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SCT-4X Series

Firmware version 01.21.01

Webserver Manual



January 4, 2024

RICE LAKE WEIGHING SYSTEMS

PN 221635 Rev A

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www.ricelake.com

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Introduction

Thank you for purchasing this product.

This manual contains webserver information for the following SCT-4SX digital weight transmitters:

- SCT-4X-ETHIP
- SCT-4X-MODTCP
- SCT-4X-PRONET

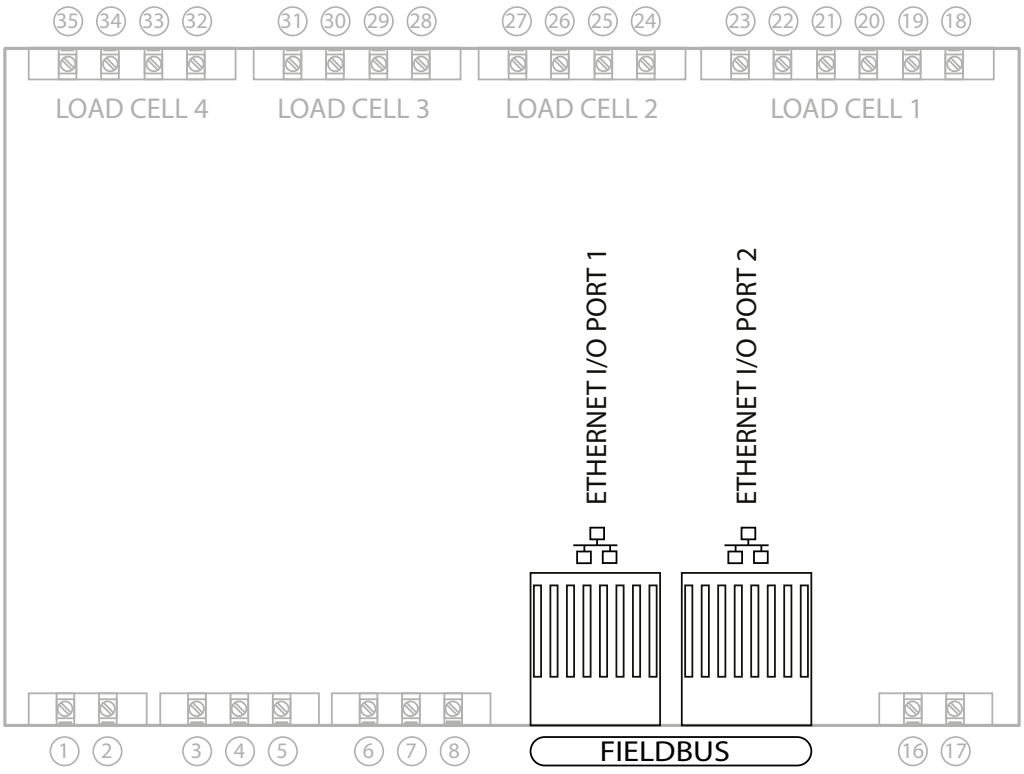
It is recommended that you carefully follow the instructions for programming the weight transmitter; performing actions not indicated in this manual could compromise the functionality of the scale.

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

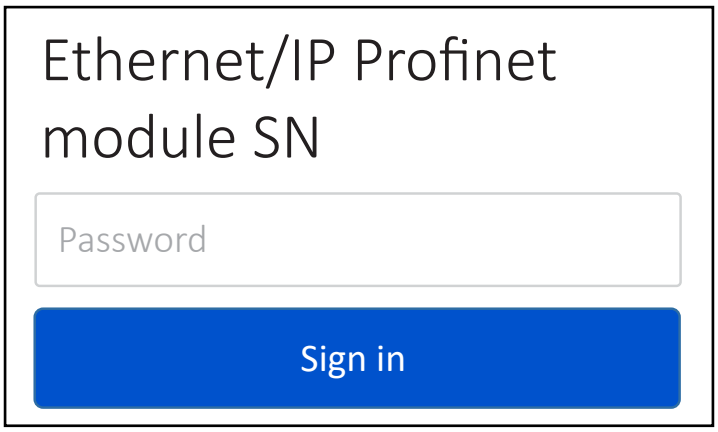
The IP address, subnet mask and gateway of the instrument can be configured using the procedure indicated in the "**Fieldbus configuration**" paragraph in the instrument Quick start guide.

In most applications it is sufficient to set the IP address of the instrument in the same class as the PC.

For advanced configurations it is recommended to 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 you logged in, it is possible to change the password (**Change password**).

