Series 320 XB^{BB}

Analytical   **Precision**

Precisa
THE BALANCE OF QUALITY

Series 320 XB^{BB}
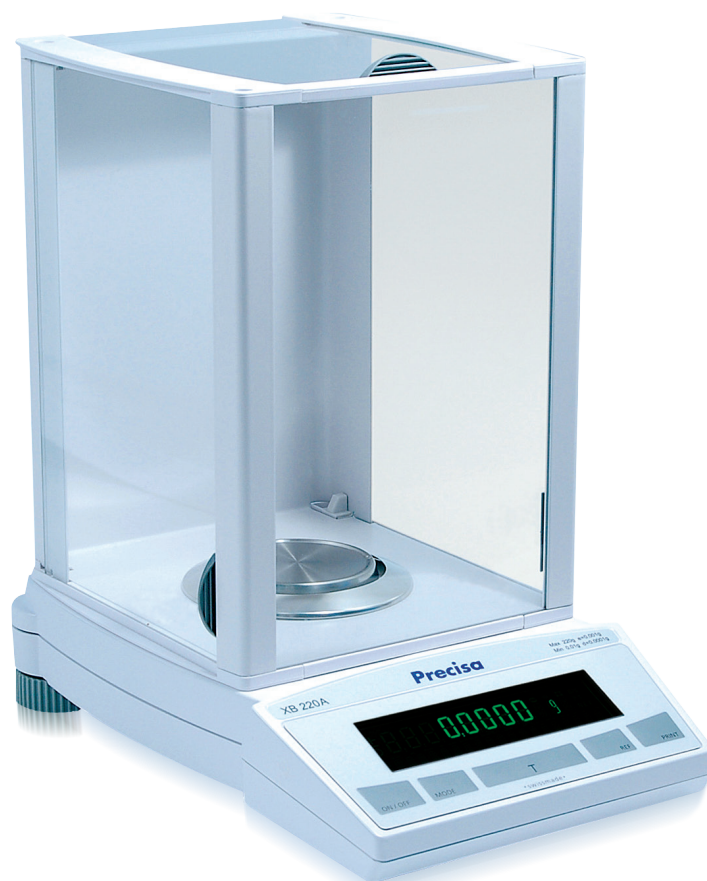
The Precisa 320 high performance series combines precision and quality, and offers the highest metrological performance and advanced integrated features.
The bright vacuum fluorescent display, generously sized weighing pan, easy-operation draft shield, plus all the standard integrated weighing programmes, combine to make the 320 XB^{BB} series a high performance versatile precision balance.
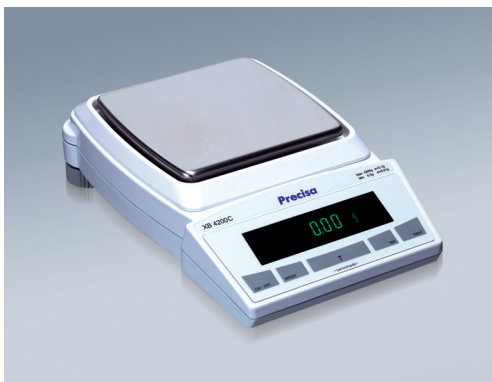
Compact design
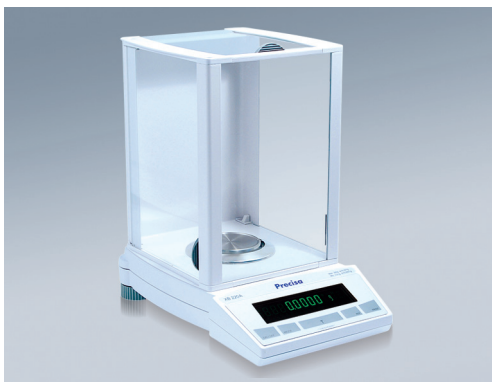
Easy operation draft shield

High-contrast vacuum fluorescent display

High Precision technology

The 320 XB^{BB} series owes its high reliability and durability to the well-known competence of Precisa's engineering and development.

The weighing cell is of the highest mechanical quality, operates extremely precisely; it can also be easily and economically repaired.

Adjustable environmental settings provide superior performance in difficult production environments or unstable laboratory conditions.

