



SWISS MADE  
SWISS TECHNOLOGY

# GENERAL CATALOGUE

BALANCES AND ANALYTICAL INSTRUMENTS



## WE INVEST IN: TECHNOLOGY

Since 1935 Precisa has developed and manufactured the finest balances and equipment of its type in the world. With renowned Swiss quality and precision, Precisa is globally acknowledged as one of the leading balance manufacturing companies. A global distribution network in more than 100 countries ensures availability of Precisa products and services worldwide.

## WE INVEST IN: THE FUTURE

Products manufactured by Precisa are 100% Swiss made to meet and exceed the highest and most exacting standards in the world. Diverse, flexible and multi-faceted in inception and development, our success is founded on these core values: in each phase of development, Precisa has been innovative, courageous, and stamped with the spirit of pioneers.



## PRECISA DNA: ZERO COMPROMISE

Laboratory and industrial technicians are aware of the significance of the results they provide. That is why they are unwilling to accept any compromise in their field of work. And that is precisely why leading specialists around the world place their trust in Precisa. And have done for decades.

## PRECISA DNA: SWISS PRECISION

Precisa products are prime examples of Swiss perfection and reliability. They are tried and tested in both demanding laboratory environments and industrial applications, and are subject to rigorous quality controls throughout the entire manufacturing process. Precisa invests continuously in developing new technologies and employs a highly qualified team. The result is a state-of-the-art range of precision instruments for the most exacting demands.



## SERIES 390

With the Series 390 Precisa is setting new standards with a balance that provides touch screen technology, frameless automatic draft shield, self linearization and self calibration. With the easy to use menu, inspired by the best smartphones, you will be familiar with your unique balance within seconds.

## SERIES 520

The Series 520 balances contain the innovative PHASTbloc™. This advanced weighing technology is the culmination of over 40 years of knowledge and experience and unites the benefits of a conventional weighing cell and monolithic design. This enables the efficient maintenance and repair of a weighing cell instead of replacing it - sustainability in practice. Advanced materials, engineering and unique manufacturing methods lift quality and performance to new heights.

## SERIES 360

The Series 360 balances owe their extremely high reliability and durability to the well-known competence of Precisa's engineering and development. The weighing cell is of the highest mechanical quality and operates with extreme precision.

## SERIES 321

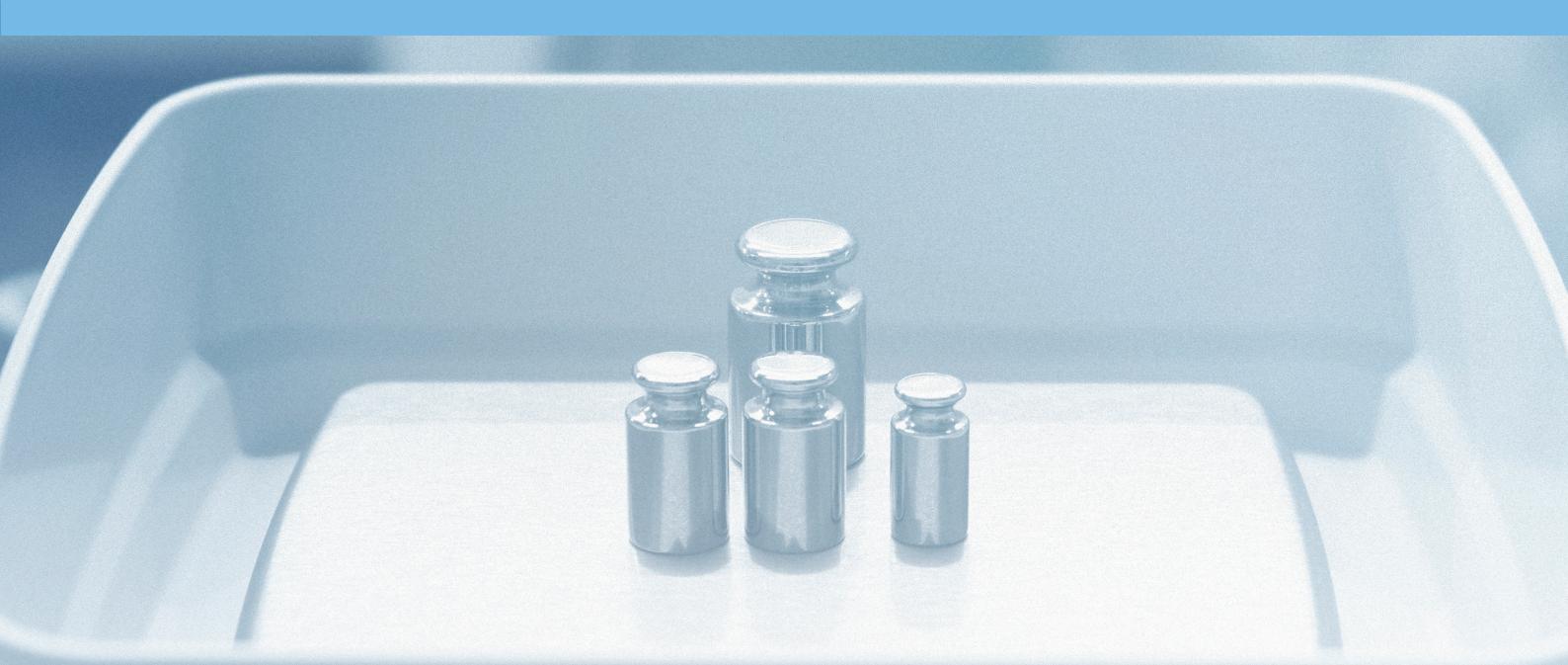
The Series 321 meets and exceeds user expectations regarding design, functionality and reliability of a modern weighing instrument. Swiss quality combined with the latest technology make the Series 321 the first choice for both laboratories and industrial weighing applications where ease-of-use, efficient measurements and reliable results are required.

## SERIES 165

The Series 165 is a versatile weighing machine, delivering weighing results accurately, reliably and in the chosen format, ideal either in the lab or in the field.

## SERIES 490

The Series 490 provides a range of robust, reliable and accurate industrial scales for a wide array of applications. Exceptional performance features and a built-in automatic self-calibration system gives users full confidence in achieving accurate weighing results – approved and certified. User-friendly, multi-application terminals designed to meet every weighing requirement.



## SERIES 365

The Series 365 model EM120-HR moisture analyzer meets the highest international quality standards. Precisa has developed an instrument which not only provides a high degree of precision, but also offers an outstanding array of additional options.

## SERIES 330/335

The Series 330 and 335 moisture analyzers are more suited to users who require only a limited number of methods. The series features 4 different models to cover a wide range of applications.

## SERIES 340

The Series 340 EM thermogravimetric analyzer (TGA) automatically measures moisture, ash and loss of ignition at reduced workload and costs. The entire process is monitored and recorded from start to finish in a closed system. The prepASH® is designed as an autonomous device and does not require any additional PC, it is available in 3 models.

