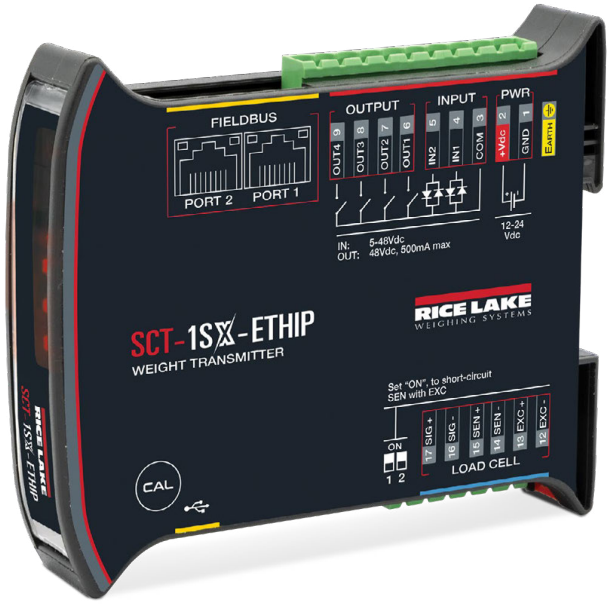
SCT-1SX Series

Firmware version 01.21.01

Webserver Manual



RICE LAKE®
WEIGHING SYSTEMS

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The most current version of this publication, software, firmware and all other product updates can be found on our website:

www.ricelake.com

Table of Contents

Introduction

Thank you for purchasing this product.

This manual contains webserver information for the following SCT-1SX digital weight transmitters:

- SCT-1SX-E/IP
- SCT-1SX-MODTCP
- SCT-1SX-PRONET

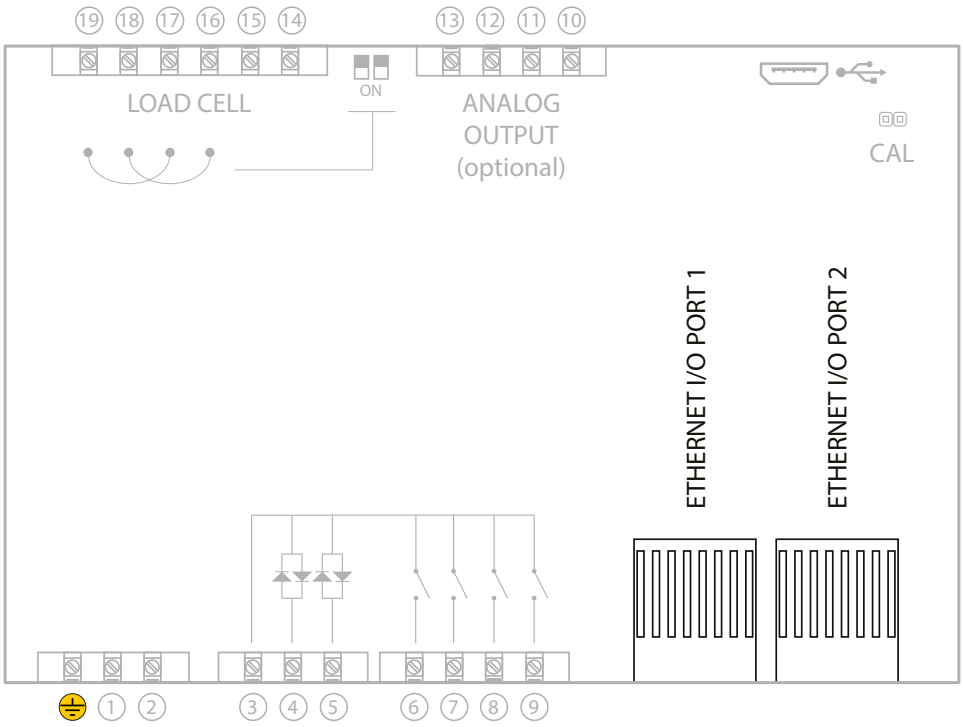
It is recommended that you carefully follow the instructions for programming the weight transmitter; performing actions not indicated in this manual could compromise the functionality of the scale.

