are comma separated values (CSV) and the semicolon (;) is used as a value separator.

This can be used even the SmartCounter is not connected to a local WiFi network.

Example:

EggJet20; UTC; 25.06.2021; 17:22:25; 1; 120

=

Printer System; Timezone; DD.MM.YYYY; HH:MM:SS; Increment; Current Counter Value

4.3.3.2 SEND DATA BY SMS



Scan the QR code and the current counter data are opened in your SMS text message app.

This can be used even the SmartCounter is not connected to a local WiFi network.

The SMS number can be [configured](#).

Example:

```
Dear user

System: EggJet20
Timezone: UTC
Date: 25.06.2021
Time: 17:22:25
Increment: 1
Counter: 120

Best regards
(Nuovo AG)
```

4.3.3.3 SEND DATA BY E-MAIL

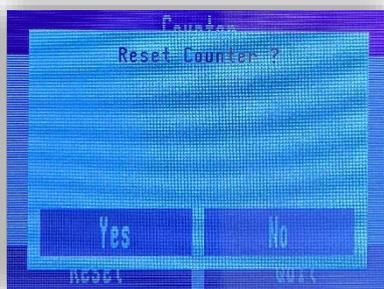


Scan the QR code and the current counter data are opened in your e-mail app.

This can be used even the SmartCounter is not connected to a local WiFi network.

The e-mail address can be [configured](#).

4.3.4 RESET



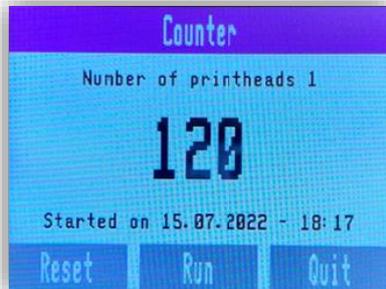
YES

The counter value is resets to 0 and the window is closed.

No

The window is closed.

4.3.5 RUN / STOP



RUN

Enable counting.

STOP

Disable counting.

4.4 SETTING SCREEN



4.4.1 TITLE BAR

This shows the screen title.

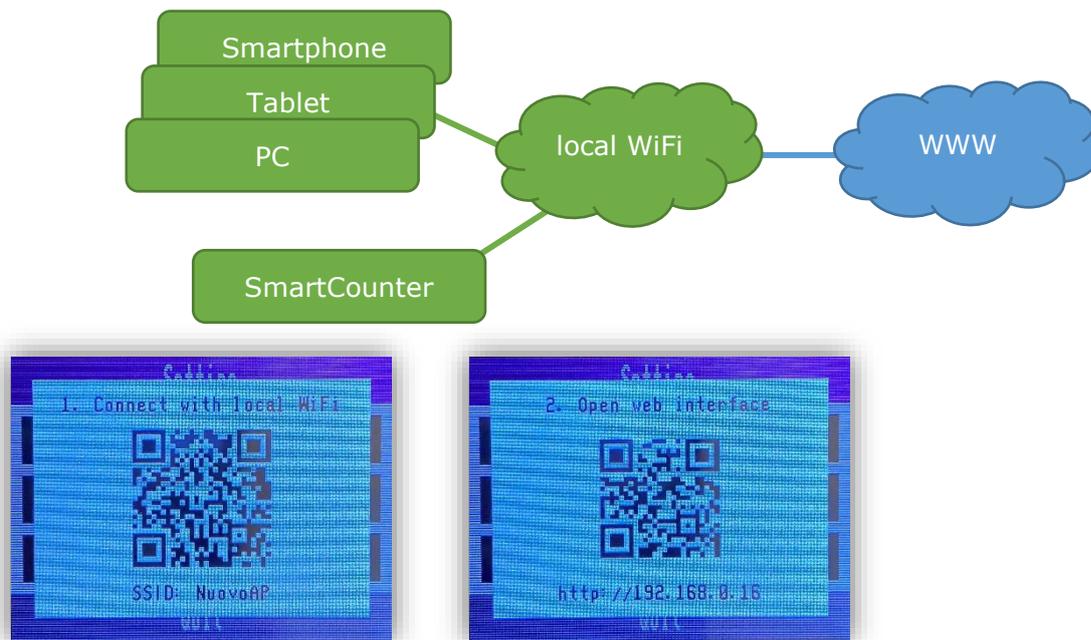
4.4.2 QUIT

This button brings back the [Main Screen](#).

4.4.3 LOCAL WEB

Two steps and you are connected to the local WiFi network. The SmartCounter web interface (web page) is opened in a web browser.

The web interface is limited. Better use the [web application](#).



[STEP 1]

The first window connects your smartphone to the local WiFi network.

If your smartphone is already connected to the same WiFi network you can skip this step.

Scan the QR code and you are connected. This is the same local WiFi network the SmartCounter is connected to.

[STEP 2]

The second window opens the SmartCounter web interface (web page).

Scan the QR code and the web interface is opened in a web browser.

Alternatively, the URL can be manually entered in the web browser.

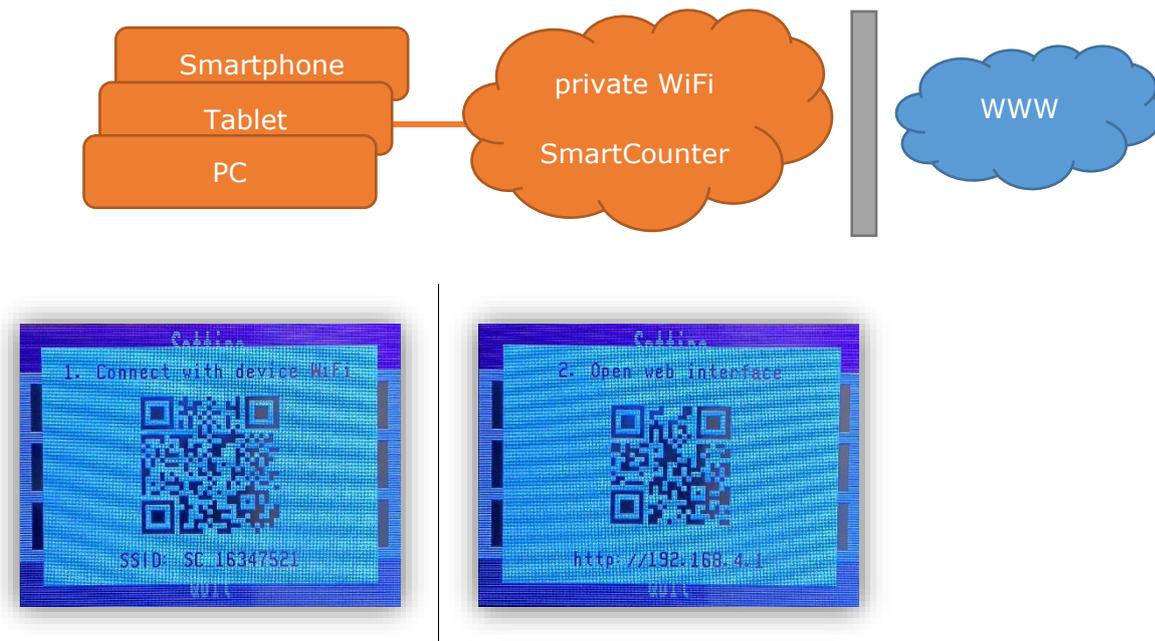
The URL is shown below the QR code.

