



# Series 321

Precisa Gravimetrics AG

# Series 321



Paolo Fancelli, Designer

With the 321 series, Precisa is in today's mindset: offering active, modern thinking professionals the enjoyment of using well designed even trendy products in their working environment. In combination with the excellent quality and easy-to-use interface it takes the new Precisa experience in weighing to the next level.

A handwritten signature in black ink that reads "Paolo Fancelli".



SWISS MADE 

Going beyond high performance and precision – Series 321 meets today's and tomorrow's user expectations regarding design, functionality and reliability of a modern weighing instrument. Swiss quality, a breathtaking look combined with latest technology make Series 321 the first choice for both laboratories and industrial weighing applications where ease-of-use, efficient measurements and reliable results are required.

**Designed to perform:**

Designer Paolo Fancelli has created a modern, young design which is refreshingly different from what you can find today in the market. Trendy and smart it will be an eye-catcher in every laboratory. And it works – over a wide weighing range and with highest accuracy.

**Stylish control panel:**

The sophisticated user-interface utilizes a new softTOUCH technology for its control. Touch pads, illuminated only when a function is active, guide the user and allow fast and error-free operation. The super-bright blue-line VFD display takes easy reading to a new level.

**Versatile connectivity:**

The balance comes as standard with RS232 and USB interfaces and connects to the wide variety of Precisa accessories and communication adapters.

**Easy to clean:**

321 features easyCLEAN – the easy wipe-off balance and draft shield design. The unique concept of the new draft shield with 270° unobstructed view allows tool-free dismantling and assembling in seconds and can be easily cleaned in your dishwasher.

**SCS intelligent calibration system:**

The intelligent, fully automatic internal calibration system reacts on slightest changes in temperature and is fully programmable on both temperature change and predefinable time.

**High reliability and precision:**

Balances from Precisa are known for highest quality demands under the label "Swiss made". Not only concerning technology but also finishing and selected materials.



## Precisa LX Series: Technical Specifications



### Analytical Balances 0.1 mg

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm/inch)	Class / „e“	Response Time
LX 120A	120 g	0.1 mg	0.1 mg	0.2 mg	Ø 90 / 3.5	Class I/1 mg	2 s
LX 220A	220 g	0.1 mg	0.1 mg	0.2 mg	Ø 90 / 3.5	Class I/1 mg	2 s
LX 320A	320 g	0.1 mg	0.1 mg	0.2 mg	Ø 90 / 3.5	Class I/1 mg	3 s

Dimensions (WxLxH) 228x381x342 mm

Draft shield inside dimensions 180x172x227 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)	Class / „e“	Response Time
LX 320M	320 g	1 mg	1 mg	1.5 mg	135 x 135	Class II/10 mg	1.5 s
LX 620M	620 g	1 mg	1 mg	1.5 mg	135 x 135	Class II/10 mg	1.5 s
LX 920M	920 g	1 mg	1 mg	1.5 mg	135 x 135	Class I/10 mg	2 s
LX 1220M	1220 g	1 mg	1 mg	2 mg	135 x 135	Class I/10 mg	2 s

Dimensions (WxLxH) 228x381x124 mm

Draft shield inside dimensions 170x170x35 mm

Net weight 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)	Class / „e“	Response Time
LX 620C	620 g	0.01 g	0.005 g	10 mg	200 x 200	Class II/0.1 g	1.5 s
LX 1200C	1200 g	0.01 g	0.01 g	10 mg	200 x 200	Class II/0.1 g	1.5 s
LX 2200C	2200 g	0.01 g	0.01 g	15 mg	200 x 200	Class II/0.1 g	1.5 s
LX 4200C	4200 g	0.01 g	0.01 g	15 mg	200 x 200	Class II/0.1 g	1.5 s
LX 6200C	6200 g	0.01 g	0.01 g	15 mg	200 x 200	Class II/0.1 g	1.5 s

Dimensions (WxLxH) 228x381x90 mm  
No draft shield

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



### Precision Balances 0.1 – 1g

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e“	Response Time
LX 3200D	3200 g	0.1 g	0.05 g	0.1 g	200 x 200	Class II/0.1 g	1 s
LX 6200D	6200 g	0.1 g	0.05 g	0.1 g	200 x 200	Class II/1 g	1 s
LX 10200D	10200 g	0.1 g	0.1 g	0.15 g	200 x 200	Class II/1 g	2 s
LX 10200G	10200 g	1 g	0.5 g	0.5 g	200 x 200	Class II/1 g	1.5 s

Dimensions (WxLxH) 228x381x90 mm  
No draft shield

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

### Common Specifications

Floating displays	Temperature range	Line voltage	Stability settings	Power consumption	Frequency
adjustable	0 .. 40 °C	90V – 264V	adjustable	18 VA	47 – 63 Hz














Options	321 LX
Protection IP65: protection against ingress of dust and low pressure water jets, fitted at factory, not all types available	350-8688
Set for EC / OIML verification, fitted at factory, not verified, available only for balances with EC / OIML Type approval	350-8684
EC-Verification according to 90/384/ECC by Precisa (initial verification) available only for balances with EC / OIML Type approval and SCS	350-8685
SCS: Self Calibration System with clock, automatic on temperature change and real-time programmable	available
ACW: Calibration Warning System, automatic warning for calibration on temperature change	standard
Clock	standard

Accessories	321 LX
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 $\varnothing=75\text{mm}$ , $h=100\text{mm}$	350-8636
Density kit solids only (w/o Glass body and Hook) for 0.01mg and 0.1mg balances. Container size $\varnothing=75\text{mm}$ , $h=100\text{mm}$	350-8637
Glass body 10ccm for density determination of liquids	350-7054
Downholder for samples with density $<1\text{ g/cm}^3$	350-7194
Animal weighing bowl complete for 0.01g, 0.1g and 1g balances	350-8551
Dust cover for the whole balance, set of 20 pieces	350-8686
Cable for balance 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

BUS Accessories	321 LX
Remote / secondary display free-standing with cable 1.5 m	350-8504
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	321 LX
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

## Features and Applications

 Swiss made.	 Counting
 Vacuum Fluorescent Display	 Animal weighing
 Automatic Calibration Warning	 Density determination
 Interface RS232 for PC printer	 Check weighing plus/minus
 Support IQ/OQ/PQ	 Net total application Add-up summation Dosage program
 Anti theft protection - password and mechanical	 Free conversion Area conversion (paper program)
 Clock (Printout GLP/GMP, Auto-Call etc.)	 Statistics
 Below balance weighing	 Recorder
 USB Device	 Automatic Repeatability Test
 Units g, mg, ozt, lb, tael, etc.	
 % weighing	 Fully automatic internal calibration system SCS