

Legend



Electromagnetic Force Restoration. Coil in a permanent magnet for the the most accurate weighings



High Resolution Load Cell. Strain gauge measure the deformation as change in electrical resistance



RS232 Data Interface. To connect the balance to printer, PC, peripheral devices.



Measuring Units. Select the measuring unit that balance will use to display weight



Piececounting. Function to count identical items, reference quantities are selectable.



Checkweighing. Upper and lower limits can be set individually, for dosing and portioning.



Percentual Weighing. Function calculates the variation of a sample from reference value (100%)



Totalization Function. Measures cumulative weight of multiple items. Shows total and current weight



Animal Weighing. Accurate readings under unstable conditions such moving laboratory animals.



Density Determination. This function accurately determines density of a solid object or a liquid



Max Load (Peak hold). This function retains the peak value in a series of consecutive weights



Glp Setup. Allows storing identification data of balance, project and user. Date and Time



Date & Time. Balance shows current date and time



Multi Language. Several languages can be selected from the menu of the balance



Formulation. Allows setting recipes with name and tolerances for each ingredient. Automatic reproportioning



Suspended Weighing. A support with hook can be loaded on the underside of the balance



Initial verification. According to 2014/31/EU available for balance with EC/(OIML) Type approval



Accumulator. Balance has internal accumulator or can be used with optional external accumulator



Battery Operating. Balance can work using AA batteries



Statistics Function. Shows Min, Max, Sum, Average, Standard deviation



Gross-Net-Tare. Function shows simultaneously gross, net weight and tare.



Database. Internal database to store data and drying methods



Textile Function. Determines the title of a thread, measuring units: Tex, Td, Nm, Nc.



Drying Modes: different temperature profiles are available for drying process



Infrared Sensors. Touchless, to call TARE or PRINT functions without touching the balance



Touchscreen Display. 5 inch resistive display, user friendly, easy to use and intuitive.



LCD Display. Standard 8 digit LCD display with backlight



Graphic Display Text/graphical LCD dot matrix display with backlight.



Ioniser. Integrated ioniser on the back of the balances



Bluetooth. It is possible to connect bluetooth devices



USB interface. It is possible to connect a usb pendrive



Graph. Real time drying process graph visualization



Password. User profile can be password protected



Memory. It is possible to store up to 5 different drying programs

OPTIKA quick finder

Resolution	Weighing Range	Family Name	Page	M Verification	Internal Calibration	External Calibration	Windshield
0,01mg	62g...220g	TS - TSI	8-9		■		■
0,01mg	62g...220g	SM	14		■		■
0,01mg	62g...220g	SMG	15		■		■
0,1mg	220g...610g	TS - TSI	10-11		■		■
0,1mg	410g...610g	A	16		■		■
0,1mg	410g...610g	AG	17		■		■
0,1mg	120g...310g	B	18	□	□	■	■
0,1mg	120g...310g	BG	19	□	□	■	■
0,001g	310g...2100g	TS	12-13		■	■	□
0,001g	520g...1200g	C	20	□	□	■	□
0,001g	520g...2100g	CH	21	□	□	■	■
0,001g	520g...1200g	CG	22	□	□	■	□
0,001g	520g...2100g	CGH	23	□	□	■	■
0,001g	210g...420g	E	26		□	■	□
0,001g	210g...420g	EG	28		□	■	□
0,001g	210g...420g	EH	27		□	■	■
0,001g	210g...420g	EGH	29		□	■	■
0,001g	210g...420g	H	34			■	■
0,001ct / 0,001g - 0,01g	330g...4200g	JW	42		▲	■	▲
0,01g	3100g...6200g	TS	12-13		■	■	
0,01g	4200g...6200g	D	24	□	□	■	
0,01g	4200g...6200g	DG	25	□	□	■	
0,01g	1000g...5200g	F	30	□	□	■	
0,01g	1000g...5200g	FG	31	□	□	■	
0,01g	620g...4200g	I	35			■	
0,01g	200g...420g	M	37			■	
0,01g/0,1g	3200g...10000g	TS	12-13			■	
0,1g	4500g...10000g	G	32			■	
0,1g	4500g...10000g	GG	33			■	
0,1g	3200g...6500g	L	36			■	
0,1g	420g...2200g	M	37			■	
0,01g-0,1g-1g	6200g...32000g	TS-HC - HCG - HC	38-39-40			■	

Moisture Balances

Resolution	Weighing Range	Family Name	Page	Thermometer Calibration	Halogen Infrared Lamp
0,0001mg	60g	TG	41-42	□	■
0,0001mg	60g	T GRAPHIC	43-44	□	■
0,001g	200g	TG	38-39	□	■
0,001g	160g/200g	T GRAPHIC	43-44	□	■
0,01g	60g	T GRAPHIC	43-44	□	■

(■ = Standard □ = Optional ▲ = Only For Some Models)

OPTIKA quick finder

Lcd Display	Graphic Display	Touch Screen display	Integrated Ioniser	Rs232	Units	Glp	Multi Language	Hook	Power Bank
		■	▲	■	■	■	■		
■			▲	■	■				
	■		▲	■	■	■	■		
		■	▲	■	■	■	■		
■			▲	■	■				
	■		▲	■	■	■	■		
■			▲	■	■				
	■		▲	■	■	■	■		
		■		■	■	■	■	▲	
■				■	■			▲	
■				■	■			■	
	■			■	■	■	■	■	
	■			■	■	■	■	■	
■				■	■			▲	□
	■			■	■	■	■	▲	□
■				■	■			▲	□
	■			■	■	■	■	▲	□
■				■	■				□
■				■	■			■	
		■		■	■	■	■	□	
■				■	■			■	
	■			■	■	■	■	■	
■				■	■			▲	□
	■			■	■	■	■	▲	□
■				■	■			■	□
■					■				□
■				■	■				□
■				■	■			■	□
	■			■	■	■	■	■	□
■				■	■			■	□
■					■				□
▲	▲	▲		■	■	▲	▲	■	□