# 390

## PREMIUM

### HF MODEL

FULLY EQUIPPED WITH AUTOMATIC DRAFT SHIELD WITH TLS FOR TOUCHLESS OPERATION PLUS SYSTEMS ECS AND ACS

Model	Capacity	Readability	Repeatability (Load >5%)	Min. Weight (1%, k=2, Load >5%)	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
<b>Semi-Micro Balances</b>									
HF 125SM	125 g	0.01 mg	0.010 mg	2.0 mg*	0.06 mg	ø 80	I / 1 mg	8 s	390-9104-009
HF 125SM-FR	61 g - 125 g	0.01 mg / 0.1 mg	0.010 mg 0.040 mg	2.0 mg*	0.06 mg / 0.1 mg	ø 80	I / 1 mg	8 / 2 s	390-9106-009
HF 225SM-DR	102 g / 225 g	0.01 mg / 0.1 mg	0.010 mg 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	ø 80	I / 1 mg	8 / 2 s	390-9107-009
HF 225SM-FR	61 g - 225 g	0.01 mg / 0.1 mg	0.010 mg 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	ø 80	I / 1 mg	8 / 2 s	390-9108-009
<b>Analytical Balances</b>									
HF 120A	120 g	0.1 mg	0.04 mg	8.2 mg*	0.1 mg	ø 90	I / 1 mg	2 s	390-9257-009
HF 220A	220 g	0.1 mg	0.04 mg	8.2 mg*	0.2 mg	ø 90	I / 1 mg	2 s	390-9258-009
HF 320A	320 g	0.1 mg	0.04 mg	8.2 mg*	0.2 mg	ø 90	I / 1 mg	3 s	390-9259-009
HF 520A	520 g	0.1 mg	0.06 mg	12 mg*	0.4 mg	ø 90	-	4 s	390-9260-009

### HA MODEL

AUTOMATIC DRAFT SHIELD WITH TLS  
FOR TOUCHLESS OPERATION

Model	Capacity	Readability	Repeatability (Load >5%)	Min. Weight (1%, k=2, Load >5%)	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
<b>Semi-Micro Balance</b>									
HA 125SM	125 g	0.01 mg	0.010 mg	2.0 mg*	0.06 mg	ø 80	I / 1 mg	8 s	390-9104-003
HA 125SM-FR	61 g - 125 g	0.01 mg / 0.1 mg	0.010 mg 0.040 mg	2.0 mg*	0.06 mg / 0.1 mg	ø 80	I / 1 mg	8 / 2 s	390-9106-003
HA 225SM-DR	102 g / 225 g	0.01 mg / 0.1 mg	0.010 mg 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	ø 80	I / 1 mg	8 / 2 s	390-9107-003
HA 225SM-FR	61 g - 225 g	0.01 mg / 0.1 mg	0.010 mg 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	ø 80	I / 1 mg	8 / 2 s	390-9108-003
<b>Analytical Balances</b>									
HA 120A	120 g	0.1 mg	0.04 mg	8.2 mg*	0.1 mg	ø 90	I / 1 mg	2 s	390-9257-003
HA 220A	220 g	0.1 mg	0.04 mg	8.2 mg*	0.2 mg	ø 90	I / 1 mg	2 s	390-9258-003
HA 320A	320 g	0.1 mg	0.04 mg	8.2 mg*	0.2 mg	ø 90	I / 1 mg	3 s	390-9259-003
HA 520A	520 g	0.1 mg	0.06 mg	12 mg*	0.4 mg	ø 90	-	4 s	390-9260-003

\* USP Min. weight (0.1%, k=2, Load >5%) = Min. weight x 10



- 7" Touch Screen
- Touchless Sensor Operation (HF/HA models)
- Ultra Low Weighing Pan

## HE MODEL

ELECTRIC DRAFT SHIELD

Model	Capacity	Readability	Repeatability (Load >5%)	Min. Weight (1%, k=2, Load >5%)	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
<b>Semi-Micro Balances</b>									
HE 125SM	125 g	0.01 mg	0.010 mg	2.0 mg*	0.06 mg	ø 80	I / 1 mg	8 s	390-9104-002
HE 125SM-FR	61 g - 125 g	0.01 mg / 0.1 mg	0.010 mg 0.040 mg	2.0 mg*	0.06 mg / 0.1 mg	ø 80	I / 1 mg	8 / 2 s	390-9106-002
HE 225SM-DR	102 g / 225 g	0.01 mg / 0.1 mg	0.010 mg 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	ø 80	I / 1 mg	8 / 2 s	390-9107-002
HE 225SM-FR	61 g - 225 g	0.01 mg / 0.1 mg	0.010 mg 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	ø 80	I / 1 mg	8 / 2 s	390-9108-002
<b>Analytical Balances</b>									
HE 120A	120 g	0.1 mg	0.04 mg	8.2 mg*	0.1 mg	ø 90	I / 1 mg	2 s	390-9257-002
HE 220A	220 g	0.1 mg	0.04 mg	8.2 mg*	0.2 mg	ø 90	I / 1 mg	2 s	390-9258-002
HE 320A	320 g	0.1 mg	0.04 mg	8.2 mg*	0.2 mg	ø 90	I / 1 mg	3 s	390-9259-002
HE 520A	520 g	0.1 mg	0.06 mg	12 mg*	0.4 mg	ø 90	-	4 s	390-9260-002

## HM MODEL

MECHANICAL DRAFT SHIELD

Model	Capacity	Readability	Repeatability (Load >5%)	Min. Weight (1%, k=2, Load >5%)	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
<b>Semi-Micro Balances</b>									
HM 125SM	125 g	0.01 mg	0.010 mg	2.0 mg*	0.06 mg	ø 80	I / 1 mg	8 s	390-9104-001
HM 125SM-FR	61 g - 125 g	0.01 mg / 0.1 mg	0.010 mg 0.040 mg	2.0 mg*	0.06 mg / 0.1 mg	ø 80	I / 1 mg	8 / 2 s	390-9106-001
HM 225SM-DR	102 g / 225 g	0.01 mg / 0.1 mg	0.010 mg 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	ø 80	I / 1 mg	8 / 2 s	390-9107-001
HM 225SM-FR	61 g - 225 g	0.01 mg / 0.1 mg	0.010 mg 0.040 mg	2.0 mg*	0.06 mg / 0.2 mg	ø 80	I / 1 mg	8 / 2 s	390-9108-001
<b>Analytical Balances</b>									
HM 120A	120 g	0.1 mg	0.04 mg	8.2 mg*	0.1 mg	ø 90	I / 1 mg	2 s	390-9257-001
HM 220A	220 g	0.1 mg	0.04 mg	8.2 mg*	0.2 mg	ø 90	I / 1 mg	2 s	390-9258-001
HM 320A	320 g	0.1 mg	0.04 mg	8.2 mg*	0.2 mg	ø 90	I / 1 mg	3 s	390-9259-001
HM 520A	520 g	0.1 mg	0.06 mg	12 mg*	0.4 mg	ø 90	-	4 s	390-9260-001

