

EXECUTIVE **Precisa 360 ES**



Semi-micro

Analytical

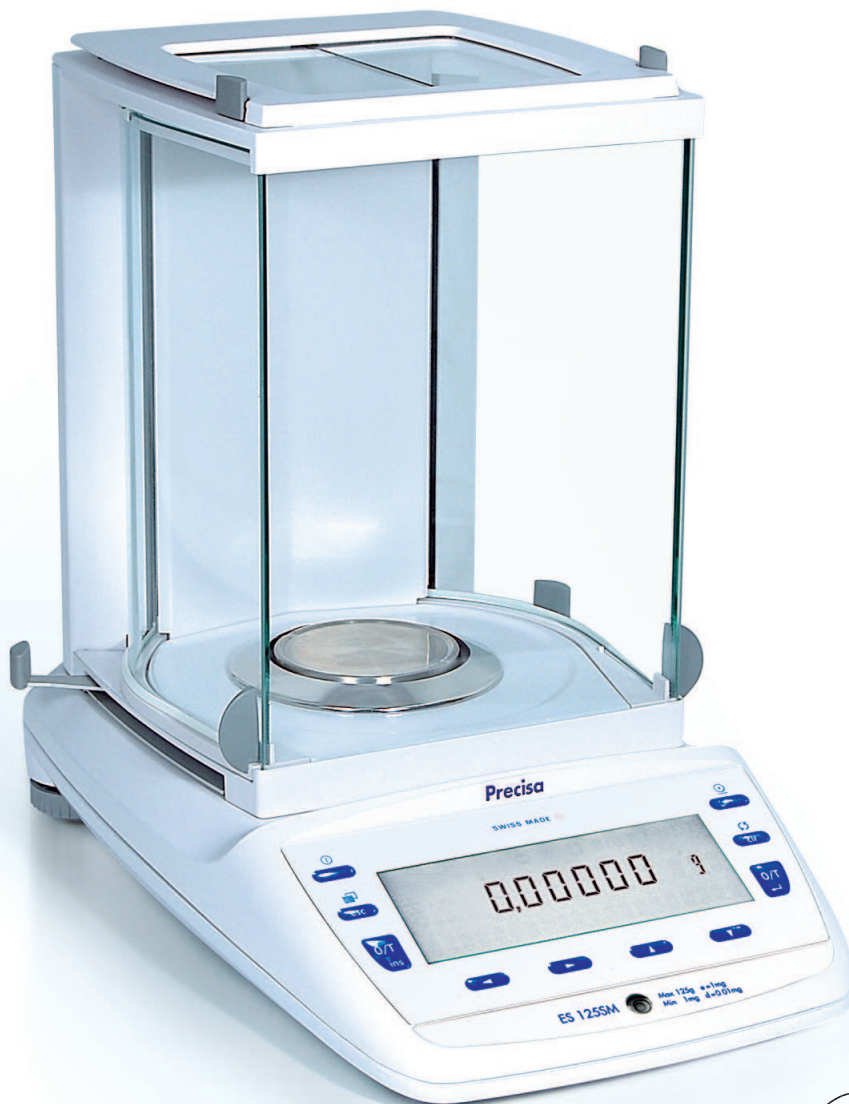
Precision

Precisa

■ The Balance of Quality ■

EXECUTIVE

Precisa 360 ES

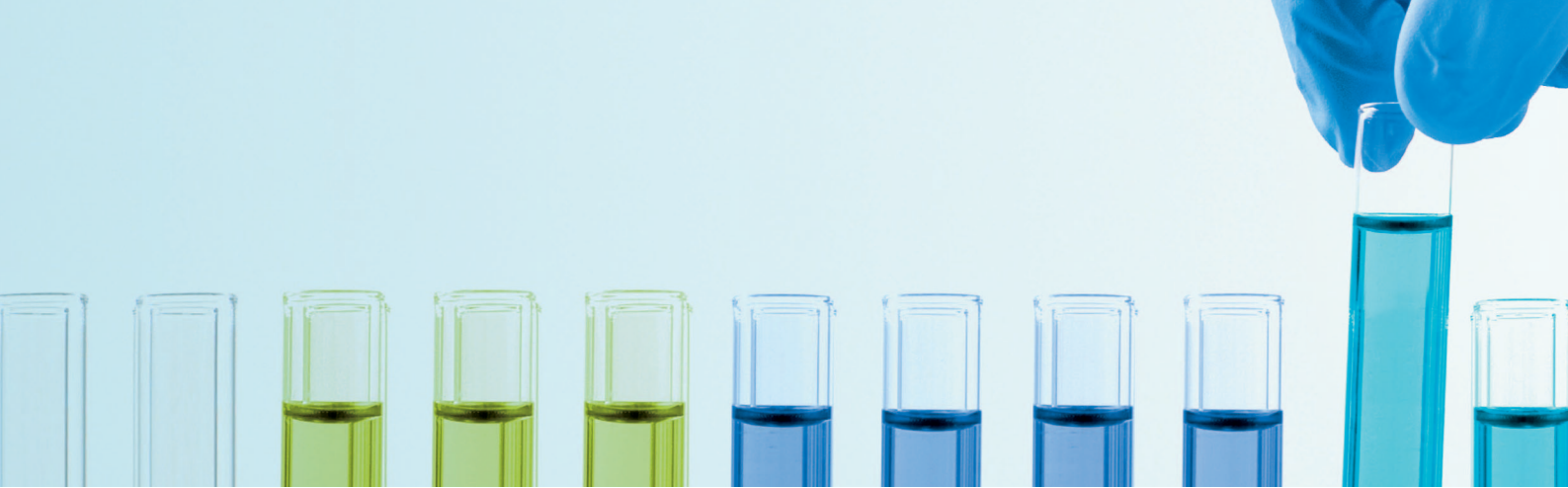


With the 360 series, Precisa is setting new standards in the demanding area of high-end laboratory balances: innovative, high-tech instrumentation which includes the latest technical developments, unique performance features, best user-interface and the most modern design to establish the 360 series as the very bench-mark for modern laboratory technology. Those users who will not accept any compromise in their working environment may enjoy the reassuring certainty that for many years they can rely on an extremely accurate laboratory instrument which features the latest technology and renowned Swiss Quality. Day after day.



Paolo Fancelli, Designer

Paolo Fancelli



Compactly styled design



Designed along smooth, flowing lines



Easy-to-read display

Impressive design

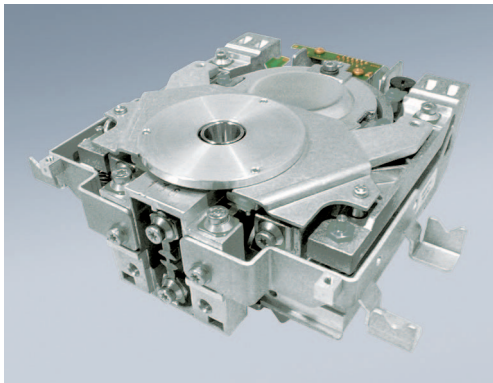
The modern, slim design by designer Paolo Fancelli gives our compact, integrated technology an impressive form and positions the new series visually in a class of its own.

High Precision technology

The 360 series owes its extremely high reliability and durability to the well-known competence of Precisa's engineering and development and, as a result, exceeds all established industry standards. The weighing cell is of the highest mechanical quality, operates extremely precisely; it can also be repaired easily and economically. In addition, our fully automatic, programmable time and temperature controlled calibration system ensures absolute accuracy. Previous calibration information is stored and can be printed upon demand. Adjustable environmental settings provide superior performance in difficult production environments or unstable laboratory conditions.

Expanded weighing range

Precisa balances distinguish themselves through their high weighing ranges, as yet unsurpassed in the market. Milligram resolution balances with weighing ranges of over one kilogram, or balances with a weighing range of eight kilograms and a readability of one hundredth of a gram.



Pure Swiss precision at the heart of the balance



Menu-driven, screen-guided applications



Advanced, multipurpose connectivity

Life-long reliability

The balances offer a high degree of protection against mechanical and electrical interference and operate with highest levels of precision from the initial weigh-in procedure through to the final result. The premium workmanship of our robust die-cast aluminium housing and chemically-resistant sealed keypad offers protection against spills, makes ES balances amazingly resistant to the ambient conditions of the surrounding environment. Day after day.

