SOCIETÀ COOPERATIVA
BILANCIAI

Single Weight
FLYNET

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2 INTRODUCTION

The SINGLE WEIGHING operation function can be managed as:

- ✔ standard operations.
- ✔ sum weighing operations.

“Standard” operation is characterised by independent weighing operations. The net weight is always printed, gross and tare weight can be printed or not depending on the parameters set in the configuration.

The "Sum" operation allows you to perform multiple weighing operations in sequence without unloading the scale, zeroing the net weight after each weighing operation.

For all other information, refer to the manual “Flynet50 Use, maintenance and installation manual”.

3 CONFIGURING THE INDICATOR

Below is the list of the typical parameters of the single weighing application.

To access the configuration, press the keys:



(Path: MENU - TOOLS - CONFIGURATION - APPLICATION)

Use the lower bar or the single key to select the desired parameter section.

The default values of the individual parameters are highlighted in bold.

3.1 ARCHIVES - CONFIGURING ARCHIVES



3.1.1 Parameters of the product archive



PRODUCT		
Parameter	*Value*	*Description*
Enable	**YES** NO	Enabling using the archive
Type of window	**Standard** With image	Type of archive display
Mandatory data	YES **NO**	Code selected for weighing operation
Selection	**NO** Always	When code is to be selected
Immediate search	**YES** NO	Display window for data search

Search Keyboard	**Alphanumeric** Numeric	Keyboard type enabled for search
Display defaults	Code Description **Code and description**	Type of archive display
Default sorting	**By Code** By Description	Data for archive sorting
Sorting type default	**Ascending** Descending	Type of archive sorting
Customised archive name		Enter a different text for Product. The new text set will be used throughout the application

3.1.2 Parameters of the customer archive



CUSTOMER		
Parameter	*Value*	*Description*
Enable	**YES** NO	Enabling using the archive
Type of window	**Standard** With image	Type of archive display
Mandatory data	YES **NO**	Code selected for weighing operation
Selection	**NO** Always	When code is to be selected

Immediate search	**YES** NO	Display window for data search
Search Keyboard	**Alphanumeric** Numeric	Keyboard type enabled for search
Display defaults	Code Description **Code and description**	Type of archive display
Default sorting	**By Code** By Description	Data for archive sorting
Sorting type default	**Ascending** Descending	Type of archive sorting
Customised archive name		Set a different text for customer. The new text set will be used throughout the application

3.1.3 Parameters for PLU archive



PLU		
Parameter	*Value*	*Description*
Enable	**YES** NO	Enabling using the archive

3.1.4 Generic



GENERIC		
Parameter	*Value*	*Description*
Enable	**YES** NO	Enabling using the archive
Type of window	**Standard** With image	Type of archive display
Mandatory data	YES **NO**	Code selected for weighing operation
Selection	**NO** Always	When code is to be selected
Immediate search	**YES** NO	Display window for data search
Search Keyboard	**Alphanumeric** Numeric	Keyboard type enabled for search
Display defaults	Code Description	Type of archive display

	Code and description	
Default sorting	**By Code** By Description	Data for archive sorting
Sorting type default	**Ascending** Descending	Type of archive sorting
Customised archive name		Set a text different from Generic. The new text set will be used throughout the application

3.1.5 Operator



OPERATOR		
Parameter	*Value*	*Description*
Enable	**YES** NO	Enabling using the archive
Type of window	**Standard** With image	Type of archive display
Mandatory data	YES **NO**	Code selected for weighing operation
Selection	**NO** Always	When code is to be selected
Immediate search	**YES** NO	Display window for data search
Search Keyboard	**Alphanumeric** Numeric	Keyboard type enabled for search

Display defaults	Code Description **Code and description**	Type of archive display
Default sorting	**By Code** By Description	Data for archive sorting
Sorting type default	**Ascending** Descending	Type of archive sorting
Customised archive name		Set a text different from Operator. The new text set will be used throughout the application

3.1.6 Lot



LOT		
Parameter	*Value*	*Description*
Enable	**YES** NO	Enabling using the archive

3.1.7 Coefficient



COEFFICIENT		
Parameter	*Value*	*Description*
Enabled	YES **NO**	Enabling using the archive
Customised archive name		Set a different text for Coefficient. The new text set will be used throughout the application
Customised result header		Set a different text for Result. The new text set will be used throughout the application

3.2 OTHER - OTHER CONFIGURATIONS



3.2.1 Fields



You can set up 7 messages, each one consisting of a description line and a value line, which can be set as a printout footer if necessary.

FIELDS		
Parameter	*Value*	*Description*
Enable	YES **NO**	Enabling using additional fields
Field 1	**Field1**	Click on the parameter Field 1 to access the table of individual values
Field 2	**Field2**	Click on the parameter Field 2 to access the table of individual values
Field 3	**Field3**	Click on the parameter Field 3 to access the table of individual values
Field 4	**Field4**	Click on the parameter Field 4 to access the table of individual values
Field 5	**Field5**	Click on the parameter Field 5 to access the table of individual values
Field 6	**Field6**	Click on the parameter Field 6 to access the table of individual values
Field 7	**Field7**	Click on the parameter Field 7 to access the table of individual values

Individual value parameters		
Parameter	*Value*	*Description*
Code	**1**	Field number from 1 to 7
Text	**Field1**	Field text value of max 30 characters.
Value		Field value of max 30 characters.
Print	**YES** NO	When to print the field
Delete	**YES** NO	Enabling field deleting after printing

3.2.2 Configuring printer



All the sub-menus are present to correctly set the serial printer(s) to be connected.

3.2.2.1 Configuring serial port



Select the desired COM and set the required parameters. Only the serial ports that are correctly installed in the indicator when accessing the machine setup are displayed.

SERIAL PORTS / COM4		
Parameter	*Value*	*Description*
Baudrate		Select speed
Bits		Select data bit
Stop		Select stop bit
Parity		Select parity

Handshake		Select handshake (none, hardware)
Protocol		RS232

SERIAL PORTS / COM6		
Parameter	*Value*	*Description*
Baudrate		Select speed
Bits		Select data bit
Stop		Select stop bit
Parity		Select parity
Handshake		Select handshake (none, xon/xoff)
Protocol		RS232

SERIAL PORTS / COM7		
Parameter	*Value*	*Description*
Baudrate		Select speed
Bits		Select data bit
Stop		Select stop bit
Parity		Select parity
Handshake		Select handshake (none)
Protocol		RS422

3.2.2.2 Configuring printer



A printer instance needs to be added.

Click on Printers.

Press  Add key to add a printer.

Set the desired name for the printer instance and press the Confirm key.

A new instance with a different name must be created for each connected printer.

IMPORTANT: The name set for the instance must be selected in the Printer Alias parameter in the Printer Configuration menu.

Select the model and the connection COM and press the  Save key to save the configuration.

CONFIGURING PRINTER		
Parameter	*Value*	*Description*
Model	**STB80**	This contains the list of printers that can be connected. The key to open the specific parameters of the selected model are on the right of the model.
COM	**COM4**	Select the connection com

3.2.2.3 Configuring parameters



PRINTER		
Parameter	*Value*	*Description*
Weighing printer	**Main** Both	It enables the printer to be a primary or secondary printer too
In case of failure of secondary printer failure	**Interrupt** Continue	How to act in case of secondary printer failure
Main Printer Alias		Select the name of the printer instance
Secondary Printer Alias		Select the name of the printer instance
No. of line feeds to skip input weighing operation	**15**	Number of lines feeds to position the outgoing printout on the tag.

3.2.2.4 Configuring layouts



Below you can select the layout to be used for each type of operation in the application. The same parameter is also present in the setup of the single operation. Changing it on one side will also change it on the other.

WARNING: check that the layout is correct for the model of the printer present.

LAYOUT		
Parameter	*Value*	*Description*
Main printer weigh. operation layout	weighing.xml Weighingcode128.xml	Select the printing layout on the main printer

Sec. printer layout	weighing.xml Weighingcode128.xml	Select the printing layout on secondary printer

3.2.2.5 Configuring header texts



You can set up 5 lines of messages, each one consisting of 42 characters which can be set as printout header if necessary.

TEXTS		
Parameter	*Value*	*Description*
Text 1		Alphanumeric text
Text 2		Alphanumeric text
Text 3		Alphanumeric text
Text 4		Alphanumeric text
Text 5		Alphanumeric text
Printing texts in totals	YES **NO**	Enabling text printing in total printout

3.2.2.6 Configuring footer texts



You can set up 5 lines of messages, each one consisting of 42 characters which can be set as printout footer if necessary.