\* USP Min. weight (0.1%, k=2, Load >5%) = Min. weight x 10

# SERIES 390 OPTIONS & ACCESSORIES

Options	HF	HA	HE	HM
EU-Verification according to 2014/31/EU by Precisa (initial verification), available only for balances with EU/OIML type approval	350-8930	350-8930	350-8930	350-8930
TLS Touchless sensors to operate draft shield, tare, print, ...	standard	standard	350-8047	-
ECS Electrostatic Cancellation System & AOS Ambient Observation System all-round care package	standard	390-8500-000	390-8500-000	-
ECS Electrostatic Cancellation System	standard	390-8500-001	390-8500-001	-
AOS Ambient Observation System	standard	390-8500-002	390-8500-002	-
Extension cable Ethernet only	390-8501-001	390-8501-001	390-8501-001	390-8501-001
Extension cable USB host (type A) only	390-8501-002	390-8501-002	390-8501-002	390-8501-002
Extension cable USB device (type B) only	390-8501-003	390-8501-003	390-8501-003	390-8501-003
Extension cable USB host double (2 type A) only	390-8501-004	390-8501-004	390-8501-004	390-8501-004
Extension cable Ethernet + USB host (type A)	390-8501-021	390-8501-021	390-8501-021	390-8501-021
Extension cable Ethernet + USB host (type B)	390-8501-031	390-8501-031	390-8501-031	390-8501-031
Extension cable Ethernet + USB host double (2 type A)	390-8501-041	390-8501-041	390-8501-041	390-8501-041
Extension cable USB host (type A) + USB host (type A)	390-8501-022	390-8501-022	390-8501-022	390-8501-022
Extension cable USB host (type A) + USB device (type B)	390-8501-032	390-8501-032	390-8501-032	390-8501-032
Extension cable USB device (type B) + USB host double (2 type A)	390-8501-043	390-8501-043	390-8501-043	390-8501-043

Applications	HF	HA	HE	HM
BEST Buoyancy error suppression technology	standard	standard	350-8738-001	350-8738-001
Density determination	standard	standard	350-8738-002	350-8738-002

Accessories	HF	HA	HE	HM
Hook for weighing below the balance	350-8527	350-8527	350-8527	350-8527
VasoFrame 390	350-8721	350-8721	350-8721	350-8721
AeroPan 390 Ø 80mm for 0.01mg balances	350-8728	350-8728	350-8728	350-8728
AeroPan 390 Ø 90mm for 0.1mg balances	350-8729	350-8729	350-8729	350-8729
Density kit, Container size Ø 75mm, h= 100mm	350-8719	350-8719	350-8719	350-8719
Density kit solids only (w/o Glass body and Hook), Container size Ø 75mm, h= 100mm	350-8720	350-8720	350-8720	350-8720
Glass body 10ccm for density determination of liquids	350-7054	350-7054	350-7054	350-7054
Downholder for samples with density < 1g/cm³	350-7194	350-7194	350-7194	350-7194
Evaporation trap for pipette calibration complete for 0.01mg and 0.1mg balances	350-8717	350-8717	350-8717	350-8717
Adapter to assemble Eppendorf Humidity Trap for 0.01mg and 0.1mg balances	350-8718	350-8718	350-8718	350-8718
Single foot switch for one function: tare, print, ...	350-8747-001	350-8747-001	350-8747-001	350-8747-001
Double foot switch USB for two functions: tare and print, tare and ...	350-8747-002	350-8747-002	350-8747-002	350-8747-002
WiFi connection	350-8935	350-8935	350-8935	350-8935

## Additional Accessories & Applications

- Further accessories, see Special Products / Accessories

Operating Temperature	Line Voltage, Tolerance	Power Consumption	Frequency
5 .. 40 °C (41°F .. 104°F)	115V / 230V, +15% / -20%	18 VA	50 - 60 Hz

# SERIES 390 FEATURES



Max 220g Min 10mg d=0.1mg e=1mg

Help

Application Density determination

Application for determining the density of different materials or bc

Preparation of the application

Working with the "Density kit" equipment

Min 220g Min 10mg d=0.1mg e=1mg Support - 23.03.2018 08:21

Density determination

Select method

HELP

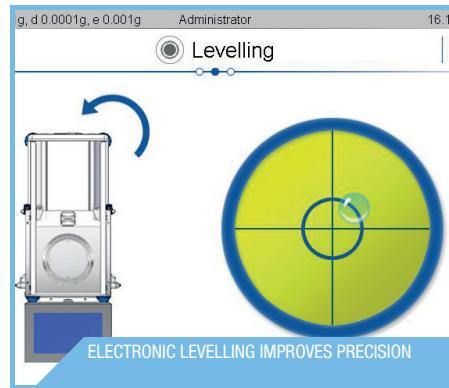


0.0001g, e 0.001g Roger 05.02.2016

Weighing ?

5.4408 g

STABILITY-INDICATOR VISUALLY PREDICTIVE



mg d=0.01/0.1mg e=1/10mg

Users

gro fae User N

gro

fae

User N

USER MANAGEMENT



		LCD TS	SCS	RBC I23	232	USB host	IG PB					TLS	ECS	AOS	IDS	IIO				MDS			e		MSP	MSW	ART	BEST									
HF	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	OD	OD	AC	✓	✓	✓	OD	✓	AC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
HA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AC	AC	✓	OD	OD	AC	✓	✓	✓	OD	✓	AC	✓	✓	✓	✓	✓	✓	✓	✓	✓
HE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AC	AC	✓	OD	OD	AC	✓	✓	✓	OD	✓	AC	✓	✓	✓	✓	✓	✓	✓	✓	✓
HM	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	OD	OD	AC	✓	✓	✓	OD	✓	AC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

AC = accessory or optional built-in at factory

OD = on demand

# 520

## ADVANCED/STANDARD



### PT MODEL

TOUCH SCREEN  
OPERATION

Model	Capacity	Readability	Repeatability (Load >5%)	Min. Weight (1%, k=2, Load >5%)	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
<b>Analytical Balances</b>									
PT 120A	120 g	0.1 mg	0.1 mg	20.0 mg*	0.2 mg	ø 90	I / 1 mg**	2 s	520-9221-002***
PT 220A	220 g	0.1 mg	0.1 mg	20.0 mg*	0.2 mg	ø 90	I / 1 mg**	2 s	520-9222-002***
<b>Precision Balances</b>									
PT 320M	320 g	1 mg	1 mg	200 mg*	1.5 mg	ø 120	II / 10 mg**	1.5 s	520-9321-002***
PT 620M	620 g	1 mg	1 mg	200 mg*	1.5 mg	ø 120	II / 10 mg**	1.5 s	520-9322-002***
PT 320C	320 g	0.01 g	0.005 g	1 g*	10 mg	186 x 186	–	1.5 s	520-9421-002***
PT 620C	620 g	0.01 g	0.005 g	1 g*	10 mg	186 x 186	II / 0.1 g**	1.5 s	520-9422-002***
PT 1200C	1200 g	0.01 g	0.01 g	2 g*	10 mg	186 x 186	II / 0.1 g**	1.5 s	520-9423-002***
PT 2200C	2200 g	0.01 g	0.01 g	2 g*	10 mg	186 x 186	II / 0.1 g**	1.5 s	520-9424-002***
PT 3200C	3200 g	0.01 g	0.01 g	2 g*	10 mg	186 x 186	II / 0.1 g**	1.5 s	520-9425-002***
PT 4200C	4200 g	0.01 g	0.01 g	2 g*	10 mg	186 x 186	II / 0.1 g**	1.5 s	520-9426-002***
PT 3200D	3200 g	0.1 g	0.05 g	10 g*	0.1 g	186 x 186	II / 0.1 g**	1 s	520-9521-002***
PT 6200D	6200 g	0.1 g	0.05 g	10 g*	0.1 g	186 x 186	II / 1.0 g**	1 s	520-9522-002***
PT 10200D	10200 g	0.1 g	0.1 g	20 g*	0.15 g	186 x 186	II / 1.0 g**	2 s	520-9523-002***
PT 10200G	10200 g	1 g	0.5 g	100 g*	0.5 g	186 x 186	II / 1.0 g**	1.5 s	520-9621-002***