4.4.4 DEVICE WEB

Two steps and you are connected to the private SmartCounter WiFi network. The SmartCounter web interface (web page) is opened in a web browser.

The private SmartCounter WiFi network and the web interface are limited.

Use this way only for commissioning the SmartCounter.



[STEP 1]

The first window connects your smartphone to the private SmartCounter WiFi network. Scan the QR code and you are connected.

This is a private WiFi network and not connected to the internet.

[STEP 2]

The second window opens the SmartCounter web interface (web page). Scan the QR code and the web interface is opened in a web browser.

Alternatively, the URL can be manually entered in the web browser.

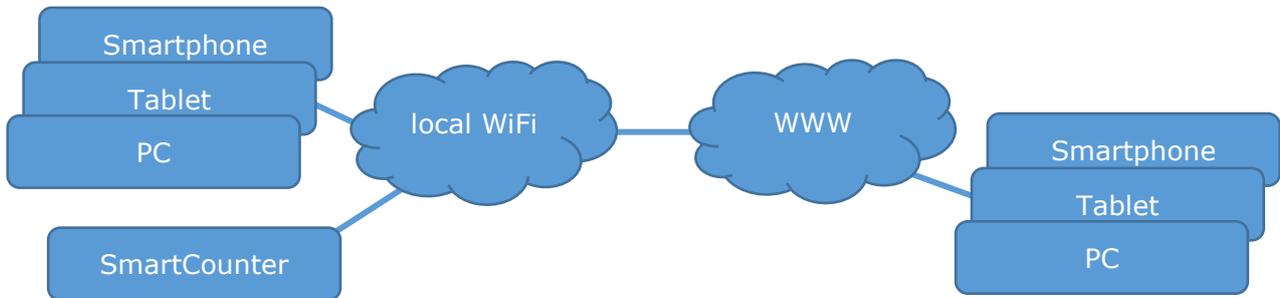
The following URL is shown below the QR code:

<http://192.168.4.1>

4.4.5 WEB APP

One step and you are logged in to the SmartCounter web application.

The web application runs in a web browser and it works anywhere in the world. You only have to be connected to the internet.



A) USER

The first window opens the web application in user mode.

Scan the QR code and you are logged in as user.

In user mode you cannot change the settings.

B) ADMINISTRATOR

The second window opens the web application in administrator mode.

Scan the QR code and you are logged in as administrator.

Alternatively, the URL can be manually entered in the web browser. This way you have to manually login.

The following URL is shown below the QR code:

<http://www.nuovo.ch/webapp/SC20P/app>

4.4.6 INFO

Seven windows show information about the SmartCounter system equipment, status and configuration.

COUNTER



This section shows information about the [counter system](#):

- **Mode**

The [configured](#) counter mode.

Master mode:

The SmartCounter is plugged to a HPUnt20 and counts the printed eggs.

Slave mode:

The SmartCounter is standalone and linked to a master mode SmartCounter. It acts as a display and remote control for the master mode SmartCounter.

- **SMS**

The [configured](#) SMS number.

This is used for [send data by SMS](#).

- **E-mail**

The [configured](#) e-mail address.

This is used for [send data by e-mail](#).

- **Increment**

The [configured](#) number of print heads.

For correct counting this configuration must correspond with the number of print heads the printer is equipped with.

- **Sensor Mode**

The configured sensor mode for counter trigger.

- **Sensor Delay**

The configured sensor delay after power-on.

DEVICE



This section shows information about the [device](#):

- **Type**
The exact designated type of the device.
- **Firmware**
The firmware version running on the device.
- **Language**
The user language installed on the device.
- **Name**
The network name of the device.
- **MAC**
The unique address assigned to the network interface of the device.

DISPLAY



This section shows information about the touch [display](#):

- **Orientation**
The [configured](#) display orientation.

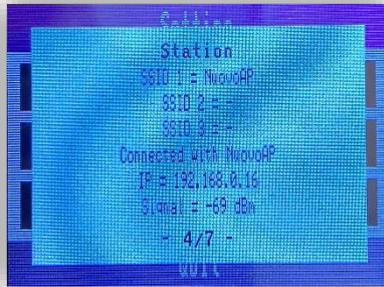
ACCESS POINT



This section shows information about the built-in WiFi [access point](#):

- **SSID**
The name of the private SmartCounter WiFi network.
- **IP**
The SmartCounter IP address within the private SmartCounter network.
It's always: 192.168.4.1

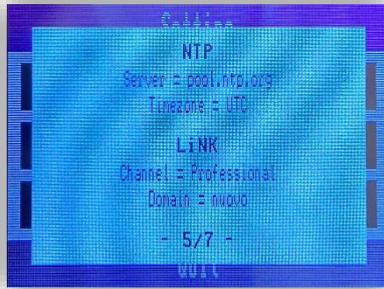
STATION



This section shows information about the network [station](#):

- **SSID 1**
The first [configured](#) local WiFi network name.
The station first tries to connect to this network.
- **SSID 2**
The second [configured](#) local WiFi network name.
If SSID 1 configuration is not valid or the network not available the station tries to connect to this network.
- **SSID 3**
The third [configured](#) local WiFi network name.
If SSID 2 configuration is not valid or the network not available the station tries to connect to this network.
If this configuration is not valid or the network not available the station tries to connect to the default network:
SSID: NuovoAP
Key: e4Yb-6gH3-1BbZ-94ey
If this network is not available the station pauses for 15 seconds and tries again to connect with SSID 1 configuration etc.
- **Connected**
The current connection to a local WiFi network.
- **IP**
The current station IP address within the connected local WiFi network.
The station gets the IP address from the network.
- **Signal**
The current signal strength from the connected local WiFi network.
0 dBm is the best and -100 dBm is the worst.
Values less than -80 dBm are problematic.

NTP



This section shows information about the [network time protocol system](#) (NTP):

- **Server**
The [configured](#) NTP server name.
- **Timezone**
The [configured](#) timezone.

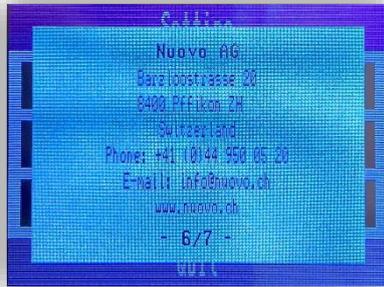
LINK



This section shows information about the [linked network system](#) (LiNK):

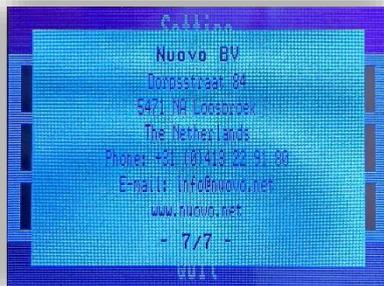
- **Channel**
The [configured](#) channel name.
- **Domain**
The [configured](#) domain name.

Nuovo AG



This section shows information about [Nuovo AG](#) (CH).

Nuovo BV



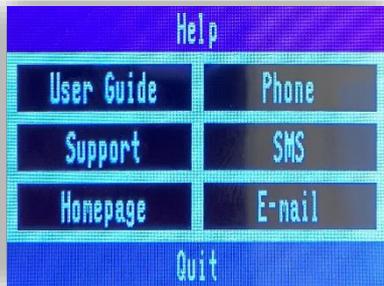
This section shows information about [Nuovo BV](#) (NL).