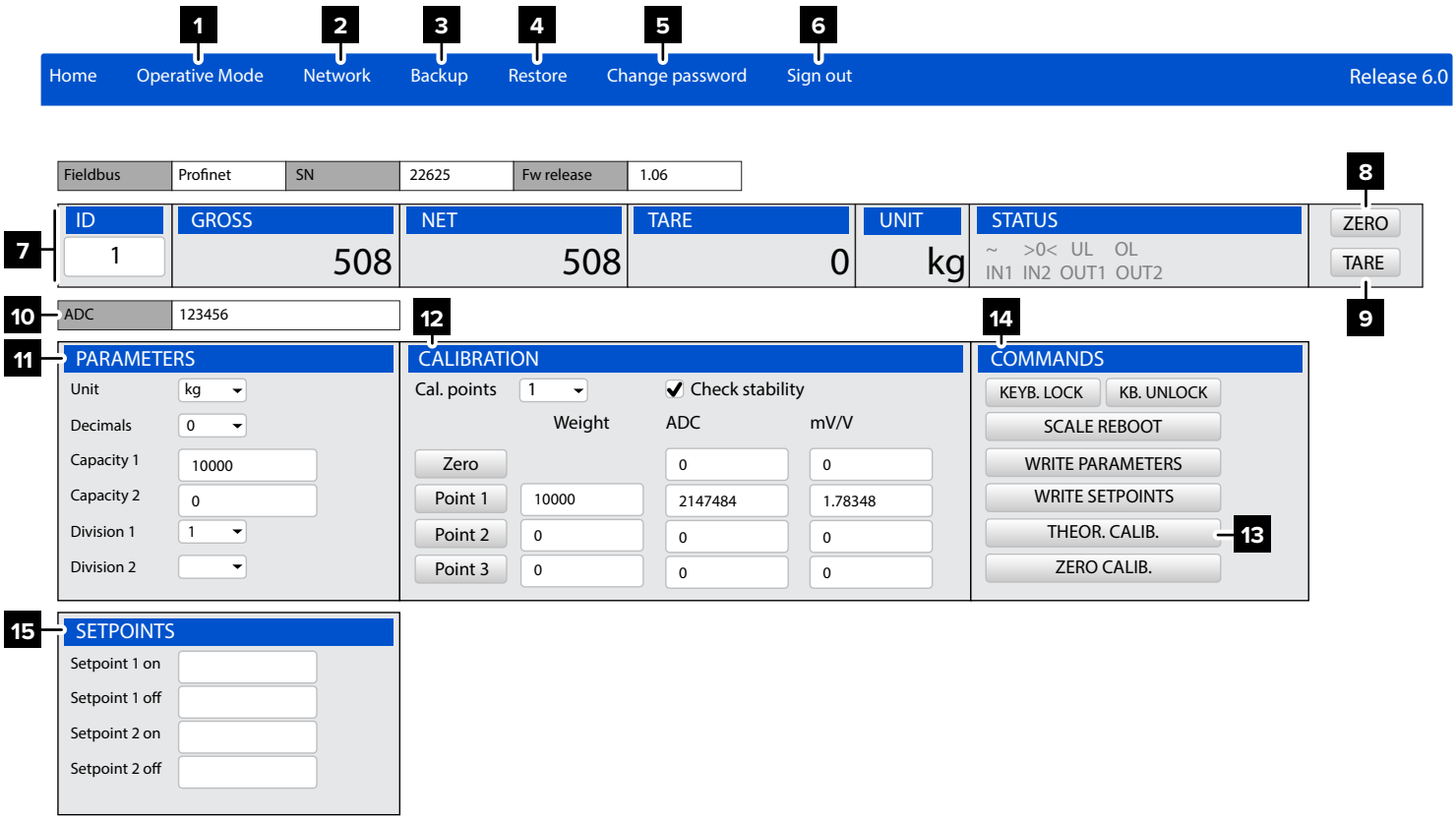
In case of lost password contact Rice Lake Weighing Systems for recovery.