\* USP Min. weight (0.1%, k=2, Load >5%) = Min. weight x 10

\*\* EU/OIML type approval on demand, Initially verified with SCS (-001) only

\*\*\* -001 for balance with SCS / -002 for balance without SCS



- PHASTbloc™ Weighing Cell
- Electronic Precision Levelling
- Multi User Management

## PB MODEL

5 MEMBRANE KEYPAD OPERATION

Model	Capacity	Readability	Repeatability (Load >5%)	Min. Weight (1%, k=2, Load >5%)	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
<b>Analytical Balances</b>									
PB 120A	120 g	0.1 mg	0.1 mg	20.0 mg*	0.2 mg	ø 90	I / 1 mg**	2 s	520-9211-002***
PB 220A	220 g	0.1 mg	0.1 mg	20.0 mg*	0.2 mg	ø 90	I / 1 mg**	2 s	520-9212-002***
<b>Precision Balances</b>									
PB 320M	320 g	1 mg	1 mg	200 mg*	1.5 mg	ø 120	II / 10 mg**	1.5 s	520-9311-002***
PB 620M	620 g	1 mg	1 mg	200 mg*	1.5 mg	ø 120	II / 10 mg**	1.5 s	520-9312-002***
PB 320C	320 g	0.01 g	0.005 g	1 g*	10 mg	186 x 186	–	1.5 s	520-9411-002***
PB 620C	620 g	0.01 g	0.005 g	1 g*	10 mg	186 x 186	II / 0.1 g**	1.5 s	520-9412-002***
PB 1200C	1200 g	0.01 g	0.01 g	2 g*	10 mg	186 x 186	II / 0.1 g**	1.5 s	520-9413-002***
PB 2200C	2200 g	0.01 g	0.01 g	2 g*	10 mg	186 x 186	II / 0.1 g**	1.5 s	520-9414-002***
PB 3200C	3200 g	0.01 g	0.01 g	2 g*	10 mg	186 x 186	II / 0.1 g**	1.5 s	520-9415-002***
PB 4200C	4200 g	0.01 g	0.01 g	2 g*	10 mg	186 x 186	II / 0.1 g**	1.5 s	520-9416-002***
PB 3200D	3200 g	0.1 g	0.05 g	10 g*	0.1 g	186 x 186	II / 0.1 g**	1 s	520-9511-002***
PB 6200D	6200 g	0.1 g	0.05 g	10 g*	0.1 g	186 x 186	II / 1.0 g**	1 s	520-9512-002***
PB 10200D	10200 g	0.1 g	0.1 g	20 g*	0.15 g	186 x 186	II / 1.0 g**	2 s	520-9513-002***
PB 10200G	10200 g	1 g	0.5 g	100 g*	0.5 g	186 x 186	II / 1.0 g**	1.5 s	520-9611-002***

\* USP Min. weight (0.1%, k=2, Load >5%) = Min. weight x 10

\*\* EU/OIML type approval on demand, Initially verified with SCS (-001) only

\*\*\* -001 for balance with SCS / -002 for balance without SCS

# SERIES 520 OPTIONS & ACCESSORIES

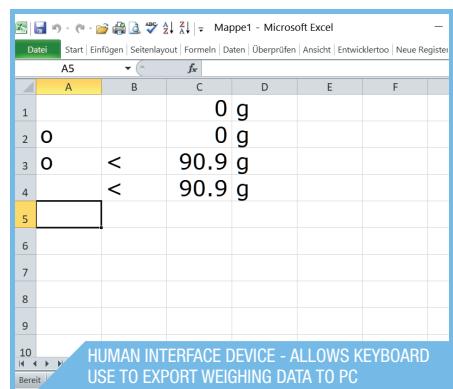
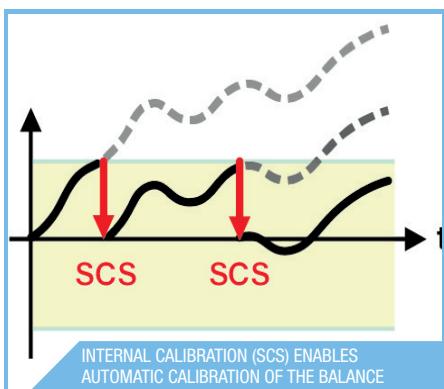
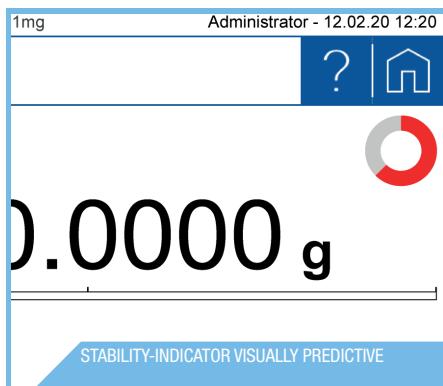
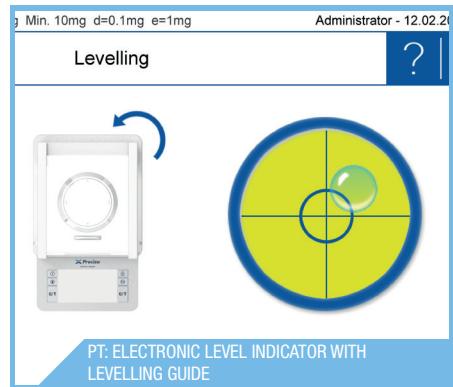
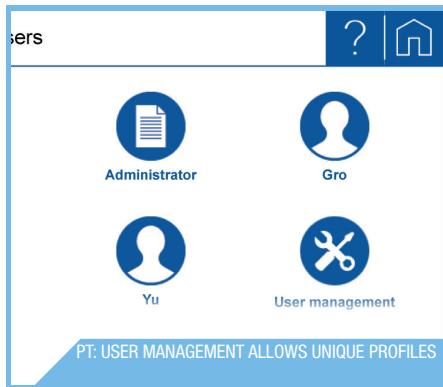
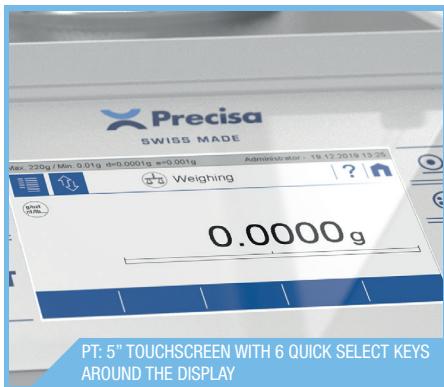
Options	PT	PB
EU-Verification according to 2014/31/EU by Precisa (initial verification) incl. alibi memory, available only for balances with EU/OIML type approval and SCS	350-8938 on demand	350-8938 on demand
Protection IP65, protection against ingress of dust and low pressure water jets, fitted at factory, not all types available	350-8754 on demand	350-8754 on demand
SCS PT: Self calibration System with clock, automatic on temperature change and real-time programmable	520-xxxx-001	-
SCS PB: Self calibration System with clock, automatic on temperature change and real-time programmable	-	520-xxxx-001

