



# **LABORATORY ELECTRONIC BALANCES**

# 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 simultaneousily 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



The OPTIKA series of SemiMicro SM balances is equipped with the new highly integrated electromagnetic cell, with automatic internal calibration on all models, they are characterized by a high level of precision and repeatability.

As in the tradition of OPTIKA products, SemiMicro SM balances deliver an excellent performance/price ratio.

#### I-Model



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

## Features

- Electromagnetic force restoration weighing system
- Highly integrated weighing cell
- Automatic internal calibration
- Efficient filtering to deliver quick and accurate results
- LCD with backlight with adjustable contrast
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed
- Plastic protection cover for keypad

# **Balance Technical data**

- Span drift (+ 10...+ 30 °C): +/- 2ppm/°C
- Dimensions LxWxH (mm): 345x215x345
- Weighing chamber dimensions LxWxH (mm): 162x171x225
- Dimensions of external electronics box LxWxH: 175x105x50 (mm), weight 500g
- Power supply 110-230Vac, 50/60Hz; output 24V 500mA 13VA
- Net Weight: 7Kg

#### **Internal Calibration**

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

### **Accessories**

- 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)
- Calibration certificate (CNS0333)