TEXTS		
Parameter	*Value*	*Description*
Text 1		Alphanumeric text
Text 2		Alphanumeric text
Text 3		Alphanumeric text
Text 4		Alphanumeric text

Text 5		Alphanumeric text

3.2.3 Display

DISPLAY		
Parameter	*Value*	*Description*
Main page	Multiscale **Single scale**	
Scale switching on	A,B,S etc...	In case of duplex indicator, at switching on select the scale
Scale selection	**Yes** No	In case of duplex indicator, enable scale change

3.2.4 Weighing operation

PRINTER		
Parameter	*Value*	*Description*
Operation	Standard Sum	Select the type of operation
Managing new weighing operation with scale unloading	ON **OFF**	Enabling new weighing operation with scale unloading
Delete data after weighing operation	YES NO	If ticked, optional data (product, lot, etc.) are deleted after a weighing operation
Print Gross weight	YES NO	If ticked, Gross weight is printed

Print Tare	Always Only if Preset Greater than Zero	Tare printed only if the set condition has been verified
Print Date and Time	**YES** NO	If ticked, date and time are printed
Print Logo	**YES** NO	If ticked, logo is printed
Barcode printout	**YES** NO	If ticked, the barcode printing is enabled, showing the net weight without any point or comma.
Manufacturer line printout	**YES** NO	If ticked, the line with the manufacturer's name is printed
No. of Printed copies	**0**	Set the number of copies
Main printer weigh. operation layout	**Weighing.xml** Weighingcode128.xml	Select the printing layout on the main printer. If the first one is selected, the barcode, if any, is of ean8 type, while if the second one is selected it is of code 128 type
Sec. printer weigh. operation layout	**Weighing.xml** Weighingcode128.xml	Select the printing layout on secondary printer. If the first one is selected, the barcode, if any, is of ean8 type, while if the second one is selected it is of code 128 type

3.2.5 Automatically exporting weighing operation archive in csv



Automatically exporting CSV			
Parameter	*Value*	*Description*	
Automatic export	YES **NO**	If this is ticked, the export of the weighing operation to a csv format file is enabled. The following are the 3 export modes, one excluding the other ones	
	Export every (weighing operation)	**1**	It is possible to set how many weighing operations to be exported every time
	Export every (hours)	**1**	It is possible to set how many hours have to elapse between one export operation and the next one
	Export at (time)	**hh:mm**	You can set the time at which the export is to be carried out
File export device	**\NAND_Flash\Extern**	Select a location to export to	
Deleting exported weighing operations	YES **NO**	It is possible to set whether or not to delete the weighing operations from the DB after exporting	
Dividing the csv file every (number of exports)	**1**	It is possible to create multiple csv files by setting the number of weighing operations per file. **(A)**	

Delete weighs older than (days)	**0**	Automatically delete the older of the weighted number of days**.(B)**

(A)

The following examples for clarity are made with "weighted" exports but the same reasoning also applies to "time" exports.

Example 1)

"Export every (weighs) = 1"
"Divide the csv file every (nr. Exports) = 1"
Result: At each weighing a different .csv file is created with the format "yyyy_mm_dd_hh_mm_ss_Pesate.csv" (it may differ according to the language in use).

Example 2)

"Export every (weighs) = 1"
"Divide the csv file every (nr. Exports) = 0"
Result: At each weighing, the weighing in the queue is added to the "Pesate.csv" file (it may differ according to the language in use). Operation reinserted for compatibility with dated releases where only one file was used for exports.

Example 3)

"Export every (weighs) = 1"
"Divide the csv file every (nr. Exports) = 100"
Result: At each weighing, the weighing in the queue is added to the "Pesate.csv" file (it may differ according to the language in use). On the 101st export (corresponding to the 101st weigh), a new "Pesate.csv" file is created with the 101 weight and the old one with the previous 100 weighs is renamed with the date and time of that instant.

Example 4)

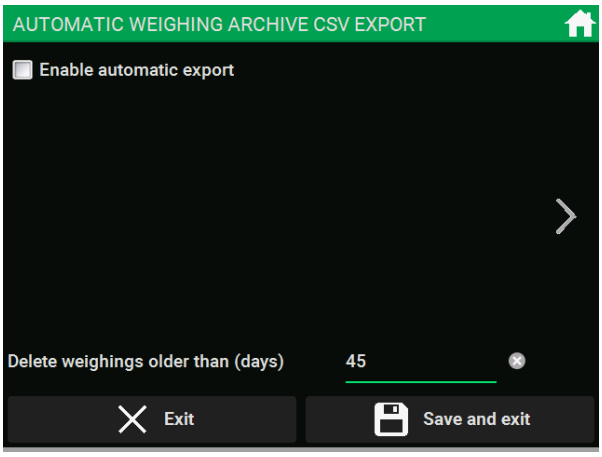
"Export every (weighs) = 10"
"Divide the csv file every (nr. Exports) = 5"
Result: Every 10 weighs, 10 weighs are added in the queue to the "Pesate.csv" file. On the sixth export (corresponding to the 60th weigh), a new "Pesate.csv" file is created with the last 10 weighs and the old one with the previous 50 weighs is renamed with the date and time of that instant.

(B)

Elimination of obsolete weighings.

If a value other than 0 (zero) days is set, a search is made for the old and deleted weighs at the end of each weighing.

Deletion is unrelated to automatic archiving.



Automatic archiving with cancellation of old weighings.

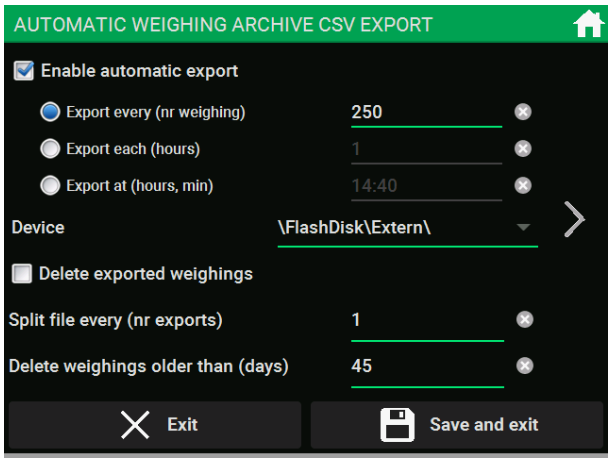
Example of operation with the parameters below.

If there are 1000 weighs in memory and 500 of them are older than 45 days, when I go to export 250 the obsolete 500 will be eliminated.

The 500 recent weighings will remain in memory.

When it comes to + 250 new weighs, the new 250 are exported and if there are weighs older than 45 days they will be eliminated.

If you activate "Clear exported weighs", after export the weighs archive will be completely emptied.



Emailing csv		
Parameter	*Value*	*Description*
Sending email	YES **NO**	Enabling/Disabling sending emails with csv files of the weighs
Mail to:		Recipient's email address
Mail Cc:		Email address of the Cc recipient
Mail blind cc:		Email address of the Bcc recipient
Subject		Subject of the email
Text		Email text

Sending csv to FTP Server		
Parameter	*Value*	*Description*
Sending to FTP server	YES **NO**	
Host folder		
Deleting the csv transmitted after number of days		

Configuring FTP client		
Parameter	*Value*	*Description*
Host		
UserName		
Password		
Port	**21**	

3.2.6 Package number



Package number		
Parameter	*Value*	*Description*
Applying Package No. to the Tare	YES **NO**	Enabling/disabling using packages associated with tare.
Applying Package No. to Tare 1	YES **NO**	Enabling/disabling using packages associated with tare1.

WARNING: if known tares are enabled, the packages associated with tare2 are always available

3.2.7 Sum weighing



Sum weighing		
Parameter	*Value*	*Description*
Gross weight in tare at the end of weighing operation	**YES** NO	If ticked, at the end of weighing operation, the gross weight is added to tare weight.
Reduced printing	**YES** NO	If ticked, the printing is of a reduced type, the first printout shows any headers, date, time and optional data, while the subsequent printouts show only the modified optional data and weight data.

3.2.8 Excluding columns



By default, all listed data are exported to the CSV file. Selecting them one by one, it is possible to exclude the unwanted ones, reducing the number of columns that will be present in the CSV file.