4.4.7 SYSTEM



A window shows technical information about the system.

4.5 HELP SCREEN



4.5.1 TITLE BAR

This shows the screen title.

4.5.2 QUIT

This button brings back the [Main Screen](#).

4.5.3 USER GUIDE



Scan the QR code and the current version of the user guide opens.

This can be used even the SmartCounter is not connected to a local WiFi network.

4.5.4 SUPPORT



Scan the QR code and the support webpage of Nuovo AG opens in the web browser.

This can be used even the SmartCounter is not connected to a local WiFi network.

Alternatively, the URL can be manually entered in the web browser.

The following URL is shown below the QR code:

www.nuovo.ch/support

4.5.5 HOMEPAGE

A) NUOVO AG

The first window opens the webpage of Nuovo AG (CH).



Scan the QR code and the webpage is opened in a web browser.

This can be used even the SmartCounter is not connected to a local WiFi network.

Alternatively, the URL can be manually entered in the web browser.

The following URL is shown below the QR code:

www.nuovo.ch

B) NUOVO BV

The second window opens the webpage of Nuovo BV (NL).



Scan the QR code and the webpage is opened in a web browser.

This can be used even the SmartCounter is not connected to a local WiFi network.

Alternatively, the URL can be manually entered in the web browser.

The following URL is shown below the QR code:

www.nuovo.net

4.5.6 PHONE

A) NUOVO AG

The first window opens the phone number of Nuovo AG (CH).



Scan the QR code and you are ready to phone.

This can be used even the SmartCounter is not connected to a local WiFi network.

Alternatively, the phone number can be manually entered.

The following phone number is shown below the QR code:

[+41 \(0\)44 950 05 20](tel:+41(0)449500520)

B) NUOVO BV

The second window opens the phone number of Nuovo BV (NL).



Scan the QR code and you are ready to phone.

This can be used even the SmartCounter is not connected to a local WiFi network.

Alternatively, the phone number can be manually entered.

The following phone number is shown below the QR code:

[+31 \(0\)413 22 91 80](tel:+31(0)413229180)

4.5.7 SMS

A) NUOVO AG

The first window opens the SMS number of Nuovo AG (CH).



Scan the QR code and you are ready to write a SMS text message.

This can be used even the SmartCounter is not connected to a local WiFi network.

B) NUOVO BV

The second window opens the SMS number of Nuovo BV (NL).



Scan the QR code and you are ready to write a SMS text message.

This can be used even the SmartCounter is not connected to a local WiFi network.

4.5.8 E-MAIL

A) NUOVO AG

The first window opens the e-mail address of Nuovo AG (CH).



Scan the QR code and you are ready to write an e-mail.

This can be used even the SmartCounter is not connected to a local WiFi network.

Alternatively, the e-mail address can be manually entered.

The following e-mail address is shown below the QR code:

info@nuovo.ch

B) NUOVO BV

The second window opens the e-mail address of Nuovo BV (NL).



Scan the QR code and you are ready to write an e-mail.

This can be used even the SmartCounter is not connected to a local WiFi network.

Alternatively, the e-mail address can be manually entered.

The following e-mail address is shown below the QR code:

info@nuovo.net

5. WEB INTERFACE

Web interface and [web application](#) look the same. The web interface is a web page provided by the SmartCounter:

- It works on all devices (smartphone, tablet, PC, Mac etc.) with a built-in web browser application (Safari, Google Chrom, Mozilla Firefox etc.).
- Access and manage your SmartCounter from within the local network.
- Access the current value of the user counter.

All page contents must be updated manually.

5.1 HOW TO USE

A) LOCAL WIFI NETWORK

If the SmartCounter is **connected** to a local WiFi network:

- Please use the SmartCounter screen [Local Web](#) to open the web interface.

It is recommend to use the [web application](#).

B) NO LOCAL WIFI NETWORK

If the SmartCounter is **not connected** to a local WiFi network:

- Please use the SmartCounter screen [Device Web](#) to open the web interface.

5.2 COUNTER PAGE



Select the Counter button for a page update.

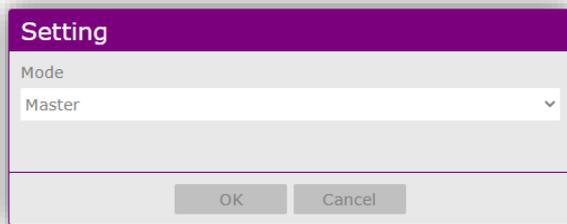
You have to do this manually.

5.2.1 SETTING

MODE

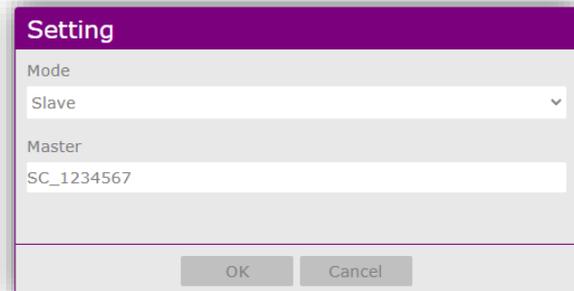
This is the current SmartCounter [mode](#).

For configuration select the > symbol and a window opens:



The dialog box has a purple header with the title "Setting". Below the header, there is a label "Mode" and a dropdown menu currently showing "Master". At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

[Master Mode](#)



The dialog box has a purple header with the title "Setting". Below the header, there is a label "Mode" and a dropdown menu currently showing "Slave". Below that, there is a label "Master" and a text input field containing "SC_1234567". At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

[Slave Mode](#)

Mode Master

No further configuration needed.

Mode Slave

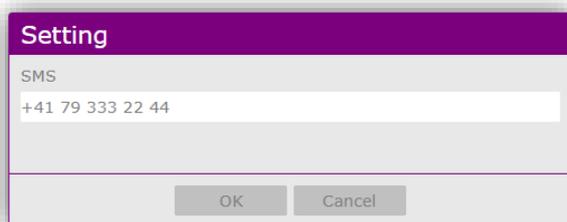
The name of the master mode SmartCounter has to be entered.

Master mode and slave mode SmartCounter must use the same [LiNK configuration](#).

SMS

This is the configured SMS [number](#). This is used for [send data by SMS](#).

For configuration select the > symbol and a window opens:

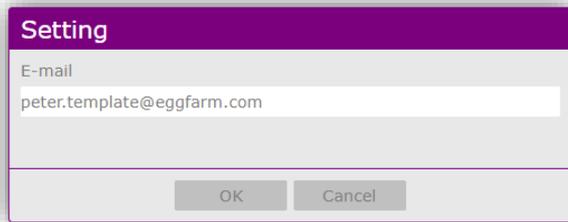


The dialog box has a purple header with the title "Setting". Below the header, there is a label "SMS" and a text input field containing "+41 79 333 22 44". At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

E-MAIL

This is the configured e-mail [address](#). This is used for [send data by e-mail](#).

For configuration select the > symbol and a window opens:

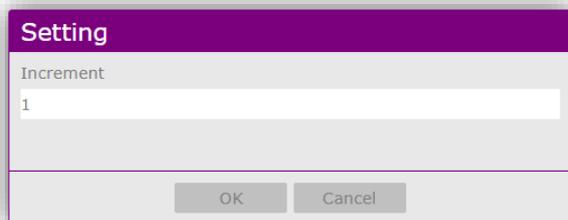


The screenshot shows a dialog box titled "Setting" with a purple header. Inside, the label "E-mail" is positioned above a text input field containing the email address "peter.template@eggfarm.com". At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

INCREMENT

This is the configured [increment](#). For correct counting, this configuration must correspond with the number of print heads the printer is equipped with.