Applications	PT	PB
BEST Buoyancy Error Suppression Technology	350-8739-001	-

Accessories	PT	PB
Draft shield PB	350-8735	350-8735
Draft shield PB + Weighing pan M* Includes all necessary parts: 350-8735, Weighing pan M*	350-8735-001	350-8735-001
Draft shield PB short	350-8742	350-8742
Draft shield PB short + Weighing pan M* Includes all necessary parts: 350-8742, Weighing pan M*	350-8742-001	350-8742-001
Remote display free-standing, incl. 1.5 m cable	-	350-8401-001
Remote display with wall bracket, incl. 1.5 m cable	-	350-8401-002
Hook for weighing below the balance	350-8744	350-8744
Animal weighing bowl complete for 0.01g, 0.1g and 1g balances	350-8743	350-8743
Density kit for 0.1mg balances Container size Ø 75mm, h= 100mm	350-8719	350-8719
Density kit solids only (w/o Glass body and Hook) for 0.1mg balances Container size Ø 75mm, h= 100mm	350-8720	350-8720
Glass body 10ccm for density determination of liquids	350-7054	350-7054
Downholder for samples with density < 1 g/cm3	350-7194	350-7194
Single foot switch USB for one function: tare, print, ...	350-8747-001	350-8747-001
Double foot switch USB for two functions: tare and print, tare and ...	350-8747-002	350-8747-002
Protective cover 520 for the whole balance (0.1mg, 1mg), set of 5 pieces	350-8745-001	350-8745-001
Protective cover 520 for the whole balance (0.01g, 0.1g, 1g), set of 5 pieces	350-8745-002	350-8745-002
Carrying case 520	350-8746	350-8746
LAN Ethernet connection 520 PT	350-8939-000	-
WiFi connection 520 PT	350-8941	-
Interface box, LAN ethernet connection	-	350-8940-001
Interface box, WiFi connection	-	350-8940-002

Operating Temperature	Line Voltage, Tolerance	Power Consumption	Frequency
5 .. 40 °C (41°F .. 104°F)	115V / 230V, +15% / -20%	18 VA	50 - 60 Hz

# SERIES 520 FEATURES



PT	✓	✓		AC	AC	AC	OD	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
PB	✓		✓	AC	AC	AC	OD	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

AC = accessory or optional built-in at factory

OD = on demand

# 360 ADVANCED



## EP MODEL

CUSTOMIZABLE GRAPHIC SCREEN  
12 MEMBRANE KEY OPERATION

Model	Capacity	Readability	Repeatability (Load >5%)	Min. Weight (1%, k=2, Load >5%)	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
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### Semi-Micro Balances

EP 125SM	125 g	0.01 mg	0.02 mg	4.0 mg*	0.03 mg	Ø 80	I / 1 mg**	8 s	360-9100-002
EP 225SM-DR	102 g / 225 g	0.01 mg / 0.1 mg	0.02 mg	4.0 mg*	0.03 mg / 0.1 mg	Ø 80	I / 1 mg**	8 s / 3 s	360-9101-002

### Analytical Balances

EP 120A	120 g	0.1 mg	0.1 mg	20 mg*	0.2 mg	Ø 90	I / 1 mg**	2 s	360-9231-002
EP 220A	220 g	0.1 mg	0.1 mg	20 mg*	0.2 mg	Ø 90	I / 1 mg**	2 s	360-9232-002
EP 320A	320 g	0.1 mg	0.1 mg	20 mg*	0.2 mg	Ø 90	I / 1 mg**	3 s	360-9233-002
EP 420A	420 g	0.1 mg	0.15 mg	30 mg*	0.4 mg	Ø 90	I / 1 mg**	3 s	360-9234-002
EP 520A	520 g	0.1 mg	0.15 mg	30 mg*	0.4 mg	Ø 90	—	4 s	360-9236-002
EP 420A-FR	120 g - 420 g	0.1 mg / 1 mg	0.15 mg / 1 mg	30 mg*	0.3 / 1 mg	Ø 90	I / 1 mg**	3 s	360-9235-002

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
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### Precision Balances

EP 320M	320 g	1 mg	1 mg	1.5 mg	135 x 135	II / 10 mg**	1.5 s	360-9345-001
EP 620M	620 g	1 mg	1 mg	1.5 mg	135 x 135	II / 10 mg**	1.5 s	360-9346-001
EP 920M	920 g	1 mg	1 mg	1.5 mg	135 x 135	I / 10 mg**	2 s	360-9347-001
EP 1220M	1 220 g	1 mg	1 mg	2 mg	135 x 135	I / 10 mg**	2 s	360-9348-001
EP 2200M	2 220 g	1 mg	1 mg	2 mg	135 x 135	I / 10 mg**	3 s	360-9351-001
EP 620M-FR	120 g - 620 g	1 mg / 10 mg	1 mg / 10 mg	1.5 mg / 10 mg	135 x 135	II / 10 mg**	1.5 s	360-9349-001
EP 1220M-FR	240 g - 1 220 g	1 mg / 10 mg	1 mg / 10 mg	1.5 mg / 10 mg	135 x 135	I / 10 mg**	2 s	360-9350-001
EP 1200C	1 200 g	0.01 g	0.01 g	10 mg	200 x 200	II / 0.1 g**	1.5 s	360-9437-001
EP 2200C	2 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g**	1.5 s	360-9438-001
EP 4200C	4 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g**	1.5 s	360-9439-001
EP 6200C	6 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g**	1.5 s	360-9440-001
EP 8200C	8 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g**	1.5 s	360-9441-001
EP 6200C-FR	2 200 g - 6 200 g	0.01 g / 0.1 g	0.01 g / 0.02 g	15 mg / 0.02 g	200 x 200	II / 0.1 g**	1.5 s	360-9442-001
EP 8200C-DR	3 200 g / 8 200 g	0.01 g / 0.1 g	0.01 g / 0.03 g	15 mg / 0.05 g	200 x 200	II / 0.1 g**	1.5 s	360-9443-001
EP 6200D	6 200 g	0.1 g	0.05 g	0.1 g	200 x 200	II / 1 g**	1 s	360-9534-001
EP 8200D	8 200 g	0.1 g	0.1 g	0.15 g	200 x 200	II / 1 g**	1 s	360-9535-001
EP 12200D	12 200 g	0.1 g	0.1 g	0.15 g	200 x 200	II / 1 g**	2 s	360-9536-001
EP 12200G	12 200 g	1 g	0.5 g	0.5 g	200 x 200	II / 1 g**	1.5 s	360-9613-001

\* USP Min. weight (0.1%, k=2, Load >5%) = Min. weight x 10

\*\* EU/OIML type approval on demand



- Graphic Display, Customisable

- Support for USP 41

- Multi User Management

## ES MODEL

5 MEMBRANE KEYPAD OPERATION

Model	Capacity	Readability	Repeatability (Load >5%)	Min. Weight (1%, k=2, Load >5%)	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
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### Semi-Micro Balances

ES 125SM	125 g	0.01 mg	0.02 mg	4.0 mg*	0.03 mg	Ø 80	I / 1 mg**	8 s	360-9102-001
ES 225SM-DR	102 g / 225 g	0.01 mg / 0.1 mg	0.02 mg	4.0 mg*	0.03 mg / 0.1 mg	Ø 80	I / 1 mg**	8 s / 3 s	360-9103-001