3.3 INPUTS - Configuring inputs



3.3.1 Configuring weighing operation enabling input



Example: if connected to photocells it can be used to check the correct positioning of the vehicle on the scale.

Enabling weighing operation		
Parameter	*Value*	*Description*
ID		Instance number
Input number		Line number (E.g. 101)
Scale Alias		Name of the reference scale (example A)

3.3.2 Configuring weight reset input



Zeroing of the weight upon activation of the input, simulates pressing the zeroing button on the terminal display.

Resetting weight		
Parameter	*Value*	*Description*
ID		Instance number
Input number		Line number (E.g. 101)
Scale Alias		Name of the reference scale (example A)

3.3.3 Configuring weighing operation input



Execution of the weighing when the input is activated, simulates the pressure of the print key on the terminal display.

Weighing operation		
Parameter	*Value*	*Description*
Input number		Line number (E.g. 101)

3.3.4 Configuring transmission request input



When the input is activated, the terminal sends a string of the selected format.

Transmission request		
Parameter	*Value*	*Description*
Input number		Line number (E.g. 101)

3.3.5 Configuring scale selection input



Selection of the scale configured for that given input.

Scale selection		
Parameter	*Value*	*Description*
ID		Instance number
Input number		Line number (E.g. 101)
Scale Alias		Name of the reference scale (example A)

3.3.6 Reset Tare



Upon activation of the input, it allows you to reset any entered tare.

Reset tara		
Parameter	*Value*	*Description*
ID		Instance number
Input number		Line number (E.g. 101)
Scale Alias		Name of the reference scale (example A)

3.3.7 Acquire Tare



Upon activation of the input, it allows you to load the gross weight in tare, if the stable weight is present.

Acquire Tare		
Parameter	*Value*	*Description*
ID		Instance number
Input number		Line number (E.g. 101)
Scale Alias		Name of the reference scale (example A)

3.3.8 Automatic Tare



Upon activation of the input, it allows you to load the gross weight in tare, if the stable weight is present, or to cancel a tare if it is already present.

Automatic tare		
Parameter	*Value*	*Description*
ID		Instance number
Input number		Line number (E.g. 101)
Scale Alias		Name of the reference scale (example A)

3.4 OUTPUTS - Output configuration



3.4.1 Traffic light configuration



Configuration for red and green traffic lights for handling.

Traffic light		
Parameter	*Value*	*Description*
ID		Traffic light instance name
Scale Alias		Name of the reference scale (example A)
Green light output number		Output number
Red light output number		Output number
Activation time		Time in seconds of contact duration
Weight variation		Weight value to switch off the traffic light
Green light input number		Input number to enable green light

3.4.1.1 Remote Traffic light configuration



It is possible to use a wired traffic light on another (remote) terminal, of which it is essential to know the IP address, port, green light output and red light output. On the terminal that does not have the wiring with the traffic light, it is necessary to set:

Semaforo		
Parameter	*Value*	*Description*
ID		Traffic light instance number
Green light output number		Number of the output to which the green light on the terminal is connected.
Red light output number		Number of the output to which the red light on the terminal is connected.
Scale Alias		Name of the reference scale (example A)
Activation time (s)		Time in seconds of contact duration
Green light input number		Input number to enable green light (optional)
Weight variation		Weight value to switch off the traffic light
Remote Traffic Light		Check to enable the remote traffic light
Traffic Light IP		Set the IP address of the remote terminal that has the wiring to the traffic light
Traffic Light Port		Set the port of the remote terminal where transmission to remote commands has been enabled. Example 6006.
Green light output number		Number of the output to which the green light on the remote terminal is connected.
Red light output number		Number of the output to which the red light on the remote terminal is connected.
Green light input number		Input number to enable green light on the remote terminal (optional)

In order to manage a remote traffic light it is necessary, on the terminal that has the wiring, to create a network transmission with remote commands.
Example

TRASMISSION>RETE>TX_LAN_CMD_TL_01	
Scale	Name of the reference scale (example A)
Port	TCP port where to accept the call.
Transmission interval (ms)	Time in seconds of contact duration
String	ExtendedString
Protocol	Remote commands
……..	……

P.S. It is necessary to leave the contacts managed remotely unused. Otherwise, behaviors will be mixed between the two assigned logics.

3.4.2 Output configuration Weighing operation completed



Activation of the output at the end of a weighing

Weighing operation completed		
Parameter	*Value*	*Description*
Output number		Line number (E.g. 101)
Activation time (sec)		Output duration time

3.4.3 Output configuration Transmission Ok



Activation of the output upon receipt of the ACK character.

Successful transmission		
Parameter	*Value*	*Description*
Output number		Line number (E.g. 101)
Activation time (sec)		Output duration time

3.4.4 Output Configuration Selected Scale



Activation of the output when the set scale is selected.

Selected Scale		
Parameter	*Value*	*Description*
ID		Instance name
Output number		Line number (E.g. 101)
Scale Alias		Name of the reference scale (example A)

3.4.5 Configuring Indicator Ready output



Always active output once the terminal has completed booting.

Indicator ready		
Parameter	*Value*	*Description*
ID		Instance name
Output number		Line number (E.g. 101)

3.4.6 Configuring Bilanciai active output



Activation of the output when you are on the work page and the scale is valid, without errors and with a valid weight.

Scale working		
Parameter	*Value*	*Description*
ID		Instance name
Output number		Line number (E.g. 101)

3.4.7 Configuring card accepted output



Activation of the output after reading a badge that matches the archive data.

Card accepted		
Parameter	*Value*	*Description*
Output number		Line number (E.g. 101)
Activation time (sec)	**1**	Output duration time

3.4.8 Configuring card rejected output



Activation of the output after reading a badge that has no correspondence with the archive data.

Card rejected		
Parameter	*Value*	*Description*
Output number		Line number (E.g. 101)
Activation time (sec)	**1**	Output duration time

3.4.9 Mpp output Configuration execute



Activation of the output after the execution of the MPP operation.

Mpp Execute		
Parameter	*Value*	*Description*
Output number		Line number (E.g. 101)
Activation time (sec)	**1**	Output duration time

4 BASIC OPERATIONS

4.1 Using the touch screen

The touch screen will allow easily selecting items or giving commands for operation. Touch the screen once to select an item or launch an application.

ATTENTION

To avoid damaging the touch screen, never use pointed objects on it

4.2 Icons

The icons displayed at the top of the touch screen provide information about the status of the device.



Network connection is active



Network connection is not active



Current time

4.3 Keys

Keys displayed at the bottom of the touch screen allow access to the device tools



Select main page.



Select the page allowing you to recall the accessory data, data pre-set in the archive, data used during the weighing operations (products, customer, plate and data recall).



Select page Shortcut keys



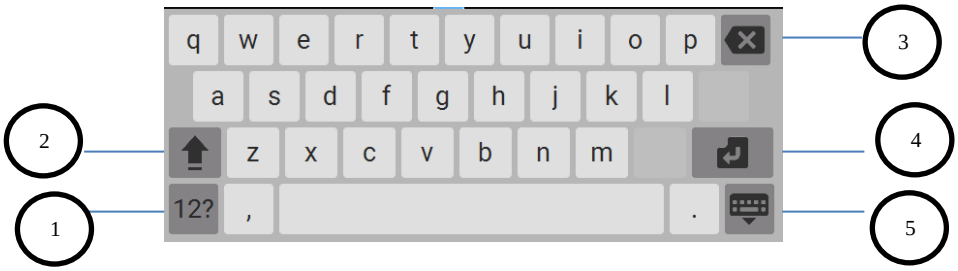
Select MPP page



Select data page; this page and the following one allow populating archives or setting data (progressive number, setpoint, range etc.) .

4.4 Configuring a text

You can enter a text using the characters on the virtual keyboard. Touch a key and hold it down to select the character displayed on the upper side of the key.