Outstanding operating simplicity

Bright, high-contrast liquid crystal display with backlight, structured access to the menu with short text prompts offer an outstanding operating simplicity. The useful Language Tool makes it easy for the user to load his or her own language and characters onto the balance display.

Advanced functionality

A wide variety of specific applications is easily selectable and guarantees the highest degree of functionality. As the result, the 360 ES series provides an extremely broad spectrum of applications for almost any lab weighing demand. Among others are Minimum weight application, advanced Pipette calibration, Buoyancy correction etc.

Multipurpose connectivity

Standard USB and RS232 interfaces for fast and convenient connection to a desktop computer and Printer.



Options	360 ES
Protection IP65: protection against ingress of dust and low-pressure water jets, fitted at factory, not available for all types	on demand

Additional Application & Features
SmartBox® Applications, Precisa BUS accessories and further special accessories and options on demand

Accessories	360 ES
Draft shield 320 XB, height 260 mm, requires adapter for 1mg, 0.01g, 0.1g and 1g balances*	350-8519
Draft shield 320 XB, height 180 mm, requires adapter for 1mg, 0.01g, 0.1g and 1g balances*	350-8518
*adapter for 1mg, 0.01g, 0.1g and 1g balances	350-7402
Draft shield mg, glass with cover	320-8504
Hook for weighing below the balance	350-8527
Density kit for 0.01mg and 0.1mg balances Container size Ø= 75 mm, h= 100mm	350-8515
Density kit for solids only (w/o Glass body and Hook) for 0.01mg and 0.1mg balances Container size Ø= 75 mm, h= 100mm	350-8556
Glass body 10ccm for density determination of liquids	350-7054
Downholder for samples with density < 1 g/cm ³	350-7194
Evaporation trap for pipette calibration complete for 0.01mg and 0.1mg balances	350-8581
Adapter to assemble Eppendorf Humidity Trap for 0.01mg and 0.1mg balances	350-8596
Animal weighing bowl complete for 0.01g balances	350-8550
Animal weighing bowl complete for 0.1g and 1g balances	350-8551
Diamond weighing pan	350-8322
Dust cover 360 for the whole balance, set of 20 pieces	350-8663
Anti-theft device	350-8555
Printer CBM910 230V - with cable and paper roll	350-8379
Printer CBM910 115V - with cable and paper roll	350-8380
Paper roll for Printer CMB910	350-8366
Ribbon for Printer CBM910	350-8367
Data cable DB9 Male / DB9 Female 1.5m (PC)	350-8672
Data cable DB9 Male / DB25 Male 1.5m (Printer)	350-8673
Cable for balance 360 used as reference balance	350-8661
External USV accu power pack for continuous operation	350-8662
Power supply / Adapter with Euro plug for balances with IP65 protection (80V - 240V)	350-8372

Features and Applications



Swiss made.



Support IQ/OQ/PQ



Counting program



Recorder



LCD backlit (no backlit for 0,01 mg balances)



Anti theft protection - password and mechanical



Animal Weighing



Minimum Sample Weight



Fully automatic internal calibration system SCS



Direct tare entry (manual), direct reference weight entry



Density determination



Automatic Repeatability Test



Easy alpha-numeric input



Clock (Printout GLP/GMP, Auto-Cal etc.)



Check weighing plus/minus



Multi-level-backweighing



Interface RS232 for PC printer



Below balance weighing



Net total application
Add-up summation
Dosage program



Buoyancy Error
Suppression Technology



USB Device



Units g, mg, oz, lb, tael, etc.



Free conversion
Area conversion
(paper program)



Pipette calibration
and evaporation trap



% weighing

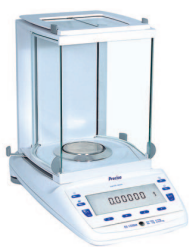


Statistics



Dynamic Difference Weighing

Precisa ES Series: Technical Specifications

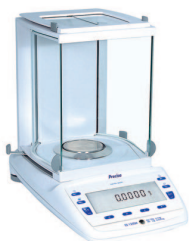


Semi-micro Balances 0.01 mg

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm/inch)	Response time
ES 125SM	125 g	0.01 mg	0.03 mg	0.06 mg	Ø 80/3.1	10 s
ES 225SM-DR	102 g / 225 g	0.01 mg / 0.1 mg	0.03 / 0.1 mg	0.06 / 0.2 mg	Ø 80/3.1	10 / 3 s