Easy operation draft shield

The 320 XB^{BB} series analytical draft shield is designed for easy operation combined with outstanding performance meeting rigid metrological requirements.

## Maximum user friendliness

The 5-button keyboard enables the user to organize and structure the various weighing programmes & weight unit options and to optimize the features offered by the Precisa 320 XB^{BB} series balance.

Vacuum fluorescent display

The bright fluorescent display is attractive and easy to view. Application programme prompts and information are shown on the display as required.
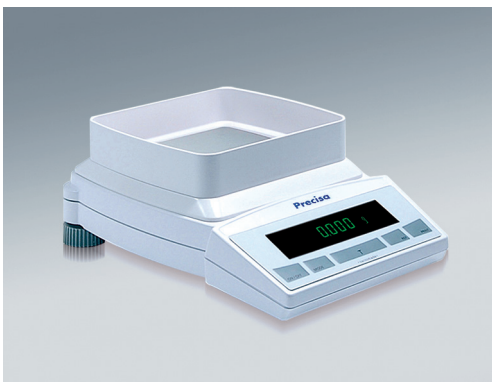
Basic draft shield for mg balances included

IP65 industrial protection as an option

Various accessories for the simultaneous connection

Life-long reliability

The balances offer a high degree of protection against mechanical and electrical interference and operate with highest levels of precision.

The premium workmanship of our robust die-cast aluminium housing and chemically-resistant sealed keypad offers protection against spills and resistance to the ambient conditions of the surrounding environment. Day after day.

IP65

The 320 XB^{BB} series is available with IP65 industrial protection as an option. IP65 protects against ingress of dust and water splashes.

State-of-the-art data management

The Precisa 320 XB^{BB} series balance is equipped with todays standard weighing applications. All weighing and other information can be captured for further data processing via the built-in interface (RS232).

SmartBox®

The SmartBox® offers extended applications in such areas as advanced parts-counting, check-weighing finished goods in the production process, establishing under or over filling, defining filling capacities and much more.

Bus connections

The following can be connected and used simultaneously:
• Bar-code reader for product identification
• Additional display (free-standing, attached or wall-ounted)
• SmartBox with alpha-numerical data input
• Input/output box with 8 relays and 4 input contacts
• Additional interface 20 mA current loop
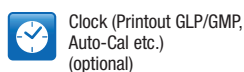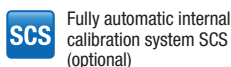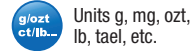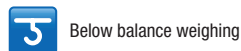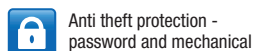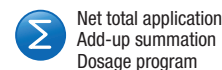• Analogue data output

Options	320 XB^BB
Protection IP65: protection against ingress of dust and low-pressure water jets, fitted at factory, not available for all types	350-8649
SCS: Self Calibration System with clock, automatic on temperature change and real-time programmable	available
Clock	350-8532

BUS Accessories	320 XB^BB
Remote / secondary display free-standing with cable 1.5 m	350-8504
Remote / secondary display mounted to the balance	350-8505
Remote / secondary display mounted to the wall with cable 3 m	350-8516
Interface 20mA current loop passive	350-8526
Interface RS232 for data transmission: - to PC, Printer or Barcode-Printer - from Barcode Reader (350-8856) or Reference-Balance	350-8506
Analog output -10V... +10V (Resolution 10mV)	350-8508
Ethernet Interface, Wired	350-8573
Ethernet Interface, Wireless	350-8588
Signal Lamp, indicator with 3 lamps, green / red / yellow	350-8510
Horn for Signal Lamp	350-8533
Input / Output module with 6 TTL Inputs / 8 Relay Outputs	350-8509
CCE-Bar code scanner BCS5040 with push button and plug to be connected to the Interface RS232 350-8506 (Connector DB25)	350-8856

SmartBox® Applications	320 XB^BB
SmartBox® Counting	350-8511-011
SmartBox® Finished Goods Packing Control, FPVO	350-8511-012
CCE-Bar code scanner BCS5040 with push button and plug to be connected to the SmartBox® (Connector RJ45)	350-8531

