#### SCHULER SCIENTIFIC



## **TD Series Balances**

**Innovative Functional Solutions** 

The TD series embodies the synergy between conventional solutions characteristic of high quality balances, and technology intended mainly for professional standards.

The combination provides you with a high-tech instrument offering pinpoint accuracy and maximum ease of operation at a price typical of lesser devices.

- 5" color capacitive touchscreen
- Display customization with widgets
- Multilingual, interactive menu
- Sensors for touch-free operation
- Conformity with GLP and GMP regulations
- Dynamically controlled sample weight (bar graph)
- Statistics, formulas, reports and printouts
- Unlimited communication possibilities
- Alibi memory with record of measurements
- Complex databases
- Maximum comfort of operation

#### Home screen

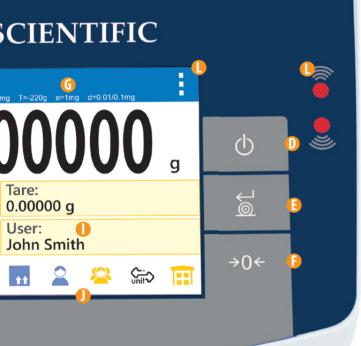
- Home screen button
- B Exit (returning to the previous screen) button
- Contraction Tarring button
- On/Off button
- Enter/Print button
- Zeroing button
- G Status bar (working mode, metrologically important parameters)
- (i) Measurement indication area
- Information desktop
- Quick access toolbar for the direct operation of balance functions and settings
- 🚺 Current working mode setup
- Sensors for touch-free operation



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Max:

d:

SAS-225.TD Analytical Balances

up to 220 g from 0,01 mg Weighing pan: min. ø70 mm



SAS.TD Analytical Balances

Max: d:

up to 310 g from 0.1 mg Weighing pan: min. ø 85 mm



SPS.TD Precision Balances

Max: up to 1000 g d: Weighing pan:

from 1 mg 128×128 mm



SPS.TD Precision Balances

Max: d: Weighing pan:

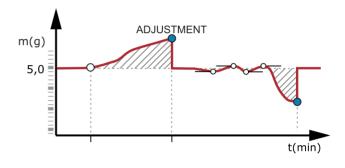
up to 6000 g from 10 mg 195×195 mm

# The TD series as a standard for quality



#### Accuracy of each weighing indication

TD series balances with an automatic adjustment system, using an internal adjustment weight, guarantee reliable measurement. Regardless of ambient conditions, the system provides effective elimination of any balance sensitivity deviations.



#### Accuracy for any temperature

Accuracy is one of the most significant parameters influencing metrological characteristics of the weighing device. The production and control system designed for TD series balances monitors and adjusts for accuracy in changing temperatures. With minimized deviation of results, the TD series series ensures great measurement stability for wide temperature range.

#### Accuracy for any conditions

The multi-shield mechanical design of TD series balances offers effective protection against the influence of ambient conditions. With such design, the TD series stands for the fast and reliable measurement of either light or heavy loads, even when ambient conditions pose challenges.



## Quality begins with precision



The optimization of TD series structural components provides measurements repeatability – the pivotal parameter for several analytical processes.

## Speed operation time optimization



The TD series is a product of both, measuring systems development, and progress when it comes to measuring signals monitoring methodology. With our TD series balances, you are offered solutions that guarantee a full range of settings providing the right sensitivity for measurements performed within seconds.

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### Ambient conditions monitoring

Information on fluctuating ambient conditions is essential in measuring devices characterized by high resolution. For your comfort, TD series balances have been equipped with system that signals the dynamics of temperature changes with a special symbol. This is especially useful while installing your device (acclimatization period), and when the working environment shows its changeable nature.



## Redefined functionality

#### Buttons customization

Customized buttons facilitate the selection of weighing units, packaging, customers, and variable tare values adding to the fast and solid performance of the weighing process. User-designed key, tailored to the user's needs, can be assigned to a particular working mode, boosting your balance's functionality.



## Clear information arrangement even greater ease of operation

Priority for our TD series balances is ease of operation and intuitive communication with the user. Clear information presented by symbols provides even more user-friendly operation.

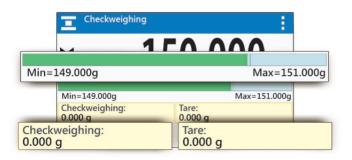
Weighing
Parts counting
Checkweighing
17
Let Dosing
Percent weighing
Density determination
Formulation
III Statistics

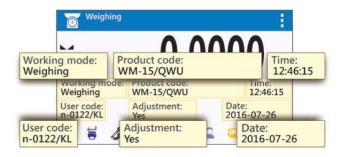
#### Labels design your own onscreen labels

TD series balances feature labels – pre-defined information fields providing various data, e.g. product name, user, date and time or bar graph. Labels names and values are not intended for modification but it is the user who decides which labels are to be displayed.