Dimensions (WxLxH) 240x360x345 mm
Draft shield inside dimensions (WxLxH) 170x170x230 mm

Net weight 6.6 kg
Sensitivity drift (10...30°C) 1.5 ppm / °C



Analytical Balances 0.1 mg

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm/inch)	Response time
ES 120A	120 g	0.1 mg	0.1 mg	0.2 mg	Ø 80/3.1	3 s
ES 220A	220 g	0.1 mg	0.1 mg	0.2 mg	Ø 80/3.1	3 s
ES 320A	320 g	0.1 mg	0.15 mg	0.3 mg	Ø 80/3.1	3 s
ES 420A	420 g	0.1 mg	0.15 mg	0.4 mg	Ø 80/3.1	3 s
ES 520A	520 g	0.1 mg	0.15 mg	0.4 mg	Ø 80/3.1	4 s
ES 420A-FR	120 g - 420 g	0.1 mg - 1 mg	0.15 / 1 mg	0.3 / 1 mg	Ø 80/3.1	3 s

Dimensions (WxLxH) 240x360x345 mm
Draft shield inside dimensions (WxLxH) 170x170x230 mm

Net weight 6.6 kg
Sensitivity drift (10...30°C) 1.5 ppm / °C



Precision Balances 1 mg

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Response time
ES 320M	320 g	1 mg	1 mg	1.5 mg	135 x 135	3 s
ES 620M	620 g	1 mg	1 mg	1.5 mg	135 x 135	3 s
ES 920M	920 g	1 mg	1 mg	1.5 mg	135 x 135	3 s
ES 1220M	1220 g	1 mg	1 mg	2 mg	135 x 135	3 s
ES 2220M	2220 g	1 mg	1 mg	2 mg	135 x 135	4 s
ES 620M-FR	120 g - 620 g	1 mg - 10 mg	1 mg / 0.01g	1.5 mg / 0.01g	135 x 135	3 / 2 s
ES 1220M-FR	240 g - 1220 g	1 mg - 10 mg	1 mg / 0.01g	1.5 mg / 0.01g	135 x 135	4 / 3 s

Dimensions (WxLxH) 240x360x150 mm
Draft shield inside dimensions (WxLxH) 170x170x35 mm

Net weight 5.5 to 5.7 kg
Sensitivity drift (10...30°C) 2.0 ppm / °C



Precision Balances 0.01 g

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Response time
ES 1200C	1200 g	0.01 g	0.01 g	10mg	200 x 200	2 s
ES 2200C	2200 g	0.01 g	0.01 g	15mg	200 x 200	2 s
ES 4200C	4200 g	0.01 g	0.01 g	15mg	200 x 200	3 s
ES 6200C	6200 g	0.01 g	0.01 g	15mg	200 x 200	3 s
ES 8200C	8200 g	0.01 g	0.01 g	15mg	200 x 200	3 s
ES 6200C-FR	2200 g - 6200 g	0.01 g - 0.1 g	0.01 g / 0.1 g	15mg / 0.1g	200 x 200	3 s
ES 8200C-DR	3200 g / 8200 g	0.01 g / 0.1 g	0.01 g / 0.1 g	15mg / 0.1g	200 x 200	3 s

Dimensions (WxLxH) 240x360x91 mm
No draft shield

Net weight 5.1 to 5.6 kg
Sensitivity drift (10...30°C) 2.0 ppm / °C



Precision Balances 0.1 - 1 g

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Response time
ES 6200D	6200 g	0.1 g	0.05 g	0.1g	200 x 200	2 s
ES 8200D	8200 g	0.1 g	0.1 g	0.15g	200 x 200	2 s
ES 12200D	12200 g	0.1 g	0.5 g	0.15g	200 x 200	2 s
ES 12200G	12200 g	1 g	0.5 g	1 g	200 x 200	2 s

Dimensions (WxLxH) 240x360x91 mm
No draft shield

Net weight 5.6 kg
Sensitivity drift (10...30°C) 2.0 ppm / °C

Common Specifications

Floating display	Temperature range	Line voltage, Tolerance	Stability settings	Power consumption	Frequency
adjustable	0 .. 40 °C	115V / 230V, +15% / - 20%	adjustable	12 VA	50 - 60 Hz