Manuals are available from Rice Lake Weighing Systems at www.ricelake.com/manuals
Warranty information is available at www.ricelake.com/warranties

Any problem with the product must be reported to the manufacturer or to the retailer where it was purchased.
Always TURN OFF THE POWER SUPPLY prior to installation or repair action.

Network Connection

Connect the instrument to the network using the available Ethernet ports:



Network Parameters

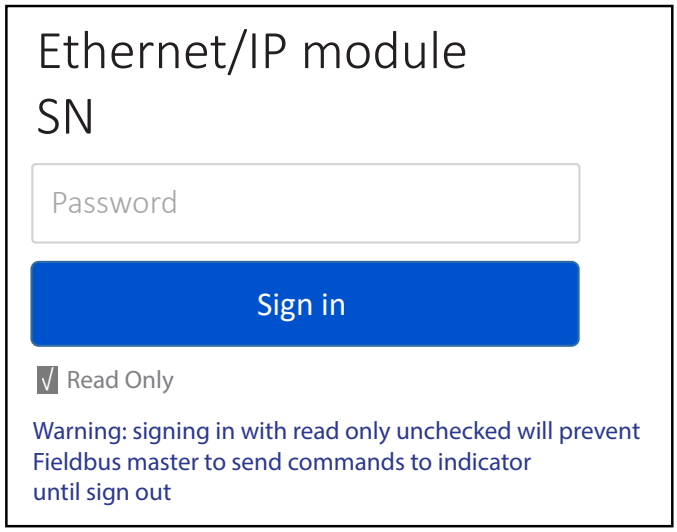
Use the **Fieldbus Settings** procedure in the instrument's Quick Start Guide to configure the IP address, subnet mask and gateway of the instrument.

In most applications it is sufficient to set the IP address of the instrument to the same network ID as the PC. Ensure the configured device ID is not used by another device on the network.

For advanced configuration, contact your network administrator.

Web Page Login

Type the IP address of the instrument into a web browser. If the instrument has been configured correctly, the login window will be displayed:



Enter the password "**00000**" and sign in.

Once logged in, it is possible to change the password (**Change password**).