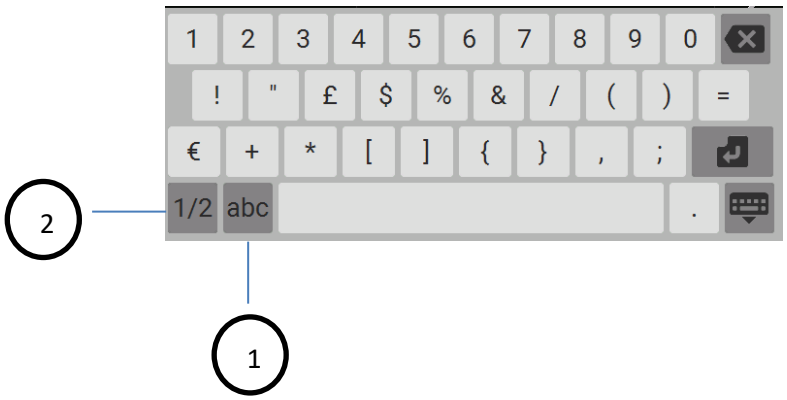
1 Use this key to switch from Alphanumeric mode to Number/Symbol mode.

2 Use this key for Uppercase/Lowercase selection.

3 This key deletes an entered character.

4 This key confirms the text and closes the virtual keyboard.

5 This key cancels a setting, retrieving the initial text and closing the virtual keyboard.



1 Use this key to switch from Number/Symbol mode to Alphanumeric mode.

2 This displays several symbols.

4.5 Access levels

Each operation is associated to an access level. If access level management is enabled, set the requested access level before performing an operation. During configuration of the device, you can set a password for each of the levels.

If level management is enabled, the password for level 4 must be set.

The other levels are optional and will only be selectable if the respective password is set.

To enable password management press in sequence: 

Setting access levels		
Parameter	*Value*	*Description*
Access levels	**OFF** ON	NO disables the access levels, they are not enabled by default. YES enables access management
Access level at start-up	**1**	Set a level, **1** is set by default
Level 2 password	**[Not Configured]**	Set a password if you want to enter level 2
Level 3 password	**[Not Configured]**	Set a password if you want to enter level 3
Level 4 password	**[Not Configured]**	Set a password if you want to enter level 4. This password is required if the access level is set to "ON".

To select and change the access levels, press in sequence:  and  (if previously set  in shortcut keys).

4.5.1 Scale

Operation	Level
Weighing operation	1
Resetting weight	1
Acquiring\Deleting tare	1

4.5.2 Archives

Operation	Level
Selecting items for weighing operations	1
Sorting	1
Searching	1
New item	2
Deleting	3
Modification	3

4.5.3 CSV

Operation	Level
Exporting	1
Importing	3

4.5.4 Tools

Operation	Level
Activating utilities	1
Selecting colour	1
Setting up shortcut keys	1
Stand-by	1
Error management	1
Setting date and time	4
Device configuration	4

5 ARCHIVES - DATA



(Path: MENU/ARCHIVES)

The device provides tables, where to save information to be used during the weighing operations and ancillary data.

5.1 Flynet Archive List

The Flynet application handles the following archives.

5.1.1 Product

KEY	FIELD NAME	ABBREVIATED TYPE	NULL values accepted	Notes
*	Code	nvarchar(20)	No	Code value
	Description	nvarchar(40)	Yes	Associated description
	Image	nvarchar(50)	Yes	It is a text field that contains the path of the image that is inside the extern. It can only be used through the terminal and cannot be set from the outside.
	CoefCode	Int	Yes	Coefficient

5.1.2 Customer

KEY	FIELD NAME	ABBREVIATED TYPE	NULL values accepted	Notes
*	Code	nvarchar(20)	No	Code value
	Description	nvarchar(40)	Yes	Associated description
	Image	nvarchar(50)	Yes	It is a text field that contains the path of the image that is inside the extern. It can only be used through the terminal and cannot be set from the outside.

5.1.3 Operator

KEY	FIELD NAME	ABBREVIATED TYPE	NULL values accepted	Notes
*	Code	nvarchar(20)	No	Code value
	Description	nvarchar(40)	Yes	Associated description
	Image	nvarchar(50)	Yes	It is a text field that contains the path of the image that is inside the extern. It can only be used through the terminal and cannot be set from the outside.

5.1.4 Lot

KEY	FIELD NAME	ABBREVIATED TYPE	NULL values accepted	Notes
*	Code	nvarchar(20)	No	Code value

5.1.5 Weighing operations

KEY	FIELD NAME	Abbreviated type	NULL values accepted	Notes
*	Id	Int(6)	No	Increased value at each operation
	Indirizzo IP	nvarchar(20)	No	Indirizzo IP del terminale
	SerialNumber	nvarchar(40)	Yes	Weighing operation serial number
	Date	nvarchar(10)	Yes	Weighing operation date
	Time	nvarchar(10)	Yes	Weighing operation time
	Progressive	Int(6)	Yes	Weighing operation progressive number
	Mpp	Int(7)	Yes	Weighing operation MPP code
	Plu	nvarchar(20)	Yes	Plu code
	PluDescription	nvarchar(40)	Yes	Description associated with Plu code
	Result	nvarchar(7)	Yes	Result matched to coefficient
	ProductCode	nvarchar(20)	Yes	Product Code
	ProductDescription	nvarchar(40)	Yes	Description associated with the product code
	CustomerCode	nvarchar(20)	Yes	Customer Code
	CustomerDescription	nvarchar(40)	Yes	Description associated with the customer code
	GenericCode	nvarchar(20)	Yes	Generic code
	GenericDescription	nvarchar(40)	Yes	Description associated with

				generic code
	Operatorcode	nvarchar(20)	Yes	
	OperatorDescription	nvarchar(40)	Yes	
	LotCode	nvarchar(20)	Yes	Lot code
	Field1	nvarchar(30)	Yes	Additional field
	Field2	nvarchar(30)	Yes	Additional field
	Field3	nvarchar(30)	Yes	Additional field
	Field4	nvarchar(30)	Yes	Additional field
	Field5	nvarchar(30)	Yes	Additional field
	Field6	nvarchar(30)	Yes	Additional field
	Field7	nvarchar(30)	Yes	Additional field
	Scale	nvarchar(1)	Yes	Weighing operation scale
	Gross	nvarchar(12)	No	Gross weight
	Tare	nvarchar(12)	Yes	Tare
	Net	nvarchar(12)	Yes	Net weight
	Tare1	nvarchar(12)	Yes	Tare 1
	Tare2	nvarchar(12)	Yes	Tare 2
	Num. of packages	int(3)	Yes	Package number, referred to tare
	Num. of packages1	int(3)	Yes	Package number, referred to tare 1
	Num. .of packages2	int(3)	Yes	Package number, referred to tare 2
	Gross(A)	nvarchar(12)	No	Gross Weight (A)
	Tare(A)	nvarchar(12)	Yes	Tare(A)
	Net(A)	nvarchar(12)	Yes	Net(A)
	Tare1(A)	nvarchar(12)	Yes	Tare 1(A)
	Tare2(A)	nvarchar(12)	Yes	Tare 2(A)
	Num. of packages(A)	int(3)	Yes	Package number, referred to tare(A)
	Num. of packages1(A)	int(3)	Yes	Package number, referred to tare 1(A)
	Num. of packages2(A)	int(3)	Yes	Package number, referred to tare 2(A)
	Gross(B)	nvarchar(12)	No	Gross Weight(B)
	Tare(B)	nvarchar(12)	Yes	Tare(B)
	Net(B)	nvarchar(12)	Yes	Net Weight(B)
	Tare1(B)	nvarchar(12)	Yes	Tare 1(B)
	Tare2(B)	nvarchar(12)	Yes	Tare 2(B)
	Num. of packages(B)	int(3)	Yes	Package number, referred to tare(B)
	Num. of packages1(B)	int(3)	Yes	Package number, referred to tare 1(B)
	Num. of packages2(B)	int(3)	Yes	Package number, referred to tare 2(B)
	Gross(C)	nvarchar(12)	No	Gross Weight(C)

	Tare(C)	nvarchar(12)	Yes	Tare(C)
	Net(C)	nvarchar(12)	Yes	Net Weight(C)
	Tare1(C)	nvarchar(12)	Yes	Tare 1(C)
	Tare2(C)	nvarchar(12)	Yes	Tare 2(C)
	Num. of packages(C)	int(3)	Yes	Package number, referred to tare(C)
	Num. of packages1(C)	int(3)	Yes	Package number, referred to tare 1(C)
	Num. of packages2(C)	int(3)	Yes	Package number, referred to tare 2(C)
	Gross(D)	nvarchar(12)	No	Gross Weight(D)
	Tare(D)	nvarchar(12)	Yes	Tare(D)
	Net(D)	nvarchar(12)	Yes	Net Weight(D)
	Tare1(D)	nvarchar(12)	Yes	Tare 1(D)
	Tare2(D)	nvarchar(12)	Yes	Tare 2(D)
	Num. of packages(D)	int(3)	Yes	Package number, referred to tare(D)
	Num. of packages1(D)	int(3)	Yes	Package number, referred to tare 1(D)
	Num. of packages2(D)	int(3)	Yes	Package number, referred to tare 2(D)
	checksum	int	No	checksum