### Analytical Balances

ES 120A	120 g	0.1 mg	0.1 mg	20 mg*	0.2 mg	Ø 90	I / 1 mg**	2 s	360-9237-001
ES 220A	220 g	0.1 mg	0.1 mg	20 mg*	0.2 mg	Ø 90	I / 1 mg**	2 s	360-9238-001
ES 320A	320 g	0.1 mg	0.1 mg	20 mg*	0.2 mg	Ø 90	I / 1 mg**	3 s	360-9239-001
ES 420A	420 g	0.1 mg	0.15 mg	30 mg*	0.4 mg	Ø 90	I / 1 mg**	3 s	360-9240-001
ES 520A	520 g	0.1 mg	0.15 mg	30 mg*	0.4 mg	Ø 90	-	4 s	360-9242-001
ES 420A-FR	120 g - 420 g	0.1 mg / 1 mg	0.15 mg / 1 mg	30 mg*	0.3 / 1 mg	Ø 90	I / 1 mg**	3 s	360-9241-001

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
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### Precision Balances

ES 320M	320 g	1 mg	1 mg	1.5 mg	135 x 135	II / 10 mg**	1.5 s	360-9352-001
ES 620M	620 g	1 mg	1 mg	1.5 mg	135 x 135	II / 10 mg**	1.5 s	360-9353-001
ES 920M	920 g	1 mg	1 mg	1.5 mg	135 x 135	II / 10 mg**	2 s	360-9354-001
ES 1220M	1 220 g	1 mg	1 mg	2 mg	135 x 135	II / 10 mg**	2 s	360-9355-001
ES 2200M	2 220 g	1 mg	1 mg	2 mg	135 x 135	II / 10 mg**	3 s	360-9358-001
ES 620M-FR	120 g - 620 g	1 mg / 10 mg	1 mg / 10 mg	1.5 mg / 10 mg	135 x 135	II / 10 mg**	1.5 s	360-9356-001
ES 1220M-FR	240 g - 1 220 g	1 mg / 10 mg	1 mg / 10 mg	1.5 mg / 10 mg	135 x 135	II / 10 mg**	2 s	360-9357-001
ES 1200C	1 200 g	0.01 g	0.01 g	10 mg	200 x 200	II / 0.1 g**	1.5 s	360-9444-001
ES 2200C	2 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g**	1.5 s	360-9445-001
ES 4200C	4 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g**	1.5 s	360-9446-001
ES 6200C	6 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g**	1.5 s	360-9447-001
ES 8200C	8 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g**	1.5 s	360-9448-001
ES 6200C-FR	2 200 g - 6 200 g	0.01 g / 0.1 g	0.01 g / 0.02 g	15 mg / 0.02 g	200 x 200	II / 0.1 g**	1.5 s	360-9449-001
ES 8200C-DR	3 200 g / 8 200 g	0.01 g / 0.1 g	0.01 g / 0.03 g	15 mg / 0.05 g	200 x 200	II / 0.1 g**	1.5 s	360-9450-001
ES 6200D	6 200 g	0.1 g	0.05 g	0.1 g	200 x 200	II / 1 g**	1 s	360-9537-001
ES 8200D	8 200 g	0.1 g	0.1 g	0.15 g	200 x 200	II / 1 g**	1 s	360-9538-001
ES 12200D	12 200 g	0.1 g	0.1 g	0.15 g	200 x 200	II / 1 g**	2 s	360-9539-001
ES 12200G	12 200 g	1 g	0.5 g	0.5 g	200 x 200	II / 1 g**	1.5 s	360-9614-001

\* USP Min. weight (0.1%, k=2, Load >5%) = Min. weight x 10

\*\* EU/OIML type approval on demand

# SERIES 360 OPTIONS & ACCESSORIES

Options	360 EP	360 ES
EU-Verification according to 2014/31/EU by Precisa (initial verification), available only for balances with EU/OIML type approval	350-8679	350-8679
Protection IP65: protection against ingress of dust and low pressure water jets, fitted at factory, not all types available	350-8694	350-8694

Accessories	360 EP	360 ES
Draft shield 360 ES manual, only for 0.01mg and 0.1mg balances	350-8659	standard
Draft shield 321 LG, only for 0.1mg balances	on demand	on demand
Draft shield 321 LG-M and Draft shield 321 LG-M short	on demand	on demand
Draft shield mg, glass with cover	320-8504	320-8504
Hook for weighing below the balance	350-8527	350-8527
Animal weighing bowl complete for 0.01g, 0.1g and 1g balances	350-8551	350-8551
VasoFrame for 0.01mg and 0.1mg balances with draft shield EP/ES	350-8727	350-8727
Density kit for 0.01 mg and 0.1 mg balances, container size: ø 75 mm, h = 100 mm	350-8636	350-8636
Density kit solids only (without glass body and hook) for 0.01 mg and 0.1 mg balances, container size ø = 75 mm, h = 100 mm	350-8637	350-8637
Glass body for density determination of liquids, V = 10cm³	350-7054	350-7054
Downholder for samples with ρ < 1g/cm³	350-7194	350-7194
Evaporation trap for pipette calibration for 0.01 mg and 0.1 mg balances	350-8633	350-8633
Adapter for Eppendorf evaporation trap for 0.01 mg and 0.1 mg balances	350-8634	350-8634
Single foot switch for one function: tare, print, ...	350-8814	350-8814
Protective cover 360 for the whole balance (0.01mg, 0.1mg), set of 5 pieces	350-8676	350-8676
Protective cover 360 for the whole balance (0.01g, 0.1g, 1g), set of 5 pieces	350-8663	350-8663
Desk power adapter with EU plug, 80V - 240V	350-8372	350-8372

Slide-in Modules, on demand only	360 EP	360 ES
PrecisaBUS converter, enables connection to almost all PrecisaBUS accessories	–	350-8664
USB Host	350-8665	–
LAN Ethernet connection	350-8666	–
WiFi connection	350-8667	–
Bluetooth connection	350-8668	–
PS 2 female & RS232 DB9 female	350-8670	–

## Additional Accessories & Applications

- PrecisaBUS accessories, see Special Products / Accessories
- SmartBox® applications, see Special Products / Accessories
- Further accessories, see Special Products / Accessories

Operating Temperature	Line Voltage, Tolerance	Power Consumption	Frequency
5 .. 40 °C (41°F .. 104°F)	115V / 230V, +15% / -20%	18 VA	50 - 60 Hz

# SERIES 360 FEATURES



AMBIDEXTROUS MANUAL DRAFT SHIELD FOR  
OPTIMUM CONDITIONS



EP: EASY TO READ CUSTOMISABLE DISPLAY



EP: USB & RS232 AS STANDARD PLUS VERSATILE  
CONNECTIVITY WITH SLIDE-IN MODULES



ES: EASY TO READ DISPLAY AND SIMPLE OPERATION



ES: USB & RS232 AS STANDARD, OTHER  
CONNECTIVITY ON DEMAND

EP	✓			✓	✓	✓	✓	OD	AC	AC	AC	AC	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ES	✓	✓			✓	✓	✓	AC	AC	AC	AC		✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