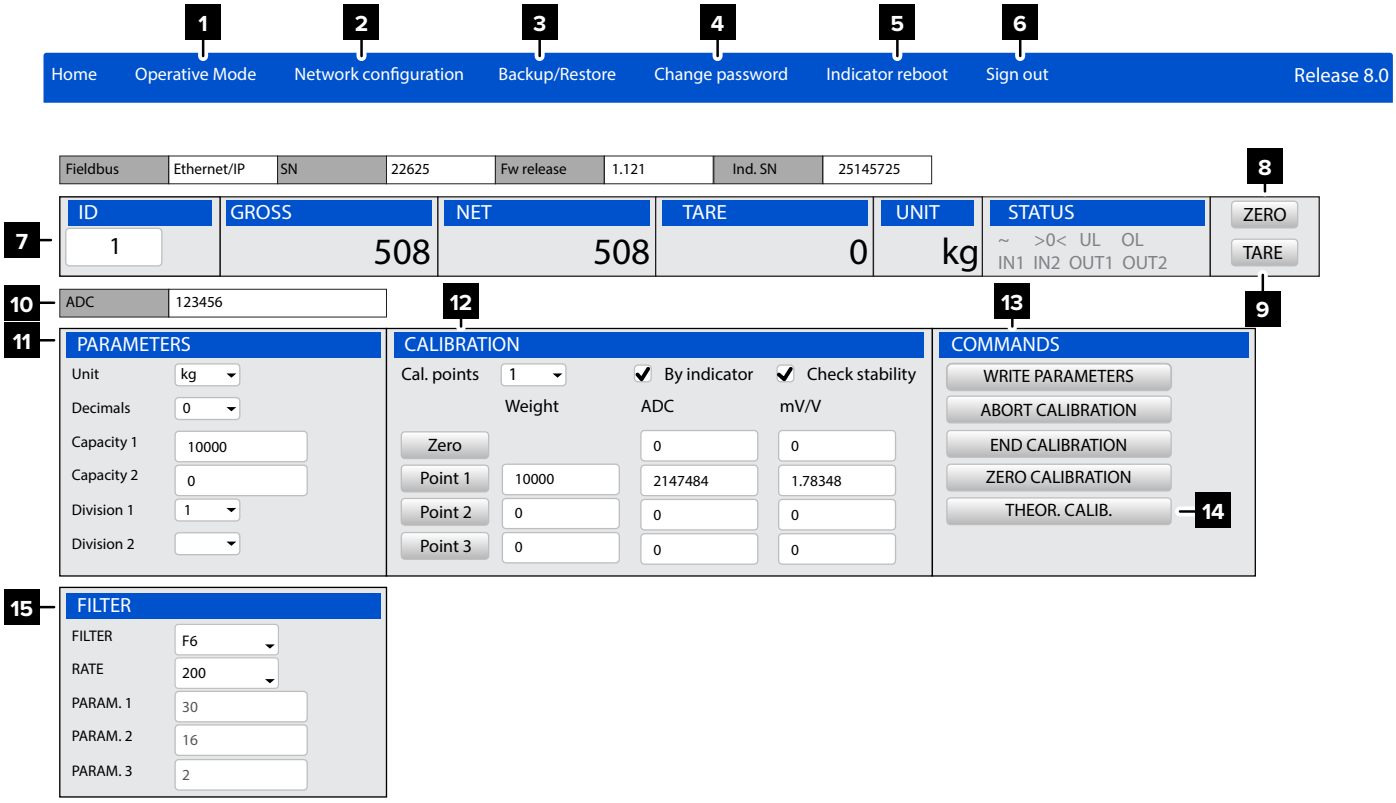
Contact Rice Lake Weighing Systems for password recovery.

Only one PC is allowed to access the instrument's web page at a time, if you login from a second PC, the first one will automatically disconnect.

Logging into the instrument with Read Only disabled interrupts the communication with the PLC.

When Read Only is enabled, the following features are restricted: accessing load cells, Calibration, Operative mode and Indicator reboot.

Dependent / independent channels mode (single scale)



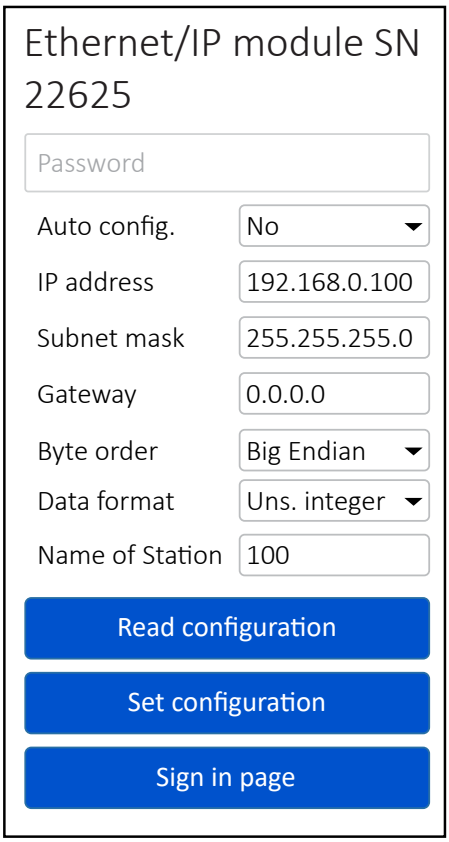
1 Operating Mode

Not available for SCT1SX / SCT1SP models. Operative mode cannot be set with only one available channel.