Graphic Display	Touch Screen Display	Rs232	Units	Glp	Multi Language	Internal Database, Save results	Password protection
	■	■	■	■	■	■	■
■		■	■	■	■		
	■	■	■	■	■	■	■
■		■	■	■	■		
■		■	■	■	■		



TS semi-micro balances are the top level, most innovative and advanced series by OPTIKA. Equipped with large 5" color touch screen display, it gives an user-friendly access to all the balance's advanced applications and internal databases. The user has easy and intuitive access to all the functions thanks to the icon-driven menus. This means more efficiency, productivity and interactivity. The TSI models are equipped with an integrated ioniser on the back of the balance with the purpose to neutralize static electricity on charged samples like plastic parts, containers or films for acquiring the most accurate results. A double case structure protects the heart of the balance: an aluminum inner case and a composite plastic external case. The many on-board functions already included, up to 6 operating languages, the large 5" inch display and the RS232 serial output close the circle of a complete product, reliable and truly convenient.



Features

- Electromagnetic force restoration weighing system
- Highly integrated weighing cell
- Automatic internal calibration
- 5" Touch-screen Display 800x480
- RS232 serial interface
- Selectable Measuring units
- Internal Database
- GLP
- Multi Languages (EN-DE-FR-IT-SP-PT)
- Multi-user with password protection
- USB port for import/export database data
- Advanced piececounting function with Statistics report
- Textile function to measure fibers with Statistics report
- Advanced Density function, with density index (DI) calculation
- Formulation (Recipe)
- Checkweighing
- Percentual weighing
- Weights adding
- Animal weighing
- Max load determination (Peak hold)
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed.

Automatic Internal Calibration

Model	Capacity (g)	Resolution (mg)	Pan (mm)	Repeatability (mg)	Linearity (mg)	Response time (sec.)
TS-SM625i	62	0,01	Ø 80	0,02	± 0,05	≤ 6
TSI-SM625i	62	0,01	Ø 80	0,02	± 0,08	≤ 6
TS-SM105i	102	0,01	Ø 80	0,05	± 0,08	≤ 6
TSI-SM105i	102	0,01	Ø 80	0,05	± 0,08	≤ 6
TS-SM1265Di	62/120	0,01/0,1	Ø 80	0,03 / 0,1	± 0,08 / ± 0,2	≤ 6
TSI-SM1265Di	62/120	0,01/0,1	Ø 80	0,03 / 0,1	± 0,08 / ± 0,2	≤ 6
TS-SM2285Di	82/220	0,01/0,1	Ø 80	0,05 / 0,1	± 0,1/ ± 0,2	≤ 6
TSI-SM2285Di	82/220	0,01/0,1	Ø 80	0,05 / 0,1	± 0,1/ ± 0,2	≤ 6
TS-SM22105Di	102/220	0,01/0,1	Ø 80	0,05 / 0,1	± 0,1/ ± 0,2	≤ 6
TSI-SM22105Di	102/220	0,01/0,1	Ø 80	0,05 / 0,1	± 0,1/ ± 0,2	≤ 6



TSI models equipped with integrated ioniser on the back of the balance. The ioniser has two way of operating: 2 minutes or continuously for max 8 hours.

Balance technical data

- Span drift (+ 10...+ 30 °C): +/- 2ppm/°C
- Dimensions LxWxH (mm): 345x215x345
- Weighing chamber dimensions LxWxH (mm): 162x171x225
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA
- Net Weight: 6,7 Kg
- Net Weight -ION models: 7,2 Kg

Ioniser technical data

- Operation modes: 2 minutes or continuously for max 8 hours
- Ozone concentration: 0-0.05 ppm (2cm from ion source)
- Distance sample-ion source: about 5-40 cm
- Discharge time: 9s/5cm, 13s/10cm
- Ambient conditions: 0-50°C, 20-80% air humidity (non-condensing)
- Ioniser Power supply: IN AC 100-240V 50/60Hz, OUT DC 12V, 500mA

Accessories

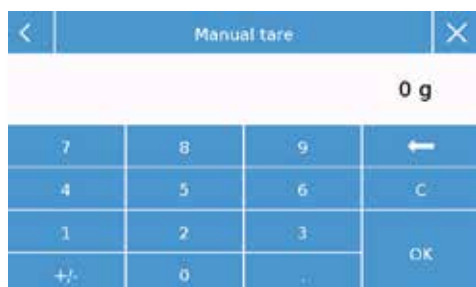
- Portable ioniser Ion-A15 (CNS0371)
- Serial Printer TLP-50, with date/time (CNS054)
- Serial Printer DPP-250 (CNS007)
- Density KIT for solids and liquids (CNS002)
- Serial to USB converter (CNS1002)
- Serial cable for serial output to printer or PC (CNS743)
- Stylus pen for touchscreen (CNS021)
- Factory Calibration certificate (CNS0333)



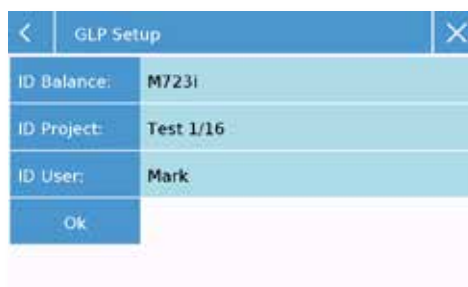
Main functions page for easy working



Live color indication for check weighing



Manual tare input



Clear and easy input for GLP function