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

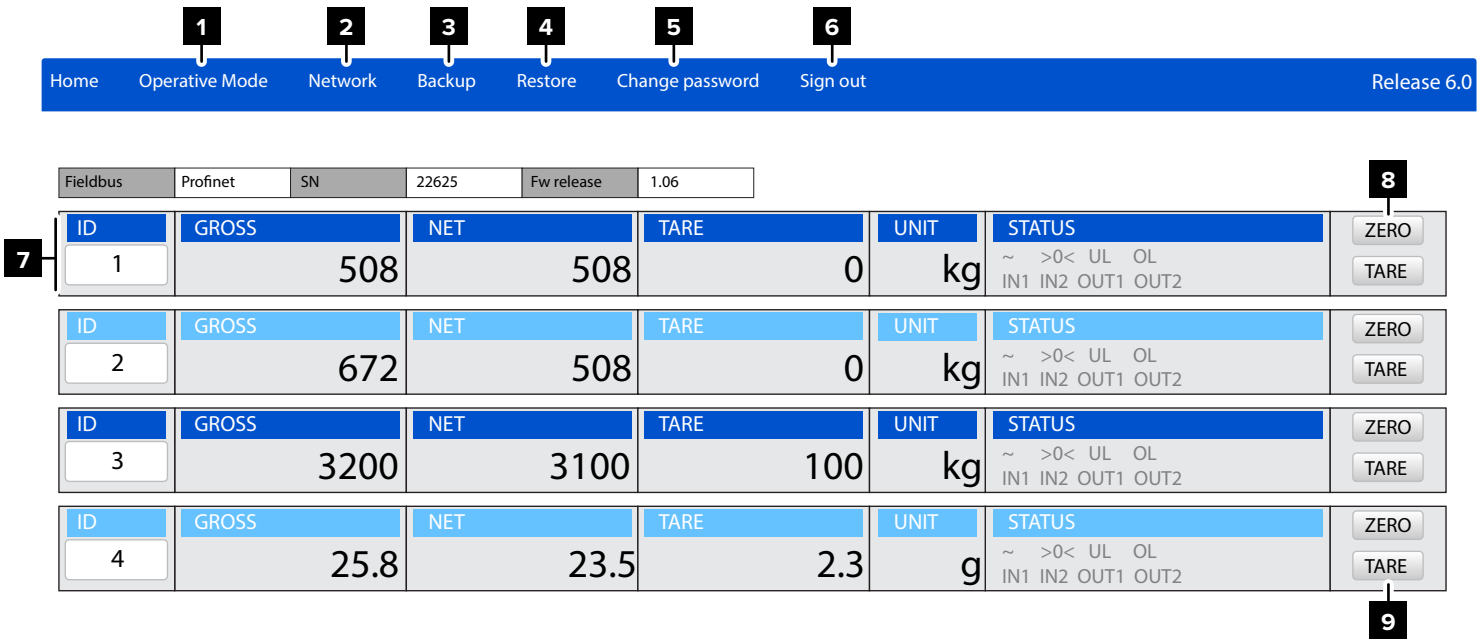
Logging in the instrument web page interrupts the communication with the PLC.

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Dependent / independent channels mode (single scale)

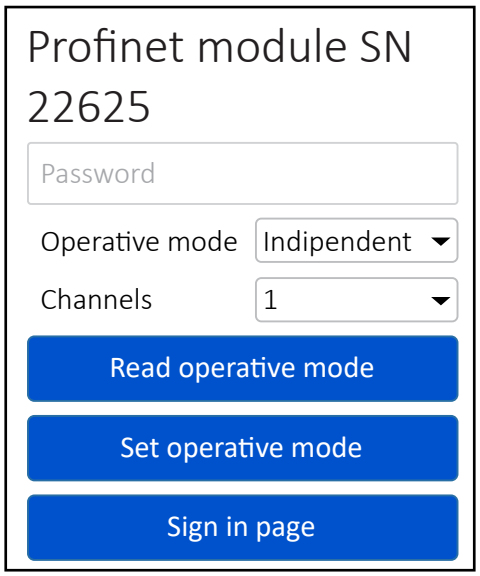


Independent Channels Mode (Multi-Scale)



1 Operating Mode

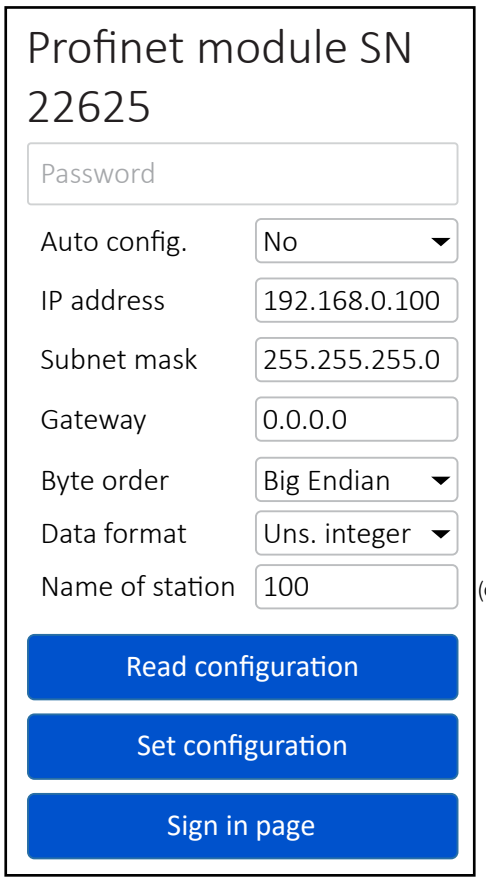
You can change the operating mode and select the number of active channels / scales from the page below.
After the change you need to log in again to the main page