Accessories	320 XB^BB
Draft shield 320 XB, height 180 mm	350-8518
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/cm3	350-7194
Animal weighing bowl complete for 0.01g	350-8550
Animal weighing bowl complete for 0.1 g and 1 g balances	350-8551
Diamond weighing pan	350-8322
Printer CBM910 230V - with cable and paper roll	350-8363
Printer CBM910 115V - with cable and paper roll	350-8370
Paper roll for Printer CMB910	350-8366
Ribbon for Printer CBM910	350-8367
Data cable RJ45 / DB9 Female 1.5 m (PC)	350-8557
Data cable RJ45 / DB25 Male 1.5 m (Printer)	350-8559
Cable for balance 320 used as reference balance	350-8534
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
Dust cover 320 over display, set of 20 pieces	350-8590
Dust cover 320 for the whole balance, set of 20 pieces	350-8589
Night cover 320 for balance without draft shield	350-4097
Night cover 320 for balance with draft shield	350-4107
Anti-theft device	350-8555
Night cover 320 for balance with draft shield	350-4107

Features and Applications

TEC Swiss Technology

IQ OQ PQ Support IQ/OQ/PQ

232 Interface RS232 for PC printer

% % weighing

Σ Net total application Add-up summation Dosage program

VFD Vacuum Fluorescent Display

Anti theft protection - password and mechanical

Below balance weighing

g/ozt ct/lb... Units g, mg, ozt, lb, tael, etc.

Animal Weighing

SCS Fully automatic internal calibration system SCS (optional)

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

ACW Calibration Warning System

Counting program

Density determination

Precisa XB^{BB} Series: Technical Specifications

Analytical Balances 0.1 mg

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Response time
XB^{BB} 120A	120 g	0.1 mg	0.1 mg	0.2 mg	Ø 80 x 3.1	4 s
XB^{BB} 220A	220 g	0.1 mg	0.1 mg	0.2 mg	Ø 80 x 3.1	4 s

Dimensions (WxLxH) 210x340x345 mm
Draft shield inside dimensions (WxLxH) 170x170x230 mm
Net weight 5.9 kg
Sensitivity drift (10...30°C) 2 ppm / °C

Precision Balances 1 mg

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Response time
XB^{BB} 160M	320 g	1 mg	1 mg	1.5 mg	135 x 135	3 s
XB^{BB} 320M	320 g	1 mg	1 mg	1.5 mg	135 x 135	3 s
XB^{BB} 620M	620 g	1 mg	1 mg	1.5 mg	135 x 135	3 s
XB^{BB} 1220M	1 220 g	1 mg	1 mg	2 mg	135 x 135	4 s

Dimensions (WxLxH) 210x340x124 mm
Draft shield inside dimensions (WxLxH) 170x170x35 mm
Net weight from 5.1 till 5.5 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
XB^{BB} 320C	320 g	0.01 g	5 mg	0.01 g	170 x 170	2 s
XB^{BB} 620C	620 g	0.01 g	5 mg	0.01 g	170 x 170	2 s
XB^{BB} 1200C	1 200 g	0.01 g	0.01 g	10 mg	170 x 170	2 s
XB^{BB} 2200C	2 200 g	0.01 g	0.01 g	15 mg	170 x 170	2 s
XB^{BB} 3200C	3 200 g	0.01 g	0.01 g	15 mg	170 x 170	3 s
XB^{BB} 4200C	4 200 g	0.01 g	0.01 g	15 mg	170 x 170	3 s
XB^{BB} 6200C	6 200 g	0.01 g	0.01 g	15 mg	170 x 170	3 s

Dimensions (WxLxH) 210x340x91 mm
No draft shield
Net weight 4.5 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
XB^{BB} 3200D	3 200 g	0.1 g	0.05 g	0.1 g	200 x 200	2 s
XB^{BB} 6200D	6 200 g	0.1 g	0.05 g	0.1 g	200 x 200	2 s
XB^{BB} 10200D	10 200 g	0.1 g	0.5 g	0.15 g	200 x 200	2 s
XB^{BB} 10200G	10 200 g	1 g	0.5 g	1 g	200 x 200	2 s

Dimensions (WxLxH) 210x340x91 mm
No draft shield
Net weight 4.7 kg
Sensitivity drift (10...30°C) 2.0 ppm / °C

Common Specifications

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

ISO 9001 BUREAU VERITAS Certification
N°CH4638370