For configuration select the > symbol and a window opens:

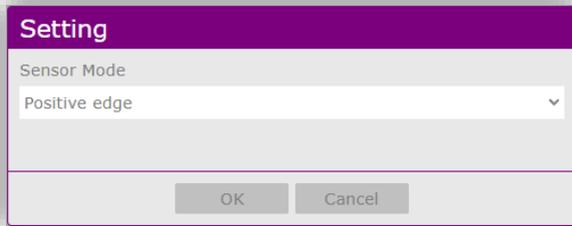


The screenshot shows a dialog box titled "Setting" with a purple header. Inside, the label "Increment" is positioned above a text input field containing the number "1". At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

SENSOR MODE

This is the current sensor mode for counter triggering.

For configuration select the > symbol and a window opens:



Positive Edge

A sensor signal change from 0 (LOW) to 1 (HIGH) is the counter trigger.

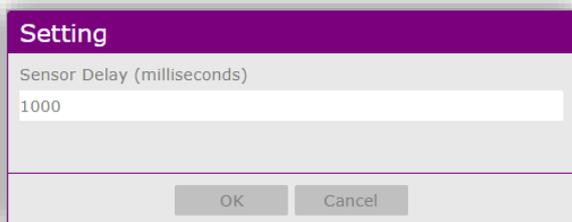
Negative Edge

A sensor signal change from 1 (HIGH) to 0 (LOW) is the counter trigger.

SENSOR DELAY

This is the current sensor delay after power-on. This is used to suppress counting until the sensor is ready after power-on.

For configuration select the > symbol and a window opens:



Sensor Delay (milliseconds)

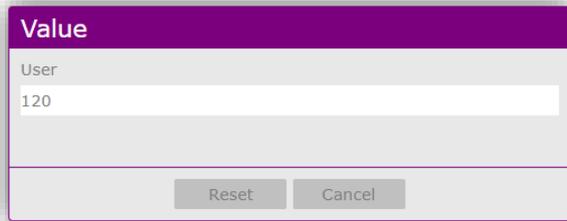
Enter the delay time in milliseconds.

5.2.2 VALUE

USER

This is the current user counter [value](#). This value is also shown on the SmartCounter [display](#).

For reset select the > symbol and a windows opens:



The screenshot shows a dialog box titled "Value" with a purple header. Inside, there is a label "User" above a text input field containing the number "120". At the bottom of the dialog, there are two buttons: "Reset" and "Cancel".

Please use the [web application](#) for additional features:

- User counter data with addition data.
- Day counter value.
- Counter data per working day.

TOTAL

This is the current total counter value.

5.3 WiFi PAGE

SmartCounter20 Pulse WiFi

Counter WiFi

Device

Type	SmartCounter20 Pulse WiFi
Firmware	Version 0.4
Language	English
Name	SC_16347521
MAC	CC:50:E3:F9:71:81

Display

Orientation	Landscape >
-------------	-------------

Access Point

SSID	SC_16347521
IP	192.168.4.1

Station

SSID 1	NuovoAP (connected) >
SSID 2	- >
SSID 3	- >
IP	192.168.0.16
Signal	-62 dBm

NTP

Server	pool.ntp.org >
Timezone	UTC >
Time	28.06.2021 - 08:57:31 UTC

LiNK

Channel	Professional >
Domain	nuovo >

Select the WiFi button for a page update.

You have to do this manually.

5.3.1 DEVICE

TYPE

This is the exact designated [type](#) of the device.

FIRMWARE

This is the [firmware](#) version running on the device.

LANGUAGE

This is the user [language](#) installed on the device.

NAME

This is the network [name](#) of the device.

MAC

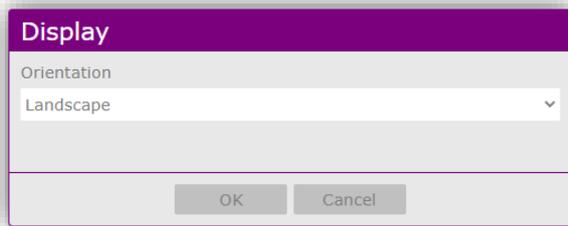
This is the unique [address](#) assigned to the network interface of the device.

5.3.2 DISPLAY

ORIENTATION

This is the configured display [orientation](#).

For configuration select the > symbol and a window opens:



Orientation Landscape

The display output is 0° rotated (default).

Orientation Landscape (rotated)

The display output is 180° rotated.

5.3.3 ACCESS POINT

Use this to connect your smartphone to the [private SmartCounter WiFi network](#).

Only use this for commissioning the SmartCounter.

Don't use this if the SmartCounter is already connected to a local WiFi network.

SSID

This is the [name](#) of the private SmartCounter WiFi network.

IP

This is the SmartCounter IP [address](#) within the private SmartCounter WiFi network.

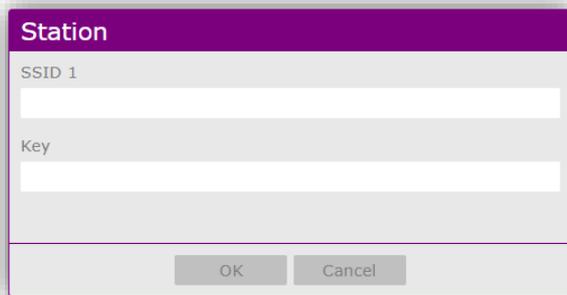
It's always: 192.168.4.1

5.3.4 STATION

SSID 1

The first configured local WiFi network [name](#). The station first tries to connect to this network.

For configuration select the > symbol and a window opens:



The screenshot shows a dialog box titled "Station" with a purple header. It contains two input fields: "SSID 1" and "Key". At the bottom, there are "OK" and "Cancel" buttons.

SSID 1

Enter the name of your WiFi network.

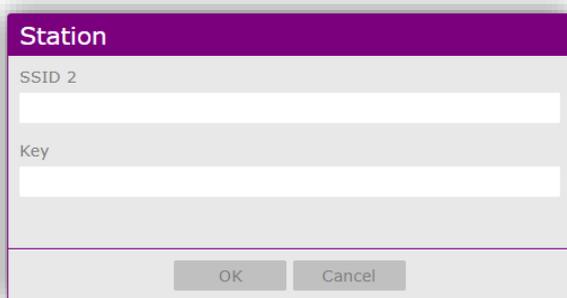
Key

Enter the key for your WiFi network.

SSID 2

The second configured local WiFi network [name](#). If SSID 1 configuration is not valid or the network not available the station tries to connect to this network.

For configuration select the > symbol and a window opens:



The screenshot shows a dialog box titled "Station" with a purple header. It contains two input fields: "SSID 2" and "Key". At the bottom, there are "OK" and "Cancel" buttons.

SSID 2

Enter the name of your WiFi network.

Key

Enter the key for your WiFi network.