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.
- Data format: Unsigned integer / Signed integer / Float.
- Profinet name: up to 16 characters (only SCT-4X-PRONET)



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

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3 Backup

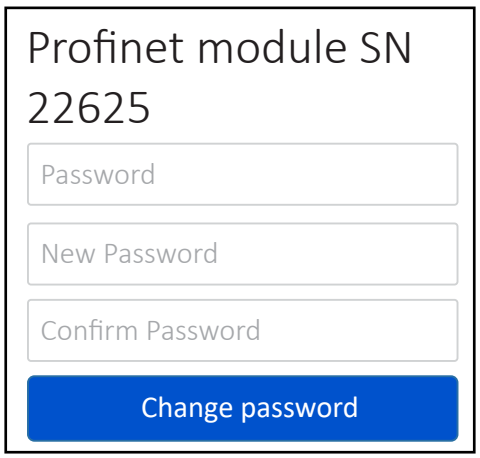
By clicking on the **"Backup"** button the browser starts receiving the instrument configuration.
When reception is complete, the **"setup.mot"** file is automatically downloaded. This file is compatible with the Rice Lake Tools.

4 Restore

By clicking on the **"Restore"** button you can select a configuration file to load on the instrument.
WARNING: the configuration file must have **".mot"** extension.

5 Change Password

You can change your login password from this page:



6 Sign Out

Logout from the instrument web page.

7 Instrument Information

Shows the weight and status information of the scale:

ID	Scale identification number. (only for Ethernet mode)	
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

Performs zeroing on the instrument.
WARNING: the zero execution takes place only if the necessary conditions are met (zero parameters).

9 Tare

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

10 A/D Converter Points

In dEP.Ch mode the value displayed is the sum of the active channels.
In ind.Ch mode is displayed the value of the active scale.

11 Calibration Parameters

Setting of 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)

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12 Calibration

1. Select the number of calibration points from the drop-down menu.
2. Enter the weight values of the calibration points in the text boxes on the left.
3. For each point, load the sample weight on the scale and click the corresponding button. The value of ADC points is automatically acquired in the text box on the right. If you know the ADC point value, you can enter it manually.
The weight and ADC point values must be increasing:

Case 1

CALIBRATION

Cal. points 1 ☑ 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

Case 2

CALIBRATION

Cal. points 1 ☑ 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

4. Save the calibration by clicking WRITE PARAMETERS

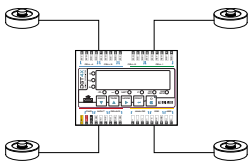
If the weight and/or ADC values are not increasing (Case 2), only point 1 will be considered.

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

13 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 calculated as shown in the note.
3. Calculate ADC points by clicking THEOR. CALIB.

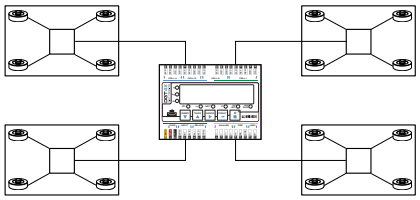
DEPENDENT CHANNELS



mV/V value:

mV/V cell1 +
mV/V cell2 +
mV/V cell3 +
mV/V cell4

INDIPENDENT CHANNELS



mV/V value:

$$\frac{\text{mV/V cell1} + \text{mV/V cell2} + \ldots + \text{mV/V cellN}}{N}$$

Repeat the procedure for each scale.

14 Commands

KEYBOARD LOCK	Keyboard lock
KEYBOARD UNLOCK	Keyboard unlock.
SCALE REBOOT	Reboot of the instrument. (You will momentarily lose communication)
WRITE PARAMETERS	Calibration parameters saving.
WRITE SETPOINTS	Setpoint saving
THEOR. CALIB	**Theoretical calibration**: By entering the weight and mV/V value of the cells the relative ADC points are calculated. .
ZERO CALIB.	**Zero calibration.**

15 Setpoint

1. Set the output function to Gross or Net. (Ref. **Quick Start Guide**)
2. Enter the output on/off values in the text boxes.
3. Save setpoints by clicking WRITE SETPOINTS

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NOTES

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