5.1.6 Coefficient

KEY	FIELD NAME	Abbreviated type	NULL values accepted	Notes
*	Code	int	No	Code value
	Value	float	Yes	Coefficient value
	Operation	nvarchar(20)	No	Type of operation (multiplication or division)
	Round	float	Yes	rounding

5.1.7 Encoding cards

KEY	FIELD NAME	Abbreviated type	NULL values accepted	Notes
*	CardCode	nvarchar(100)	No	Original card code
	UserCode	nvarchar(100)	Yes	New code to be encoded in the archive

5.1.8 Tare

KEY	FIELD NAME	Abbreviated type	NULL values accepted	Notes
*	Code	int	No	Tare code
	Description	nvarchar(30)	Yes	Tare description
	Value	nvarchar(20)	Yes	Tare value

5.1.9 Generic

dbo.Generic	CHIAVE	NOME CAMPO	Tipo Abbreviato	Ammette valori NULL	Note
	*	Code	nvarchar(20)	No	Code Value
		Description	nvarchar(40)	Sì	Description associated with generic code
		Image	nvarchar(50)	Sì	It is a text field that contains the path of the image that is inside the extern. It can only be used through the terminal and cannot be set from the outside.

5.1.10 PLU

dbo.Plu	CHIAVE	NOME CAMPO	Tipo Abbreviato	Ammette valori NULL	Note
	*	Code	nvarchar(20)	No	Code value
		Description	nvarchar(40)	Sì	Description associated with Plu
		Product	nvarchar(20)	Sì	Product Code
		Customer	nvarchar(20)	Sì	Customer Code
		Generic	nvarchar(20)	Sì	Generic code
		CoefCode	int	Sì	CoefCode
		Tara	nvarchar(20)	Sì	Tare Value
		Tara1	nvarchar(20)	Sì	Tare 1 Value
		Tara2	nvarchar(20)	Sì	Tare 2 Value

5.2 Managing Archives

The actions that can be taken are described below.

5.2.1 Creating a new item

1. Press 
2. Set information.
3. Press  to save data in the database and exit or

   Press  to save data in the database and stay in set mode or

Press  to exit.

5.2.2 Modifying an existing item

1. Touch the item to modify.
2. Press 
3. Set information.
4. Press  to save data in the database or

   Press  to exit.

5.2.3 Deleting all items

1. Press 
2. Select **YES** option.

5.2.4 Deleting an item

1. Touch the item to delete.
2. Press 

5.2.5 Printing all items

1. Press 

5.2.6 Printing an item

1. Touch the item to print.
2. Press 

5.2.7 Reprinting weighing ticket

From the weighing archive, by pressing this key it is possible to reprint the ticket relative to the selected weighing.

1. Touch the item to print.

2. Press 
3. Select "Reprint ticket"

5.2.8 Printing weighing data

From the weighing archive, by pressing this key it is possible to print the list of data present during the selected weighing operation.

4. Touch the item to print.
5. Press 
6. Select "Print data"

5.2.9 Searching for items

1. Press 
2. Press 
3. Select the option associated to your search.
4. Enter the item you are looking for.
5. Press 

5.2.10 Sorting items

1. Press 
2. Select the option associated to the sorting operation you are performing.
3. Select the option associated to the type of sorting operation.
4. Press 

5.2.11 Exiting Archive

1. Press  to exit the archive and return to the previous page.

5.3 Flynet Data List

The Flynet application handles the data shown below.

5.3.1 Setpoint

The setpoint is a weight value to be reached to which an output contact is associated. When the scale reaches the set value the contact is provided and kept. When the weight returns below the set value the contact is deactivated.

5.3.2 Range

The range includes a set of weights to be reached to which an output contact is associated. When the scale reaches a value within the set range the contact is provided and kept. When the weight value goes below or above the set range, the contact is deactivated.

5.3.3 Progressive number

The progressive number is a counter that is incremented with each weighing operation completed correctly.

6 OPERATING MODES – OPERATION

The SINGLE WEIGHING operation function can be managed as:

✔ standard operations.

✔ sum weighing operations.

The type of operation must be set in the menu: “Weighing operation”.

6.1 Standard weighing

“Standard” operation is characterised by independent weighing operations. The net weight is always printed, gross and tare can be printed or not depending on the parameters chosen in the configuration.

Optional data are printed only when set.

Select or set optional data (product, generic, customer, lot, operator, coefficient or plu).

Select or set one or more tares (optional).

Press the key . With stable weight, the device prints a ticket bearing all weighing data (if a printer is configured).

6.2 Sum weighing

The sum weighing function allows you to perform multiple weighing operations in sequence without unloading the scale, zeroing the net weight after each operation.
Optional data are printed only when set.

When sum weighing operation is selected, there is an "OVERVIEW" shortcut key on the display.

Weighing operation sequence:

1) Load the products on the scale
2) Select or set optional data (product, generic, customer, lot, operator, coefficient or plu).
3) Press the key . With stable weight, the device prints a ticket bearing all weighing data (if a printer is configured).
   At the end of this operation, the net weight is reset to zero by adding the weight on the scale to the tare.
4) Load the new product to be weighed on the scale, repeat the weighing operations from point "1".

When the weighing operations are finished, if a printer is enabled, pressing the "OVERVIEW" shortcut key will print the total net weight of weighing operations.

6.3 Weighing operation without Plu

1. Select or set optional data (product, customer, generic, operator and lot).
2. Press the key 
3. The device prints a ticket bearing all weighing data (if printer is configured).
4. The device memorises weighing data in the database.

6.4 Weighing operation with Plu

1. Select a Plu code from the main window.
2. The device will recover the optional data associated with the selected Plu code.
   Data can be modified by setting the required information or by selecting the data from the relevant archives.
3. Press the key 
4. The device prints a ticket bearing all weighing data (if printer is configured).
5. The device memorises weighing data in the database.

6.5 Notes on using the Tare in Single Weighing operation

In single weighing operation it is possible to manage from 1 to 3 tares, by setting the relevant parameter.
A "Num. of packages" can be associated to each tare; if "tare 2" is enabled the "Num. of packages 2" is always enabled, while the "Num. of packages" and "Num. of packages 1" must be enabled.
The "Num. of packages" serves as a multiplier.

6.5.1 Practical example on how to use the 3 tares

To weigh 1 pallet with 4 boxes on top, with each box containing 10 packages of which:
tare of the 10 kg pallet, the 1.5 kg box and the 0.200 kg package.

- The operator, after loading the products on the scale, presses the button  and sets:

  tare =10 kg "Num. of packages" =1
  tare 1 =1.5 kg and "Num. of packages 1"=4
  tare 2 =0.200 kg and "Num. of packages 2"=10

- The operator prepares the optional data (product, customer, operator, etc..) necessary for weighing and performs the weighing by pressing the print key 
- The operator can unload the products and proceed with a new weighing operation.

6.6 Traffic light operation

It is possible to enable the use of a traffic light associated with the weighing operation. The traffic light logic involves using two output contacts that will be used to manage a green light and a red light. From setup it is possible to set the output lines to be used and the on/off logic. The traffic light logic is to manage the weighing operation and product unloading from the scale after weighing.

Assuming you connect a green light and a red light to the traffic light and use the default values, when the scale is unloaded the two contacts are disabled so the two lights are off. When the operator loads the product onto the weighing platform the red light is activated. The operator starts the weighing operation and once it is finished the red light is deactivated and the green light turns on. When the operators unloads the product from the scale, the green light turns off.

If the “Traffic light timeout” parameter is set, the “Red” and “Green” outputs are supplied as explained above but removed, once the time set in the “Traffic light timeout” parameter has elapsed.

If the "Weight variation" parameter, other than zero, is set after the weighing operation is carried out, the green light is on until the weight present on the scale varies with respect to the acquired weight by a quantity lower / higher than the weight variation set. As soon as the weight on the scale differs from the acquired weight by an amount at least equal to the weight variation set, the green light turns off and the red one turns on.