SSID 3

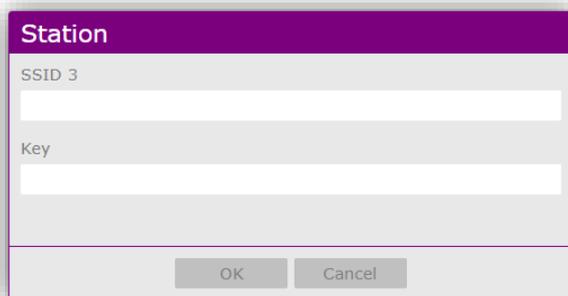
The third configured local WiFi network [name](#). If SSID 2 configuration is not valid or the network not available the station tries to connect to this network.

If this configuration is not valid or the network not available the station tries to connect to the default network:

- SSID: NuovoAP
- Key: e4Yb-6gH3-1BbZ-94ey

If this network is not available the station pauses for 15 seconds and tries again to connect with SSID 1 configuration etc.

For configuration select the > symbol and a window opens:



SSID 3

Enter the name of your WiFi network.

Key

Enter the key for your WiFi network.

IP

The current station IP [address](#) within the connected local WiFi network. The station gets the IP address from the network.

SIGNAL

The current [signal](#) strength the connected local WiFi network.

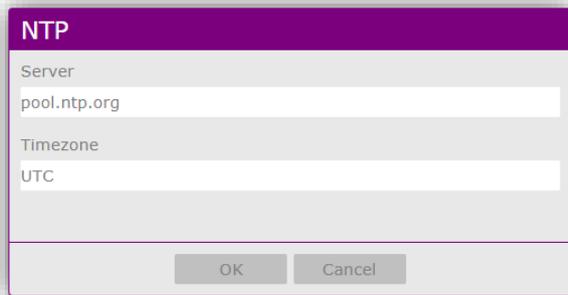
- 0 dBm is the best and -100 dBm is the worst.
- Values less than -80 dBm are problematic.

5.3.5 NTP

SERVER AND TIMEZONE

This is the configured server [name and time zone](#).

For configuration select the > symbol and a window opens:



Server

It is recommended to use the following server:

- pool.ntp.org

Timezone

Use [TZ database name](#) for your time zone:

- America/Toronto
- Asia/Tokyo
- CET, this is the [Central European Time](#).
- Europe/Berlin
- UTC, this is the [Coordinated Universal Time](#).
- ...

TIME

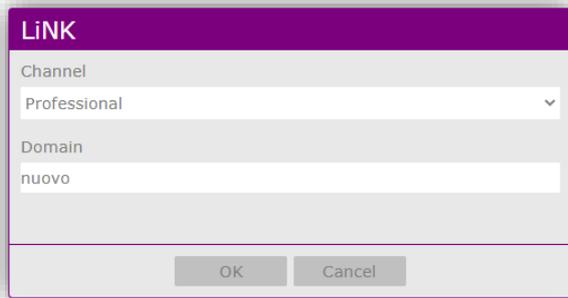
This is the current date and time.

5.3.6 LINK

CHANNEL AND DOMAIN

This is the configured [channel and domain](#).

For configuration select the > symbol and a window opens:



Channel

It is recommended to use the channel Professional. Use the same channel for all SmartCounters within your organisation or division.

Domain

SmartCounters are organised with domains. Use a unique name for you organisation or division (e.g. EggFarm_Berlin_1):

- The minimum length are 3 characters and the maximum 16 characters.
- Please use character from the English alphabet.
- Do not use # + / and SPACE.

Master mode and slave mode SmartCounter must use the same LiNK configuration.

6. WEB APPLICATION

Web application and [web interface](#) look the same.

It is recommend to use the web application if your SmartCounter is connected to a WiFi network:

- It works on all devices (smartphone, tablet, PC, Mac etc.) with a built-in web browser application (Safari, Google Chrom, Mozilla Firefox etc.).
- No application installation needed.
- Advantage of future new features and bug fixes.
- Fast response.
- Access and manage your SmartCounter from all over the world.
- Access to all data of the user counter.
- Access to all data of the day counter.
- Access to all data of the counter data per working day.

All page contents are updated automatically.

6.1 HOW TO USE

A) LOCAL WiFi NETWORK

If the SmartCounter is **connected** to a local WiFi network:

- Please use the SmartCounter screen [Web App](#) to open the web application.

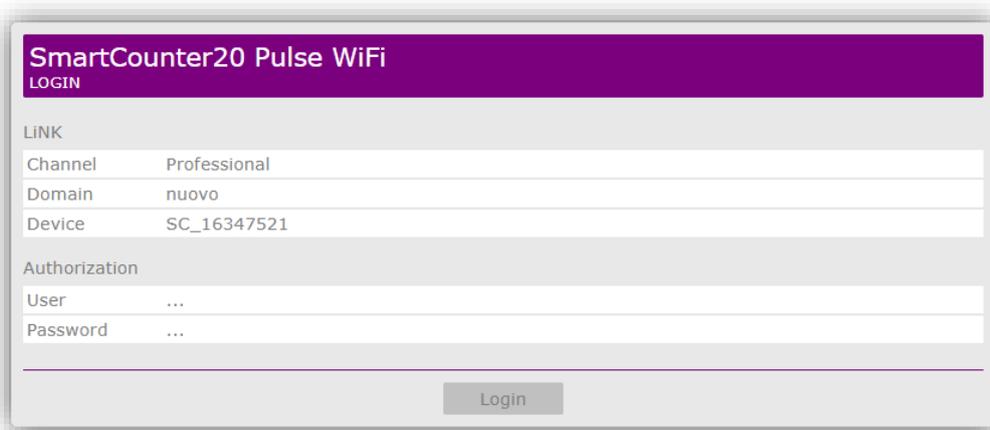
B) NO LOCAL WiFi NETWORK

If the SmartCounter is **not connected** to a local WiFi network:

- The web application is not available.

Please connect your SmartCounter to a local WiFi network.

6.2 LOGIN PAGE



SmartCounter20 Pulse WiFi LOGIN	
LINK	
Channel	Professional
Domain	nuovo
Device	SC_16347521
Authorization	
User	...
Password	...
<input type="button" value="Login"/>	

The content of this page is updated automatically.

6.2.1 LINK

CHANNEL

Select the [channel](#) your SmartCounter is connected with.

DOMAIN

Enter the [domain](#) your SmartCounter is connected with.

DEVICE

Enter the [name](#) of your SmartCounter.

6.2.2 AUTHORISATION

USER

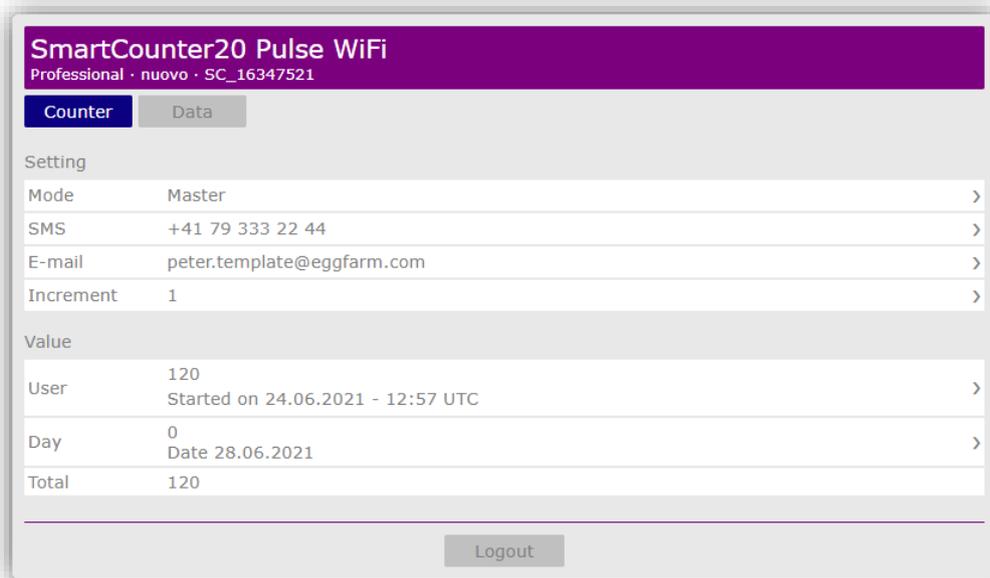
Enter the use name.