# 321

## ADVANCED/STANDARD



### LT MODEL

10 MEMBRANE KEY OPERATION  
PROGRAMMABLE

Model	Capacity	Readability	Repeatability (Load >5%)	Min. Weight (1%, k=2, Load >5%)	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
<b>Analytical Balances</b>									
LT 120A	120 g	0.1 mg	0.1 mg	20.0 mg*	0.2 mg	ø 90	I / 1 mg	2 s	321-9252-001
LT 220A	220 g	0.1 mg	0.1 mg	20.0 mg*	0.2 mg	ø 90	I / 1 mg	2 s	321-9253-001
LT 320A	320 g	0.1 mg	0.1 mg	20.0 mg*	0.2 mg	ø 90	I / 1 mg	3 s	321-9254-001

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
<b>Precision Balances</b>								
LT 160M	160 g	1 mg	1 mg	1.5 mg	135 x 135	II / 1 mg	1.5 s	321-9373-001
LT 320M	320 g	1 mg	1 mg	1.5 mg	135 x 135	II / 1 mg	1.5 s	321-9374-001
LT 620M	620 g	1 mg	1 mg	1.5 mg	135 x 135	I / 1 mg	1.5 s	321-9375-001
LT 920M	920 g	1 mg	1 mg	1.5 mg	135 x 135	I / 1 mg	2 s	321-9376-001
LT 1220M	1 220 g	1 mg	1 mg	2 mg	135 x 135	I / 1 mg	2 s	321-9377-001
LT 320C	320 g	0.01 g	0.005 g	10 mg	200 x 200	II / 0.01 g	1.5 s	321-9470-001
LT 620C	620 g	0.01 g	0.005 g	10 mg	200 x 200	II / 0.1 g	1.5 s	321-9471-001
LT 1200C	1 200 g	0.01 g	0.01 g	10 mg	200 x 200	II / 0.1 g	1.5 s	321-9472-001
LT 2200C	2 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g	1.5 s	321-9473-001
LT 3200C	3 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g	1.5 s	321-9474-001
LT 4200C	4 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g	1.5 s	321-9475-001
LT 6200C	6 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g	1.5 s	321-9476-001
LT 3200D	3 200 g	0.1 g	0.05 g	0.1 g	200 x 200	II / 0.1 g	1 s	321-9555-001
LT 6200D	6 200 g	0.1 g	0.05 g	0.1 g	200 x 200	II / 1 g	1 s	321-9556-001
LT 10200D	10 200 g	0.1 g	0.1 g	0.15 g	200 x 200	II / 1 g	2 s	321-9557-001
LT 10200G	10 200 g	1 g	0.5 g	0.5 g	200 x 200	II / 1 g	1.5 s	321-9617-001

\* USP Min. weight (0.1%, k=2, Load >5%) = Min. weight x 10



- Simple and Intuitive Operation
- Reliable and Durable, Suitable for Universal use
- IP65 Rated on Demand

## LX MODEL

5 TOUCH SENSITIVE  
KEYPAD OPERATION

Model	Capacity	Readability	Repeatability (Load >5%)	Min. Weight (1%, k=2, Load >5%)	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
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### Analytical Balances

LX 120A	120 g	0.1 mg	0.1 mg	20.0 mg*	0.2 mg	Ø 90	I / 1 mg**	2 s	321-9246-002***
LX 220A	220 g	0.1 mg	0.1 mg	20.0 mg*	0.2 mg	Ø 90	I / 1 mg**	2 s	321-9247-002***
LX 320A	320 g	0.1 mg	0.1 mg	20.0 mg*	0.2 mg	Ø 90	I / 1 mg**	3 s	321-9248-002***

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
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### Precision Balances

LX 320M	320 g	1 mg	1 mg	1.5 mg	135 x 135	II / 1 mg**	1.5 s	321-9361-002***
LX 620M	620 g	1 mg	1 mg	1.5 mg	135 x 135	II / 1 mg**	1.5 s	321-9362-002***
LX 920M	920 g	1 mg	1 mg	1.5 mg	135 x 135	I / 1 mg**	2 s	321-9363-002***
LX 1220M	1 220 g	1 mg	1 mg	2 mg	135 x 135	I / 1 mg**	2 s	321-9364-002***
LX 620C	620 g	0.01 g	0.005 g	10 mg	200 x 200	II / 0.1 g**	1.5 s	321-9452-002***
LX 1200C	1 200 g	0.01 g	0.01 g	10 mg	200 x 200	II / 0.1 g**	1.5 s	321-9453-002***
LX 2200C	2 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g**	1.5 s	321-9454-002***
LX 4200C	4 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g**	1.5 s	321-9456-002***
LX 6200C	6 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g**	1.5 s	321-9457-002***
LX 3200D	3 200 g	0.1 g	0.05 g	0.1 g	200 x 200	II / 0.1 g**	1 s	321-9547-002***
LX 6200D	6 200 g	0.1 g	0.05 g	0.1 g	200 x 200	II / 1 g**	1 s	321-9548-002***
LX 10200D	10 200 g	0.1 g	0.1 g	0.15 g	200 x 200	II / 1 g**	2 s	321-9549-002***
LX 10200G	10 200 g	1 g	0.5 g	0.5 g	200 x 200	II / 1 g**	1.5 s	321-9615-002***

\* USP Min. weight (0.1%, k=2, Load >5%) = Min. weight x 10

\*\* Initially verified with SCS (-001) only

\*\*\* -001 for balance with SCS / -002 for balance without SCS

# 321 STANDARD



## LS MODEL

5 MEMBRANE KEYPAD OPERATION

Model	Capacity	Readability	Repeatability (Load >5%)	Min. Weight (1%, k=2, Load >5%)	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
<b>Analytical Balances</b>									
LS 120A	120 g	0.1 mg	0.1 mg	20.0 mg*	0.2 mg	ø 90	I / 1 mg**	2 s	321-9249-002***
LS 220A	220 g	0.1 mg	0.1 mg	20.0 mg*	0.2 mg	ø 90	I / 1 mg**	2 s	321-9250-002***
LS 320A	320 g	0.1 mg	0.1 mg	20.0 mg*	0.2 mg	ø 90	I / 1 mg**	3 s	321-9251-002***

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
<b>Precision Balances</b>								
LS 160M	160 g	1 mg	1 mg	1.5 mg	135 x 135	II / 1 mg**	1.5 s	321-9365-002***
LS 320M	320 g	1 mg	1 mg	1.5 mg	135 x 135	II / 1 mg**	1.5 s	321-9366-002***
LS 620M	620 g	1 mg	1 mg	1.5 mg	135 x 135	II / 1 mg**	1.5 s	321-9367-002***
LS 920M	920 g	1 mg	1 mg	1.5 mg	135 x 135	I / 1 mg**	2 s	321-9368-002***
LS 1220M	1 220 g	1 mg	1 mg	2 mg	135 x 135	I / 1 mg**	2 s	321-9369-002***
LS 320C	320 g	0.01 g	0.005 g	10 mg	200 x 200	II / 0.01 g**	1.5 s	321-9466-002***
LS 620C	620 g	0.01 g	0.005 g	10 mg	200 x 200	II / 0.1 g**	1.5 s	321-9459-002***
LS 1200C	1 200 g	0.01 g	0.01 g	10 mg	200 x 200	II / 0.1 g**	1.5 s	321-9460-002***
LS 2200C	2 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g**	1.5 s	321-9461-002***
LS 3200C	3 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g**	1.5 s	321-9462-002***
LS 4200C	4 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g**	1.5 s	321-9463-002***
LS 6200C	6 200 g	0.01 g	0.01 g	15 mg	200 x 200	II / 0.1 g**	1.5 s	321-9464-002***
LS 3200D	3 200 g	0.1 g	0.05 g	0.1 g	200 x 200	II / 0.1 g**	1 s	321-9550-002***
LS 6200D	6 200 g	0.1 g	0.05 g	0.1 g	200 x 200	II / 1 g**	1 s	321-9551-002***
LS 10200D	10 200 g	0.1 g	0.1 g	0.15 g	200 x 200	II / 1 g**	2 s	321-9552-002***
LS 10200G	10 200 g	1 g	0.5 g	0.5 g	200 x 200	II / 1 g**	1.5 s	321-9616-002***