For example, if the weight acquired is 5000 kg and the weight variation set is 250 kg, when the weight present on the scale reaches 4750 kg because the vehicle is descending from the weighbridge (or it reaches 5250 kg because a second vehicle is climbing on the scale), the green light turns off and the red light turns on.

Note
The traffic light can be connected to another terminal, in this case a “remote traffic light” must be set, see paragraph 3.4.1.1.

6.7 Card operation

It is possible to recall product, customer or PLU codes by means of cards.
Any read code is searched in the indicated archive, if not present, the message "badge not managed" is displayed.

The managed cards can be barcode or transponder type.

To enable a barcode/transponder card you must set:

1) A serial port: 
(Path: MENU - TOOLS - CONFIGURATION - SYSTEM - SERIAL PORTS - COMX)

Once the serial port has been chosen, set: Baud rate, stop bit, parity, Handshake (none) and protocol of the reader to be connected (different protocols, depending on the reader).

2) A reader: 
(Path: MENU - TOOLS - CONFIGURATION - SYSTEM - SERIAL PORTS - PRINTERS/READERS/IO)

Select "READERS"/"ADD"/IDENTIFY READER WITH A NAME (e.g. reader1)/SELECT THE TYPE OF READER (e.g. Generic Reader) and associate it with the COMX previously set.

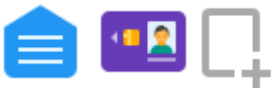
3) A Card: 
(Path: MENU - TOOLS - CONFIGURATION - CARD)

The following needs to be set for the card:

Cards		
Parameter	**Value**	***Description***
Type of card	Cb Neutral Tax code (16 characters) Encoded tax code (32 characters)	Select the type of card. • "Cb", special Bilanciai card: this card has a 13-digit frame in the same format as an EAN13 INDICOD. • "Neutral", allows you to read all the digits of the barcode/Transponder • "Tax code", handles frames longer than 16 characters. • “Encoded tax code", handles frames longer than 32 characters.
Link	Standard Product Customer	This indicates where to search for the read data. "Standard": it is searched in the PLU archive. "Product" / "Customer": it is searched in the corresponding archives.

Automatic weighing operation		If this is ticked, it allows starting a weighing operation, after reading a barcode or transponder; it simulates pressing the print button.
Time-out (sec)		Minimum time length between one card reading and the next.
Time interval		Tick if a part of the read code is required. This works with cards of the following types: "Neutral"/"tax".
Length		If "Neutral"/"tax" card types are enabled, it is possible to set how many digits are to be used among the read ones.
From position		If "Neutral"/"tax" card types are enabled, it is possible to set from which position the code should be analysed, starting from "0". This is useful if the code to be used is placed between other data.
Initial control code		Set the barcode initial digit, which is usually used with "cb" type cards.

A barcode card or transponder can be re-encoded.

To re-encode, choose "Card encoding": 
(Path: MENU/CARD CODING/NEW)

- Move the barcode or transponder card close to the reader.
- The display shows the read code next to the icon  (example: if Transponder: “E0070000242DC945” or in case of CB card: “8001508001501”). If it is already present, the associated code is recalled (example "150") while if it is new, the transcoding code must be set (example "150").
- End with:  (to save and exit) or  (to save and prepare for a new reading/encoding).

Barcodes or transponders can also be changed or set manually, if known, without being read by a reader.
Once barcode/transponder code has been matched with transcoding code, the archive whose code is to be recalled must be populated.

Example: if the archive has a numeric key (PLU), it will be necessary to set it in the same archive as a new code (max. 20 digits) with any associated data (product, customer, etc.).

Example: if the archive has an alphanumeric key (alphanumeric PLU), it will be necessary to set it in the same archive as a new code (max. 20 characters) with any associated data (product, customer, etc.).

When the reader connected to the FLYNET indicator detects the barcode/Transponder card it will recall the associated data and, if enabled, it will activate the weighing operation.

If the barcode/transponder is used without transcoding, it must be set inside the archive (of the set type) in its complete form.

ATTENTION: it is advisable to write the associated code on each transponder card so as to avoid having to re-read them later in this menu to find out the associated code.

Barcode/transponder codes can also be read/checked on the test page:



(Path: MENU/INFO/TEST/CARD READER)

Here are some examples.

Example 1: Getting a 10-character code from a 14-character barcode.

Handling a 14-character barcode card where 10 characters identify the alphanumeric PLU code.
The 10-character code to be used as search key is to be found in the barcode between the second and eleventh characters.
Set:

- set "Generic Reader" as reader type (see point "2" previously described)
- set the COM on which the reader will be connected (see point "1" previously described)
- set card encoding: 
  a) Card type: "Neutral"
  b) Time-out: 5 seconds (this may vary according to requirements)
  c) Tick the time interval
  d) Length: "10"

e) From position: “2”
f) If required, tick automatic print
g) Initial code not used

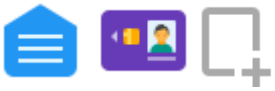
Populate the alphanumeric PLU archive with codes that can be recalled from the cards and which will allow a PLU to be identified and a weighing operation to be enabled.

Example 2: Managing a "TRFid HF405" card to recall PLU numeric codes using transcoding

RFid cards have a manufacturer code with a code similar to the following value: E0070000242DC945. The length of the codes is 16 characters maximum.

The TRFid code must be re-encoded to be used as numeric PLU archive.
Set:

- type of reader " HF405" (see point "2" previously described)
- COM on which the reader will be connected (see point "1" previously described)
- card encoding: 
  a) Card type "HF405"
  b) Time-out 5 seconds
  c) Time interval not used
  d) Length not used
  e) From not used position
  f) If required, tick automatic print
  g) Initial code not used

To re-encode, choose "Card encoding": 
(Path: MENU/CARD CODING/NEW)

1) Move the barcode or **transponder** card close to the reader.

The display shows: "CARD ENCODING"

- the "card code” on first line  the code read (example “E0070000242DC945”)
- Set the transcoding code (example "1000") on the second line "operating code”

2) Proceed from point "1" for all cards to be encoded
3) Populate the numeric PLU archive with codes that can be recalled from the cards and which will allow a PLU code to be identified and a weighing operation to be enabled.

7 TOTALS

Totals are calculated after the output weighing operation has been correctly completed.

The indicator handles the following totals. Each total is calculated starting from a search within the weighing operation archive.

7.1 Product

The total by product code allows searching for products for which weighing operations have been performed within the weighing operation archive.

Data can be extracted:

- By setting a code (only the set code will be extracted)
- Do not fill in the code so that totals for each product code in the archive will be extracted.

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, all results are printed.

Pressing the  Export key, all results are exported in a csv format file.

It is also possible to perform printing and exporting operation on a single result by selecting it before pressing the key for the operation to be performed.

7.2 Customer

The total by customer code allow searching weighing operations within the archive for customers for whom weighing operations have been performed.

Data can be extracted:

- By setting a code (only the set code will be extracted)
- Do not fill in the code so that totals for each customer code in the archive will be extracted.

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, all results are printed.

Pressing the  Export key, all results are exported in a csv format file.

It is also possible to perform printing and exporting operation on a single result by selecting it before pressing the key for the operation to be performed.

7.3 Generic

The generic total allows searching the generic codes for which weighing operations have been performed within the weighing operation archive.

Data can be extracted:

- By setting a code (only the set code will be extracted)
- Do not fill in the code so that totals for each generic code in the archive will be extracted.

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, all results are printed.

Pressing the  Export key, all results are exported in a csv format file.

It is also possible to perform printing and exporting operation on a single result by selecting it before pressing the key for the operation to be performed.

7.4 PLU

The total by Plu allows searching Plu codes for which weighing operations have been performed within the weighing operation archive.

Data can be extracted:

- By setting a code (only the set code will be extracted)
- Do not fill in the code so that totals for each Plu code in the archive will be extracted.

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, all results are printed.

Pressing the  Export key, all results are exported in a csv format file.

It is also possible to perform printing and exporting operation on a single result by selecting it before pressing the key for the operation to be performed.

7.5 Operator

The total by Operator allows searching Operator codes for which weighing operations have been performed within the weighing operation archive.

Data can be extracted:

- By setting a code (only the set code will be extracted)
- Do not fill in the code so that totals for each Operator code in the archive will be extracted.

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, all results are printed.

Pressing the  Export key, all results are exported in a csv format file.