PASSWORD

Enter the password.

6.3 COUNTER PAGE

After a successful login this page is displayed.



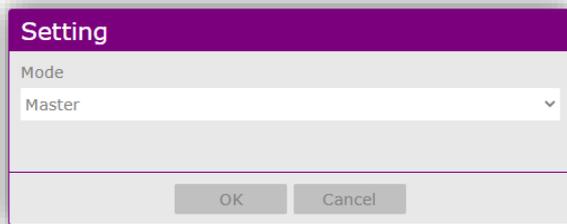
The content of this page is updated automatically.

6.3.1 SETTING

MODE

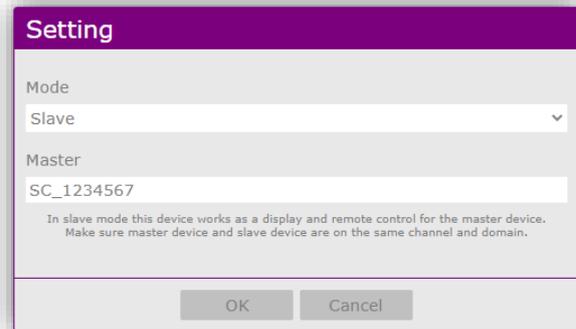
This is the current SmartCounter [mode](#).

For configuration select the row and a window opens:



The dialog box has a purple header with the text "Setting". Below the header, there is a label "Mode" and a dropdown menu currently showing "Master". At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

[Master Mode](#)



The dialog box has a purple header with the text "Setting". Below the header, there is a label "Mode" and a dropdown menu currently showing "Slave". Below that, there is a label "Master" and a text input field containing "SC_1234567". Below the input field, there is a small note: "In slave mode this device works as a display and remote control for the master device. Make sure master device and slave device are on the same channel and domain." At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

[Slave Mode](#)

Mode Master

No further configuration needed.

Mode Slave

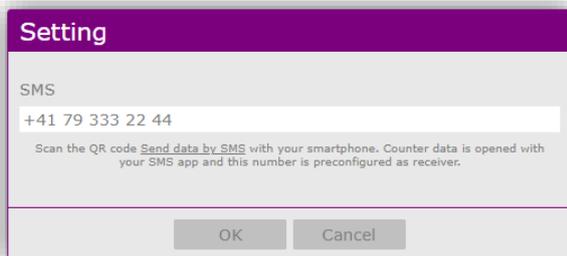
The name of the master mode SmartCounter has to be configured.

Master mode and slave mode SmartCounter must use the same [LiNK configuration](#).

SMS

This is the configured SMS [number](#). This is used for [send data by SMS](#).

For configuration select the row and a window opens:

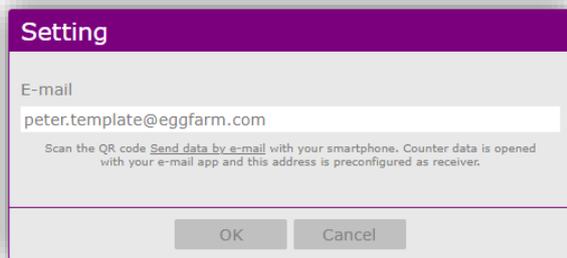


The dialog box has a purple header with the text "Setting". Below the header, there is a label "SMS" and a text input field containing "+41 79 333 22 44". Below the input field, there is a small note: "Scan the QR code [Send data by SMS](#) with your smartphone. Counter data is opened with your SMS app and this number is preconfigured as receiver." At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

E-MAIL

This is the configured e-mail [address](#). This is used for [send data by e-mail](#).

For configuration select the row and a window opens:

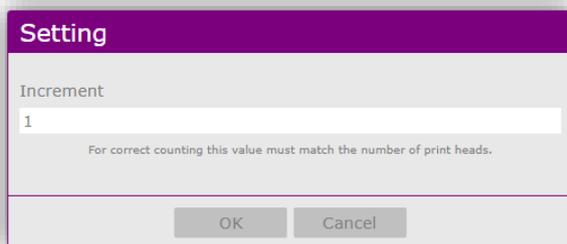


The image shows a mobile application window titled "Setting" with a purple header. The main content area is light gray and contains the label "E-mail" above a text input field with the value "peter.template@eggfarm.com". Below the input field is a small gray box with the text: "Scan the QR code [Send data by e-mail](#) with your smartphone. Counter data is opened with your e-mail app and this address is preconfigured as receiver." At the bottom of the window are two buttons: "OK" and "Cancel".

INCREMENT

This is the configured [increment](#). For correct counting this configuration must correspond with the number of print heads the printer is equipped with.

For configuration select the > symbol and a window opens:

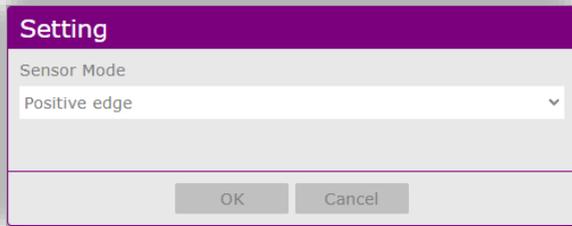


The image shows a mobile application window titled "Setting" with a purple header. The main content area is light gray and contains the label "Increment" above a text input field with the value "1". Below the input field is a small gray box with the text: "For correct counting this value must match the number of print heads." At the bottom of the window are two buttons: "OK" and "Cancel".

SENSOR MODE

This is the current sensor mode for counter triggering.

For configuration select the > symbol and a window opens:



Positive Edge

A sensor signal change from 0 (LOW) to 1 (HIGH) is the counter trigger.

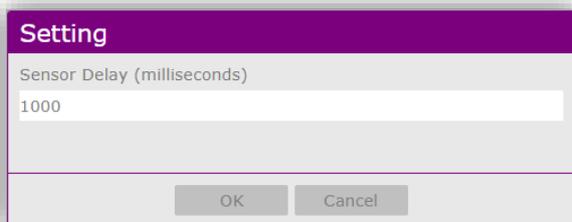
Negative Edge

A sensor signal change from 1 (HIGH) to 0 (LOW) is the counter trigger.

SENSOR DELAY

This is the current sensor delay after power-on. This is used to suppress counting until the sensor is ready after power-on.

For configuration select the > symbol and a window opens:



Sensor Delay (milliseconds)

Enter the delay time in milliseconds.

6.3.2 VALUE

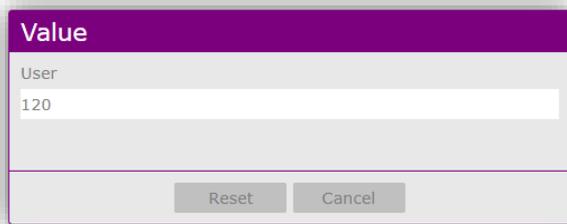
USER

This is the current user counter [value](#).