Text fields and labels feature similar characteristics, but text fields, unlike labels, can be freely created and configured by a user. It is possible to provide each text field with an individual name, function and value. In addition, you can decide on the particular text field size and location.





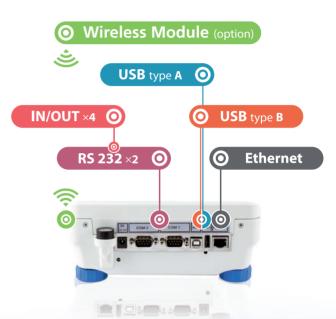
#### Databases ergonomics for your weighing process

The IT structure of TD series balances is based on structural databases. Freely programmed database content favours the creation of a dedicated information network, wherein the network precisely suits the nature of any performed process.

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## Communication interfaces

With various means of communication, the possibilities of TD series balances are even more enhanced when it comes to information storage. Standard cable connections are realized via USB-A and USB-B or RS 232 ports. As for wireless connection, Wireless Module networking technology is used by any SCHULER-manufactured software.



Databases comprise the following components:

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- 100 users
- 100 packaging types
- 100 warehouses
- 100 formulas
- 200 formula reports
- 500 density reports
- 1 000 customers
- 5 000 products
- 50 000 weighings
- 500 000 ALIBI records

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## Data safety and monitoring

#### Protecting data user authorization levels

Three different authorization levels provide restricted access to confidential information for particular groups of users. An dministrator manages authorization levels.



## Data archiving and exchange

The USB interface facilitates the transfer of reports on processes and partial weighing to peripheral devices. This is especially useful for archiving and monitoring purposes. In addition, the USB interface allows copying of input databases.

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#### ALIBI memory secure storage of measurements

ALIBI memory offers effective data protection, and it allows 500 000 weighings. This guarantees safety and continuity of your vital data stored over long period of time.



Option of exporting data from ALIBI memory to your balance.

## Reports and printouts

## Customized reports

TD series balances offer reports comprising three customized sections. As a user you have the green light for the free modification of each section content.

Weigh	ing
Date	2016.07.19
Time	14:48:50
Balance type	SAS-225.TD
Balance ID	2035
Product	PILL
User	Tom Smith
Net weight	0.8020 g
Tare	0.500 g
Gross weight	1.3020 g
Calibration	Report
Calibration type	Internal
User	Tom Smith
Project	124/SGW/2016
Date	2016.07.19
Time	12:56:10
Balance ID	1035
Calibration differe	nce 0.000 g
Signature	

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All TD series balances cooperate with computer printers supporting PCL standard. Communication between the devices is established via USB or RS 232 interface.

Sample report divided into three configurable sections: header, GLP printout and footer.



# Technical specification



**SAS-225.TD** 

**Analytical Balances** 



SAS.TD

**Analytical Balances** 



SPS.TD

**Precision Balances** 



	Analy tiour Bulanooo	,,		
Max capacity [Max]	82 g - 220 g	220 g - 310 g	360 g - 1000 g	4500 g - 6000 g
Readability [d]	0.01 mg - 0.1 mg	0.1 mg	1 mg	10 mg
Weighing pan size	min. ø70 mm	min. ø 85 mm	128×128 mm	195×195 mm
Stabilization time	3.5 s - 6 s	3.5 s	2 s	1.5 s
Adjustment	internal (automatic)	internal (automatic)	internal (automatic)	internal (automatic)
Display	5" color capacitive touchscreen			
Interfaces	2 × RS 232,	USB A, USB B, Ethernet, 4	× IN, 4 × OUT, Wireless Mod	lule

#### **Optional equipment**

- Barcode readers,
- PCL printers,
- USB keyboard,
- Under-pan weighing rack,
- Anti-vibration tables,
- Draft shield,
- Density determination kit for solids and liquids.

Optional equipment accessibility is conditioned by a particular model.

#### Features:



Wide operating temperature range

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Interfaces: 2×RS232, Ethernet, USB-A, USB-B, 4×IN, 4×OUT, Wireless Module\*

\*option

Databases



Sensors for touch-free operation

Ambient

conditions

monitoring



 Date
 2010/07/19

 Time
 14:48:50

 Balance type
 SAS-225.TD

 Balance ID
 2035

 Product
 PILL

 User
 Tom Smith

 Net weight
 0.8020 g

Customized reports and printouts



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000 000	Parts counting
CO OK HI	Checkweighing
Ċ	Dosing
Ł	Formulation
%iİ	Percent weighing
	Statistics
<u>(</u>	Animal weighing
	Peak hold
J	Density Determination
GLP	GLP Procedures
	Under-pan weighing
	Autotest
<u>_</u>	Infrared sensors
	Ambient conditions monitoring
<b>N</b> +	Newton unit measurements
	Units
	ALIBI memory
	Cooperation with titrators

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