2 Network Configuration

You can change the network parameters and the displayed data format:

- IP address, Subnet mask, Gateway (enable "Auto config." for DHCP).
- Byte order: Big endian / Little endian. This parameter conifgures device compatible with different processors. It reverses the byte order of input and the output data.
- Data format: Unsigned integer / Signed integer / Float.
- Profinet name: up to 16 characters (only SCT1SX-PRONET)



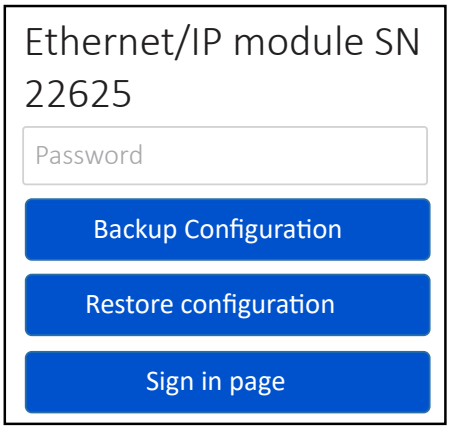
Changing the parameters will disconnect the transmitter. To reconnect, you must enter the new IP address in the web browser.

(only SCT-1SX-PRONET)

3 Backup/Restore

Select **"Backup Configuration"** to start receiving the instrument configuration in the web browser.
Once the file is received, the **"setup.mot"** file automatically downloads. This file is compatible with the Rice Lake Tools program.

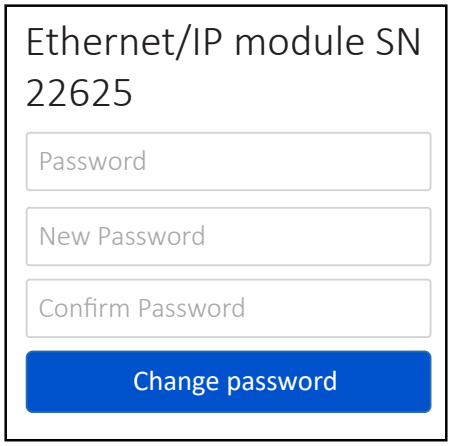
Select **"Restore Configuration"** to choose a configuration file to load on the instrument.
WARNING: The configuration file must have **".mot"** extension.



4 Change Password

To change an account's password:

- Enter your old password.
- Enter new password and then confirm.
- Select Change password tho complete the procedure.



5 Indicator Reboot

Restarts the indicator.

6 Sign Out

Signs out from the instrument's web page.

7 Instrument Information

Shows the weight and status information of the scale:

ID	Scale identification number.
GROSS	Gross weight
NET	Net weight
TARE	Tare
UNIT	Unit of measure
STATUS	Instrument status
	~ Unstable weight >0< Gross weight equal to zero UL Underload OL Overload IN1 Input 1 active IN2 Input 2 active OUT1 Output 1 active OUT2 Output 2 active

8 Zero

Zeros the instrument.
WARNING: The zero execution takes place only if the necessary conditions are met (zero parameters).

9 Tare

Performs a tare on the instrument.
To clear an active tare, you must perform a new tare when the scale is empty.

10 A/D Conversion Points

Displays the analog to digital conversion points.

11 Calibration Parameters

Sets the scale calibration parameters:

Unit	Unit of measure (g, kg, t, lb)
Decimals	Number of decimal digits (0, 1, 2, 3)
Capacity 1	First range value (or full capacity for single range applications)
Capacity 2	Second range value (not used in single range applications)
Division 1	First range division (1, 2, 5, 10, 20, 50)
Division 2	Second range division (1, 2, 5, 10, 20, 50)

12 Calibration

NOTE: When By indicator is enabled, calibration uses the indicator settings. When By indicator is disabled, it uses the settings on the web server.