It is also possible to perform printing and exporting operation on a single result by selecting it before pressing the key for the operation to be performed.

7.6 Lot

The total by Lot allows searching Lot codes for which weighing operations have been performed within the weighing operation archive.

Data can be extracted:

- By setting a code (only the set code will be extracted)
- Do not fill in the code so that totals for each Lot code in the archive will be extracted.

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, all results are printed.

Pressing the  Export key, all results are exported in a csv format file.

It is also possible to perform printing and exporting operation on a single result by selecting it before pressing the key for the operation to be performed.

7.7 General Total

The general total allows searching all the performed weighing operations within the weighing operation archive.

Data can be extracted by setting the following criteria:

- from the date of the second weighing operation
- to the date of the second weighing operation

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, the result is printed.

Pressing the  Export key, the result is exported in a csv format file.

7.8 Partial Total

The partial total allows searching all the weighing operations performed since the last partial total performed.

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, the partial total is printed.

Pressing the  Export key, the partial total is exported in a csv format file.

Pressing the  Reset key, the partial total is deleted.

7.9 Batch Total

The batch total allows searching all the weighing operations performed since the last lot total performed.

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, the partial total is printed.

Pressing the  Export key, the lot total is exported in a csv format file.

Pressing the  Reset key, the lot total is deleted.

8 MANAGING CSV FILE



(Path: MENU/CSV)

8.1 Importing data



Copying data from a csv file to the database.

1. Select the memory device where the file has been saved.
2. Select the file to import.
3. Select the destination archive.
4. Press 

8.2 Exporting data



Copying data from a database to a memory device, in csv format.

8.2.1 Exporting selected archives

1. Select the destination memory device where data should be exported to (FlashDisk, USB1 or USB2).
2. Select the archives to export.
3. Press 

8.2.2 Copying



Copying csv files into an external memory device.

8.2.2.1 Copying selected files

1. Select the memory device where the files needs to be copied.
2. Select the files to copy.
3. Press 

8.2.2.2 Copying all files

Select the memory device where the files needs to be copied.

1. Press 

8.2.3 Deleting data

Delete the files from memory device.

Press 

8.2.3.1 Deleting selected files

Select files to delete.

1. Press 

8.2.3.2 Deleting all files

1. Press 

9 MANAGING DATA TRANSMISSION



(Path: MENU/TOOLS/CONFIGURATION/TRANSMISSION)

9.1 NETWORK key:



This key allows adding a new network connection (string, port, protocol type, etc.).

Press the key: 

Enter the name you want to give to the transmission. Example "External Viewer".

Fill in the necessary parameters.

NETWORK		
Parameter	*Value*	*Description*
Scale		Select the scale to which the transmission refers
Port	6001	Setting up the network port
Transmission range (ms)	250	Transmission delay between one string and the next one.
String		Select the desired string
Protocol	Cyclic On request Ack Nack Remote commands	String management mode
Decimal separator	Comma Point	
Checksum mode		Tick to use checksum

Waiting for stable weight		Enabled with selected SASCO1 string. String is transmitted when weight is stable
Waiting time for stable weight	**10**	Enabled with selected SASCO1 string. Waiting time for stable weight.
Green ON input for Norsk		Enabled with Extended-Traffic Light string selected. Enabling green light of traffic light on the display
Reply XI10 configurable sum sc.	**Single scale (S)** Scale components (A+B)	Remote control to request the configurable sum scale weight if enabled
Suspend from input		This allows suspending transmission

Press the key:  to save

Press the key:  to close without saving.

9.2 SERIAL key:



This allows adding a new serial connection (string, port, protocol etc. type)

Press the key: 

Enter the name you want to give to the transmission. Example "External Viewer".

Fill in the necessary parameters.

SERIAL		
Parameter	*Value*	*Description*

Scale		Select the scale to which the transmission refers
Port	COM1	Set the serial port to be used
Transmission range (ms)	250	Transmission delay between one string and the next one
String		Select the desired string
Protocol	Cyclic On request Ack Nack Remote commands	String management mode
Decimal separator	Comma Point	
Checksum mode		Tick to use checksum
Waiting for stable weight		Enabled with selected SASCO1 string. String is transmitted when weight is stable
Waiting time for stable weight	**10**	Enabled with selected SASCO1 string. Waiting time for stable weight.
Green ON input for Norsk		Enabled with Extended-Traffic Light string selected. Enabling green light of traffic light on the display
Reply XI10 configurable sum sc.	**Single scale (S)** Scale components (A+B)	Remote control to request the configurable sum scale weight if enabled
Suspend from input		This allows suspending transmission

Press the key:  to save

Press the key:  to configure COM

Press the key:  to close without saving.

9.3 MPP key:



This allows entering the parameters to manage the MPP transmission.

MPP		
Parameter	*Value*	*Description*
Weighing request	From serial From key	Mpp operation request mode
Data transmission	From serial To Weighing end	MPP operation transmission/reply mode.
Saving Tare		Tick this box to enable saving the tare in MPP string.
Type of reply	Standard Std EN45501:2015 Std and time + indicator number Indicator number Serial number	Type of string to be transmitted.
Indicator number		Set if a "reply type" is selected providing for it.
Transmission to be used		Select serial port or network.

Exclude ACK NACK		Tick to exclude ack-nack management.

Press the key:  to save

Press the key:  to close without saving.

9.4 INDICATOR PARAMETER key:



INDICATOR PARAMETERS		
Parameter	*Value*	*Description*
Indicator number	0	
Sasco progressive number	1	

Press the key:  to save

Press the key:  to close without saving.

10 PRINTED DATA STRING



(Path: MENU/TOOLS/CONFIGURATION/PRINTED DATA STRING)

10.1 NETWORK key:



NETWORK		
Parameter	*Value*	*Description*
Enabled		Tick to enable the printed data string.
Port	6010	Setting up the network port
Protocol	Request Spool Archive	String management mode
Decimal separator	Comma Point	
Checksum mode		Tick to use checksum
Exclude ACK NACK		Tick to exclude ack-nack management.
ACK-NACK Timeout (ms)	3000	Ack-nack waiting time-out (if enabled)
String emission range (ms)	0	Transmission delay between one string and the next one.

Press the key:  to save and exit

Press the key:  to close without saving.

10.2 SERIAL key:



SERIAL		
	Value	Description
Enabled		Tick to enable the printed data string.
Port	COMX	Select one of the ports available on the indicator.
Protocol	Request Spool Archive	String management mode
Decimal separator	Comma point	
Checksum mode		Tick to use checksum
Exclude ACK NACK		Tick to exclude ack-nack management.
ACK-NACK Timeout (ms)	3000	Ack-nack waiting time-out (if enabled)
String emission range (ms)	0	Transmission delay between one string and the next one.

Press the key:  to save and exit

Press the key:  to close without saving.

10.3 Delete data key:



A window is displayed where you are asked whether or not to delete the stored strings.

10.4 Printed Data String Format of Flynet Indicator

Below is an explanation of some of the printed data strings of the Flynet indicator, in particular:

- with 4 scales and multiple tares enabled.
- with 4 scales and no multiple tares enabled.

The string is transmitted when the weighing operation is completed correctly. String transmission can be enabled via serial or Ethernet.

The following is the structure of the string called "Printed Data String".