The second line shows date and time when the user counter was started (this is after reset).

All of that is also shown on the SmartCounter [display](#).

For reset select the row and a window opens:



DAY

This is the current day counter value.

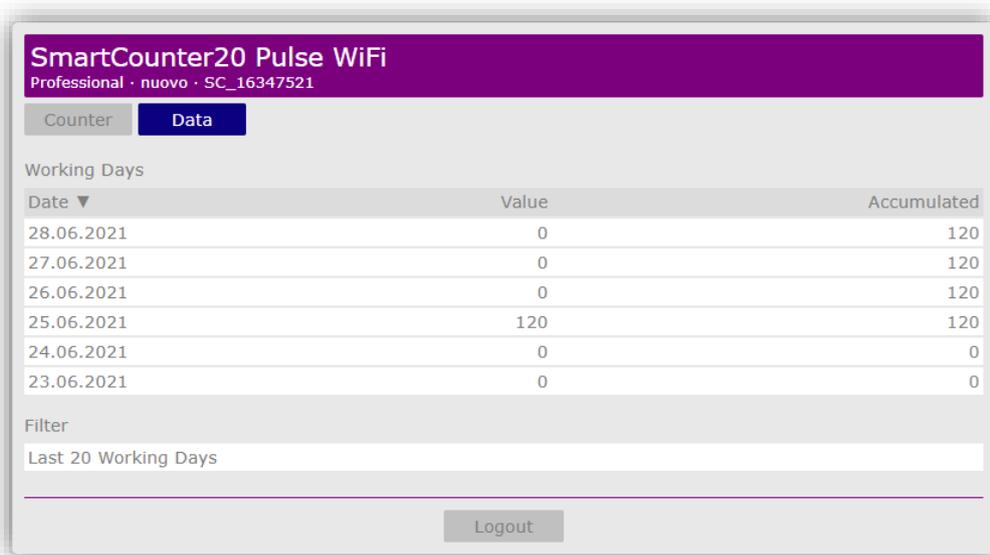
The second line shows the current date.

Select the row and the [Data Page](#) is displayed.

TOTAL

This is the current total counter value.

6.4 DATA PAGE



The content of this page is updated automatically.

6.4.1 WORKING DAYS

This is a list with day counter data:

- Date
- Day counter value
- Accumulated day counter values

Features:

- Select the list title and change the order (top down, bottom up).
- Select the list and export the data to another application.

6.4.2 FILTER

Configure the content of the listed day counter data.

6.5 SMARTCOUNTER20 PULSE WiFi PAGE

SmartCounter20 Pulse WiFi
Professional · nuovo · SC_16347521

Counter
Data

Device

Type	SmartCounter20 Pulse WiFi
Firmware	Version 0.4
Language	English
Name	SC_16347521
MAC	CC:50:E3:F9:71:81

Display

Orientation	Landscape	>
-------------	-----------	---

Access Point

SSID	SC_16347521
IP	192.168.4.1

Station

SSID 1	NuovoAP (connected)	>
SSID 2	-	>
SSID 3	-	>
IP	192.168.0.16	
Signal	-62 dBm	

NTP

Server	pool.ntp.org	>
Timezone	UTC	>
Time	28.06.2021 - 15:02:52 UTC	

LiNK

Channel	Professional	>
Domain	nuovo	>

Tools

User Manager	>
My Devices	>
Fast Access	>
CLI	>
User Guide	>
Info	>

Logout

The content of this page is updated automatically.

6.5.1 DEVICE

TYPE

This is the exact [type](#) designation of the device.

FIRMWARE

This is the [firmware](#) version running on the device.

LANGUAGE

This is the user [language](#) installed on the device.

NAME

This is the [network](#) name of the device.

MAC

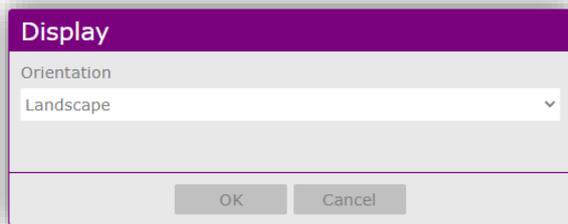
This is the unique [address](#) assigned to the device network interface.

6.5.2 DISPLAY

ORIENTATION

This is the configured display [orientation](#).

For configuration select the row and a window opens:



Orientation Landscape

The display output is 0° rotated (default).

Orientation Landscape (rotated)

The display output is 180° rotated.

6.5.3 ACCESS POINT

Use this to connect your smartphone to the [private SmartCounter WiFi network](#).

Only use this for commissioning the SmartCounter.

Don't use this if the SmartCounter is already connected to a local WiFi network.

SSID

This is the [name](#) of the private SmartCounter WiFi network.

IP

This is the SmartCounter IP [address](#) within the private SmartCounter WiFi network.

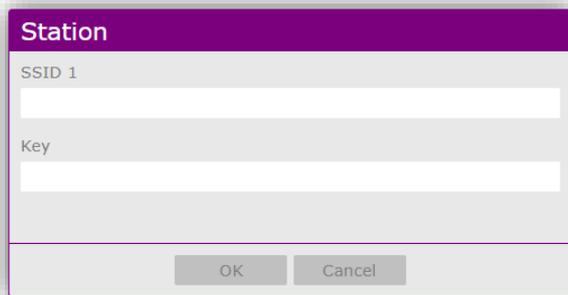
It's always: 192.168.4.1

6.5.4 STATION

SSID 1

The first configured local WiFi network [name](#). The station first tries to connect to this network.

For configuration select the row and a window opens:



The screenshot shows a dialog box titled "Station" with a purple header. It contains two input fields: "SSID 1" and "Key". At the bottom, there are "OK" and "Cancel" buttons.

SSID 1

Enter the name of your WiFi network.

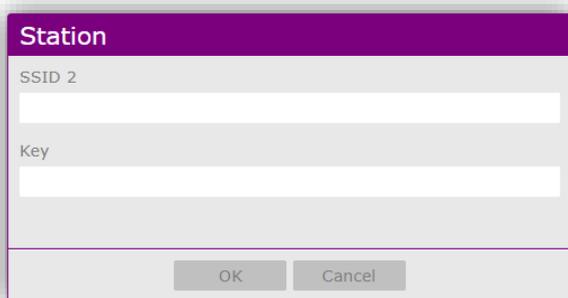
Key

Enter the key for your WiFi network.

SSID 2

The second configured local WiFi network [name](#). If SSID 1 configuration is not valid or the network not available the station tries to connect to this network.

For configuration select the row and a window opens:



The screenshot shows a dialog box titled "Station" with a purple header. It contains two input fields: "SSID 2" and "Key". At the bottom, there are "OK" and "Cancel" buttons.

SSID 2

Enter the name of your WiFi network.

Key

Enter the key for your WiFi network.

SSID 3

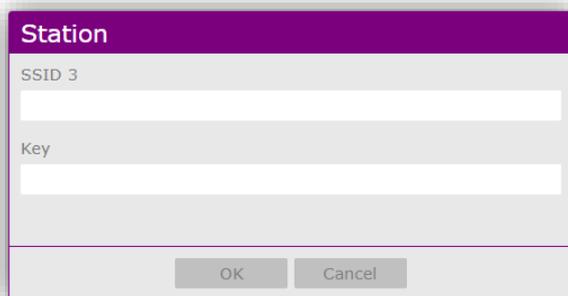
The third configured local WiFi network [name](#). If SSID 2 configuration is not valid or the network not available the station tries to connect to this network.