By Indicator Calibration (By Indicator is Enabled)

1. Enable the By indicator checkbox.
2. In the Parameters menu, set Unit, Decimals, Capacity, and Division parameters.
3. In the Calibration menu, set the number of calibration points and then enter their weight values in the corresponding Weight text boxes.
4. Select WRITE PARAMETERS to send to parameters to the indicator (units, decimals, capacities, divisions, number of calibration points and sample weights).
5. Unload the scale and then select Zero.
6. Load the platform with sample weight 1 and select Point 1. The value of ADC points is automatically acquired in the text box on the right. If you know the ADC point value, it can be entered manually.
7. Repeat 5 and 6 for the remaining calibration points. The weight and ADC point values must increase with each calibration point:
8. Select END CALIBRATION to save the calibration.

Web Server Calibration (By Indicator is Disabled)

1. Disable the By indicator checkbox.
2. In the Parameters menu, set Unit, Decimals, Capacity, and Division parameters.
3. In the Calibration menu, set the number of calibration points and then enter their weight values in the corresponding Weight text boxes.
4. Unload the scale and then select Zero.
5. Load the platform with sample weight 1 and select Point 1. The value of ADC points is automatically acquired in the text box on the right. If you know the ADC point value, it can be entered manually.
6. Repeat 4 and 5 for the remaining calibration points. The weight and ADC point values must increase with each calibration point:
7. Select WRITE PARAMETERS to save all parameters on the indicator.

If the weight and/or ADC values do not increase at each point (**Example** 2), only point 1 is considered.

If "Check stability" is enabled, calibration points are only acquired if the weight is stable.

Example 1

CALIBRATION

Cal. points 1 — By indicator — Check stability

	Weight	ADC	mV/V
Zero		0	0
Point 1	2000	647484	0.22491
Point 2	4000	1292501	0.78523
Point 3	10000	30741680	1.89348

Example 2

CALIBRATION

Cal. points 1 — By indicator — Check stability

	Weight	ADC	mV/V
Zero		0	0
Point 1	2000	647484	0.22491
Point 2	10000	30741680	1.89348
Point 3	4000	1292501	0.78523

13 Commands

WRITE PARAMETERS	Saves parameters to the indicator.
ABORT CALIBRATION	Cancels calibration without saving.
END CALIBRATION	After acquisition sequence ends calibration and saves values on indicator. **NOTE Only used when the By indicator checkbox is enabled.**
ZERO CALIBRATION	Pre-Tare Reset
THOER. CALIBRATION	**Theoretical calibration**: By entering the weight and mV/V value of the cells the relative ADC points are calculated. .

14 Theoretical Calibration

1. Enter the value 0 in the zero mV/V box.
2. Enter in the mV/V box related to point 1, the cell sensitivity value. If there are more load cells connected, enter the average value.
3. Enter in the weight box the load cell capacity. If there are more load cells connected, enter the total capacity.
4. Calculate ADC points by clicking THEOR. CALIB.

15 Filter

Filter	Configures filter (F1, F2, F3, F4, F5, F6, F7 or Custom). For more information, see instrument's operation manual.
Rate	Configures the number of analog to digital conversions (6-4800) per second that is performed by the analog to digital converter.
Param. 1	Configures the length of the average window (quantity of ADC points). For example, a value of 8 indicates 8 ADC points will be used for the average window.
Param. 2	Removes ADC points from the average window in beginning or ending positions. For example, a value of 2 indicates the 2 outermost values will be removed from the list. In the list: 10, 20, 30 and 40; 10 and 40 are removed.
Param. 3	Removes the center most ADC points from average computations. For example, a value of 2 indicates the 2 center most values are removed from the list. In the list: 10, 20, 30 and 40; 20 and 30 are removed.

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Parameter (Param.) values must meet the following the criteria:
- All parameters values must be even numbers
- Param. 2 must be less than or equal to param. 1 and greater than zero
- Param. 3 must be in the range zero to param. 2 - 2

Configure the following parameters to disable filtering:
- Param. 1 = 1
- Param. 2 = 0
- Param. 3 = 0

NOTES

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