String with 4 scales and multiple tares enabled:

Number of characters	Datum	Description
1	$	string start character (24H)
6	ID	identification number of the weighing operation (6 digits).
40	Serial no.	serial number of the indicator used to carry out the weighing operation (40 characters).
10	Date	indicator date during weighing operation (10 characters)
10	Time	indicator date during weighing operation (10 characters).
6	Progr.No.	progressive number of the weighing operation (6 digits)
7	MPP	this is the MPP code used to save the weighing operation weights (7 digits)
20	Product Code	product code of the weighing operation (20 characters)
40	Description	description recalled by the product code (40 characters)
20	Customer Code	customer code of the weighing operation (20 characters)
40	Description	description recalled by the customer code (40 characters)
20	Generic	Generic code of the weighing operation (20 characters)
40	Description	description recalled by the generic code (40 characters)
20	Operator code	Operator code of the weighing operation (20 characters)
40	Description	description recalled by the operator code (40 characters)
40	Lot code	Lot code of the weighing operation (20 characters)
20	Plu code	PLU code of the weighing operation (20 characters)
40	description	description recalled by the PLU code (40 characters)
30	Field 1	weighing operation field 1 (30 characters)
30	Field 2	weighing operation field 2 (30 characters)
30	Field 3	weighing operation field 3 (30 characters)
30	Field 4	weighing operation field 4 (30 characters)
30	Field 5	weighing operation field 5 (30 characters)
30	Field 6	weighing operation field 6 (30 characters)
30	Field 7	weighing operation field 7 (30 characters)
1	Scale	Selected Scale, this is the name of the scale used for the weighing operation (one character). Values: A (41 hex) if A scale

		B (42 hex) if B scale S (53 hex) if sum scale
12	Gross weight	Gross weight on the selected scale during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Tare	Tare on the selected scale during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Net weight	Net weight on the selected scale during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Tare 1	Multiple tare P1 on the selected scale during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Tare 2	Multiple tare P2 on the selected scale during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
3	Packages 2	Package number, Tare P2, scale selected (3 digits)
12	Gross Weight (A)	Gross weight on scale A during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Tare (A)	Tare on scale A during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Net Weight A	Net weight on scale A during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Tare 1 (A)	Multiple tare P1 on scale A during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Tare 2(A)	Multiple tare P2 on scale A during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
3	Packages 2(A)	Tare P2 Package Number (3 digits)
12	Gross Weight B	Gross weight on scale B during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Tare B	Tare on scale B during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Net Weight B	Net weight on scale B during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Tare 1	Multiple tare P1 on scale B during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Tare 2	Multiple tare P2 on scale B during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
3	Packages 2	Tare P2 Package Number (3 digits)
12	Gross Weight C	Gross weight on scale C during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Tare C	Tare on scale C during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Net Weight C	Net weight on scale C during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Tare 1	Multiple tare P1 on scale C during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)

12	Tare 2	Multiple tare P2 on scale C during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
3	Packages 2	Tare P2 Package Number (3 digits)
12	Gross Weight D	Gross weight on scale D during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Tare D	Tare on scale D during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Net Weight D	net weight on scale D during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Tare 1	Multiple tare P1 on scale D during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Tare 2	Multiple tare P2 on scale D during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
3	Packages 2	Tare P2 Package Number (3 digits)
20	Result	20 digits
3	Package no.	Selected scale package number (3 digits)
3	Package no. (A)	Tare A Package Number (3 digits)
3	Package no. (B)	Tare B Package number (3 digits)
3	Package no. (C)	Tare C Package Number (3 digits)
3	Package no. (D)	Tare D Package Number (3 digits)
3	Package no. 1	Selected scale Package number 1 (3 digits)
3	Package no. 1(A)	Tare 1 A Package Number (3 digits)
3	Package no. 1 (B)	Tare 1 B Package Number (3 digits)
3	Package no. 1(C)	Tare 1 C Package Number (3 digits)
3	Package no. 1 (D)	Tare 1 D Package Number (3 digits)
1	CR	0DH

String length: 997 characters

with 4 scales with no multiple tares enabled:

Number of characters	Datum	Description
1	$	string start character (24H)
6	ID	identification number of the weighing operation (6 digits).
40	Serial no.	serial number of the indicator used to carry out the weighing operation (40 characters).
10	Date	indicator date during weighing operation (10 characters)
10	Time	indicator date during weighing operation (10 characters).
6	Progr.No.	progressive number of the weighing operation (6 digits)
7	MPP	this is the MPP code used to save the weighing operation weights (7 digits)
20	Product Code	product code of the weighing operation (20 characters)
40	Description	description recalled by the product code (40 characters)
20	Customer Code	customer code of the weighing operation (20 characters)
40	Description	description recalled by the customer code (40 characters)
20	Generic	Generic code of the weighing operation (20 characters)
40	Description	description recalled by the generic code (40 characters)
20	Operator C.	Operator code of the weighing operation (20 characters)
40	Description	description recalled by the operator code (40 characters)
40	Lot code	Lot code of the weighing operation (40 characters)
20	Plu code	PLU code of the weighing operation (20 characters)
40	description	description recalled by the PLU code (40 characters)
30	Field 1	weighing operation field 1 (30 characters)
30	Field 2	weighing operation field 2 (30 characters)
30	Field 3	weighing operation field 3 (30 characters)
30	Field 4	weighing operation field 4 (30 characters)
30	Field 5	weighing operation field 5 (30 characters)
30	Field 6	weighing operation field 6 (30 characters)
30	Field 7	weighing operation field 7 (30 characters)
1	Scale	Selected Scale, this is the name of the scale used for the weighing operation (1 character). Values: A (41 hex) if A scale B (42 hex) if B scale B (43 hex) if C scale B (44 hex) if D scale S (53 hex) if sum scale
12	Gross weight	Gross weight on the selected scale during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Tare	Tare on the selected scale during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Net weight	Net weight on the selected scale during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)

12	Tare 1	Multiple tare P1 on the selected scale during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Tare 2	Multiple tare P2 on the selected scale during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
3	Packages 2	Package number, Tare P2, scale selected (3 digits)
12	Gross Weight (A)	Gross weight on scale A during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Tare (A)	Tare on scale A during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Net Weight A	Net weight on scale A during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Tare 1 (A)	Multiple tare P1 on scale A during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Tare 2(A)	Multiple tare P2 on scale A during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
3	Packages 2(A)	Tare P2 Package Number (3 digits)
12	Gross Weight B	Gross weight on scale B during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Tare B	Tare on scale B during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Net Weight B	Net weight on scale B during the weighing operation (9 digits + 1 space + 2 characters per unit of measurement)
12	Tare 1	Multiple tare P1 on scale B during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Tare 2	Multiple tare P2 on scale B during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
3	Packages 2	Tare P2 Package Number (3 digits)
12	Gross Weight C	Gross weight on scale C during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Tare C	Tare on scale C during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Net Weight C	Net weight on scale C during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Tare 1	Multiple tare P1 on scale C during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Tare 2	Multiple tare P2 on scale C during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
3	Packages 2	Tare P2 Package Number (3 digits)
12	Gross Weight D	Gross weight on scale D during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Tare D	Tare on scale D during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Net Weight D	net weight on scale D during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
12	Tare 1	Multiple tare P1 on scale D during the weighing operation (9

		digits +1 space + 2 characters per unit of measurement)
12	Tare 2	Multiple tare P2 on scale D during the weighing operation (9 digits +1 space + 2 characters per unit of measurement)
3	Packages 2	Tare P2 Package Number (3 digits)
20	Result	20 digits
1	CR	0DH

String length: 967 characters.

During the indicator installation it is possible to enable three modes of weight transmission:

1. ***Single***: transmission takes place before printing and the result of transmission (ACK/NACK protocol) has no effect on the weighing operation. However, the relative printout will bear the indication DATA NOT TRANSMITTED.
2. ***Spool***: transmission takes place after printing and only if this operation is completed correctly (ack/nack protocol). If the spool archive is empty, the weighing operation underway (successfully completed) will be transmitted to the PC immediately.If a transmission failure occurs, the string that should have been transmitted will be saved in the special "spool archive". If the spool archive is not empty, the weighing operation underway will be saved in the spool archive and will be queued up with the existing weighing operations. All weighing operations in the spool archive will be thus transmitted to the PC: transmission begins from the oldest strings and ends with the current one. Each string is deleted from the spool archive only after it has been correctly transmitted. A pause between each string transmission may be enabled by setting up the weighing indicator accordingly. The ack/nack protocol is used for transmission of each string saved. The number of strings that can be saved depends on the memory capacity of the weighing indicator.
3. ***Archive***: the weighing operation underway (correctly completed) will be saved in the spool archive and will be queued up with any operations that have already been saved. In order to retrieve all stored weighing cycles from the weighing indicator, the PC must send the character ENQ (05 hexadecimal = CTRL E) to the weighing indicator. Transmission begins from older strings and ends with the latest one. Each string is deleted from the spool archive only after it has been correctly transmitted.

N.B.: The PC must send its enquiry when the weighing indicator is not performing weighing operations. On the contrary, the latter will slow down.

When the PC receives a weighing string, it must transmit the ACK character (06H) if the string has been correctly acquired or the NACK character (15Hex) - or any other character differing from ACK - to the indicator if the string should be transmitted again.

Response from the PC must be sent within the time established during installation; in the event that time runs out and no response is given, the terminal will automatically transmit the string again.

The same string can be transmitted twice at the most, after which transmission will be acknowledged as not accomplished.