If this configuration is not valid or the network is not available the station tries to connect to the default network:

- SSID: NuovoAP
- Key: e4Yb-6gH3-1BbZ-94ey

If this network is not available the station pauses for 15 seconds and tries again to connect with SSID 1 configuration etc.

For configuration select the row and a window opens:



SSID 3

Enter the name of your WiFi network.

Key

Enter the key for your WiFi network.

IP

The current station IP [address](#) within the connected local WiFi network. The station gets the IP address from the network.

SIGNAL

The current [signal](#) strength from the connected local WiFi network.

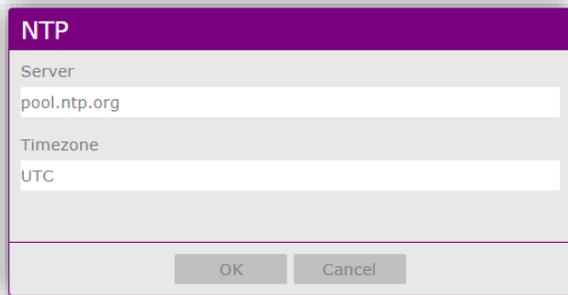
- 0 dBm is the best and -100 dBm is the worst.
- Values less than -80 dBm are problematic.

6.5.5 NTP

SERVER AND TIMEZONE

This is the configured server [name and time zone](#).

For configuration select the row and a window opens:



Server

It is recommended to use the following server:

- pool.ntp.org

Timezone

Use [TZ database name](#) for your time zone:

- America/Toronto
- Asia/Tokyo
- CET, this is the [Central European Time](#).
- Europe/Berlin
- UTC, this is the [Coordinated Universal Time](#).
- ...

TIME

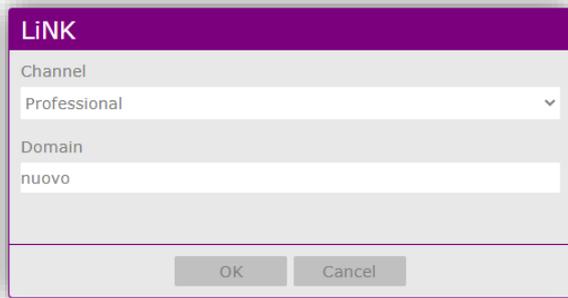
This is the current date and time.

6.5.6 LINK

CHANNEL AND DOMAIN

This is the configured [channel and domain](#).

For configuration select the row and a window opens:



Channel

It is recommended to use the channel Professional. Use the same channel for all SmartCounters within your organisation or division.

Domain

SmartCounters are organised with domains. Use a unique name for you organisation or division (e.g. EggFarm_Berlin_1):

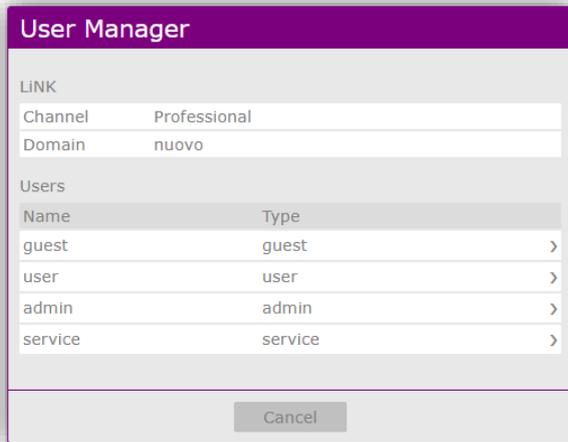
- The minimum length are 3 characters and the maximum 16 characters.
- Please use character from the English alphabet.
- Do not use # + / and SPACE.

Master mode and slave mode SmartCounter must use the same LiNK configuration.

6.5.7 TOOLS

USER MANAGER

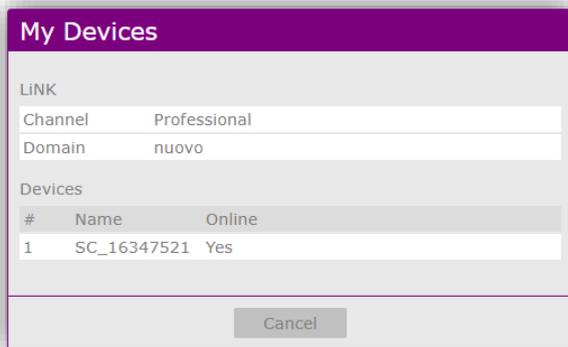
Select the row and a window opens:



Manage the users with the help of this window.

MY DEVICES

Select the row and a window opens:

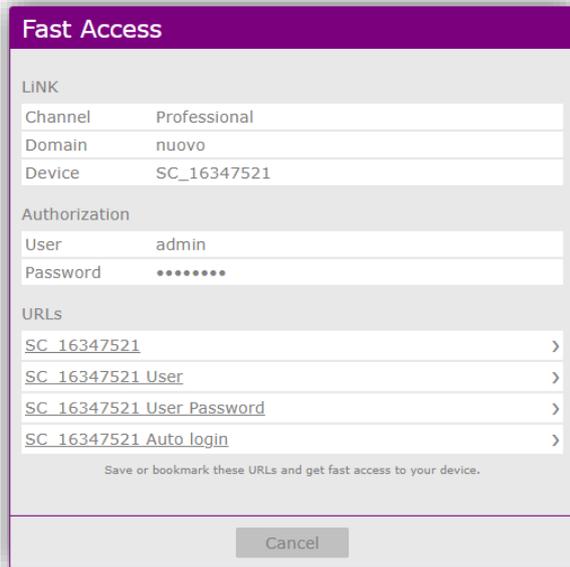


All SmartCounter devices with same channel and domain configuration are listed.

Select the row of a listed device and it will open.

FAST ACCESS

Select the row and a window opens:



The image shows a 'Fast Access' dialog box with a purple header. It contains three sections: 'LINK', 'Authorization', and 'URLs'. The 'LINK' section has fields for Channel (Professional), Domain (nuovo), and Device (SC_16347521). The 'Authorization' section has fields for User (admin) and Password (masked with dots). The 'URLs' section lists four links with right-pointing chevrons: SC_16347521, SC_16347521 User, SC_16347521 User Password, and SC_16347521 Auto login. A note at the bottom says 'Save or bookmark these URLs and get fast access to your device.' and there is a 'Cancel' button at the very bottom.

This window provides four types of URLs (links) for fast access to your SmartCounter.

SC_XXXXX

This URL opens the login page with preset channel, domain and device.

For login you have to enter the user name and password and select the Login button.

SC_XXXXX User

This URL opens the login page with preset channel, domain, device and user.

For login you have to enter the password and select the Login button.

SC_XXXXX User Password

This URL opens the login page with preset channel, domain, device, user and password.

For login select the Login button.

SC_XXXXX Auto login

This URL opens the web application and automatically logs in.

You can save (bookmark) the URLs.

You can use it for a web page, excel table or word document for easy access to you SmartCounter devices.

Copy or bookmark the line that suits best.

CLI

This is a developer tool.

USER GUIDE

Select the line and the current version of the user guide opens.

INFO

Select the line and the support webpage of Nuovo AG opens.