\* USP Min. weight (0.1%, k=2, Load >5%) = Min. weight x 10

\*\* Initially verified with SCS (-001) only

\*\*\* -001 for balance with SCS / -002 for balance without SCS

# SERIES 321 OPTIONS, ACCESSORIES & FEATURES



LT	✓	✓	✓	✓	✓	✓	✓	✓	✓	AC	AC	AC	AC	OD	AC	✓	✓	✓	✓	✓	✓	✓	✓	✓	
LX	✓	✓	AC	✓	✓	✓	✓	✓	✓	AC	AC	AC	AC	OD	AC	✓	✓	✓	✓	✓	✓	✓	✓	✓	
LS	✓	✓	AC	✓	✓	✓	✓	✓	✓	AC	AC	AC	AC	OD	AC	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Options	LT	LX	LS
EU-Verification according to 2014/31/EU by Precisa (initial verification), available only for balances with EU/OIML type approval and SCS	350-8685	350-8685	350-8685
Protection IP65: protection against ingress of dust and low pressure water jets, fitted at factory, not all types available	350-8695	350-8695	350-8695
SCS LX: Self Calibration System with clock, automatic on temperature change and real-time programmable	standard	321-xxxx-001	—
SCS LS: Self Calibration System with clock, automatic on temperature change and real-time programmable	standard	—	321-xxx-001

Accessories	LT	LX	LS
Draft shield 321 LG, only for 0.1mg balances	standard	350-8723	standard
Draft shield 321 LG-M and Draft shield 321 LG-M short, for balances >= 1mg and range <= 2.2kg	on demand	on demand	on demand
Draft shield mg, glass with cover	320-8504	320-8504	320-8504
Hook for weighing below the balance	350-8527	350-8527	350-8527
Animal weighing bowl complete for 0.01g, 0.1g and 1g balances	350-8551	350-8551	350-8551
VasoFrame for 0.1mg balances with draft shield LG	350-8722	350-8722	350-8722
VasoFrame for 0.1mg balances with draft shield LX	350-8727	350-8727	350-8727
Density kit for 0.01 mg and 0.1 mg balances, container size: ø 75 mm, h = 100 mm	350-8636	350-8636	350-8636
Density kit solids only (without glass body and hook) for 0.01 mg and 0.1 mg balances, container size ø = 75 mm, h = 100 mm	350-8637	350-8637	350-8637
Glass body for density determination of liquids, V = 10cm³	350-7054	350-7054	350-7054
Downholder for samples with ρ < 1g/cm³	350-7194	350-7194	350-7194
Evaporation trap for pipette calibration for 0.1 mg balances	350-8633	350-8633	350-8633
Adapter for Eppendorf evaporation trap for 0.1 mg balances	350-8634	350-8634	350-8634
Single foot switch for one function: tare, print, ...	350-8814	350-8814	350-8814
Protective cover 321 for the whole balance, set of 5 pieces	350-8686	350-8686	350-8686
Desk power adapter with EU plug, 80V - 240V	350-8372	350-8372	350-8372

## Additional Accessories & Applications

- PrecisaBUS accessories, see Special Products / Accessories
- SmartBox® applications, see Special Products / Accessories
- Further accessories, see Special Products / Accessories

Operating Temperature	Line Voltage, Tolerance	Power Consumption	Frequency
5 .. 40 °C (41°F .. 104°F)	115V / 230V, +15% / -20%	18 VA	50 - 60 Hz

# 165

## ENTRY



## BJ MODEL

5 MEMBRANE KEYPAD OPERATION

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e“	Response Time	Item No.
<b>Precision Balances</b>								
BJ 100M	102 g	1 mg	1 mg	2 mg	Ø 100	–	4 s	165-9327-050
BJ 410C	410 g	0.01 g	0.01 g	0.02 g	135 x 135	–	2 s	165-9422-050
BJ 610C	610 g	0.01 g	0.01 g	0.02 g	135 x 135	–	2 s	165-9423-050
BJ 1000C	1 020 g	0.01 g	0.01 g	0.02 g	135 x 135	–	4 s	165-9425-050
BJ 1200C	1 200 g	0.01 g	0.01 g	0.02 g	135 x 135	–	4 s	165-9436-050
BJ 2200C	2 200 g	0.01 g	0.01 g	0.02 g	135 x 135	–	4 s	165-9451-050
BJ 2100D	2 100 g	0.1 g	0.1 g	0.2 g	170 x 140	–	2 s	165-9513-050
BJ 4100D	4 100 g	0.1 g	0.1 g	0.2 g	170 x 140	–	2 s	165-9514-050
BJ 6100D	6 100 g	0.1 g	0.1 g	0.2 g	170 x 140	–	2 s	165-9515-050
BJ 8100D	8 100 g	0.1 g	0.1 g	0.2 g	170 x 140	–	4 s	165-9518-050
BJ 6100G	6 100 g	1 g	1 g	2 g	170 x 140	–	2 s	165-9603-050
BJ 12100G	12 100 g	1 g	1 g	2 g	170 x 140	–	2 s	165-9604-050

### Options

### 165 BJ

Density application	350-8632
Battery operation with 9V alkaline battery	standard

### Accessories

### 165 BJ

Hook for weighing below the balance	350-8561
Protective cover 165 for the whole balance, set of 5 pieces	350-8598

### Additional Accessories & Applications

- Further accessories, see Special Products / Accessories

Operating Temperature	Line Voltage, Tolerance	Power Consumption	Frequency
5 .. 40 °C (41°F .. 104°F)	115V / 230V, +15% / -20%	3 VA	50 - 60 Hz

## SERIES 165 OPTIONS & ACCESSORIES



BJ	TEC	LCD BL	Battery	Timer	USB Device	RS 232 PQ	RS 232	232	g/m² (ft²)	%	Print	Σ	PC	AC
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

AC = accessory or optional built-in at factory



# 490

## INDUSTRIAL SCALES



### IBK/ITK/ISK MODELS

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
IBK 12000D	12 100 g	0.1 g	0.1 g	0.2 g	400 x 300	II / 1 g	2 s	490-9528-00x**
IBK 18000D	18 100 g	0.1 g	0.1 g	0.2 g	400 x 300	II / 1 g	2 s	490-9529-00x**
IBK 24000D	24 100 g	0.1 g	0.1 g	0.2 g	400 x 300	II / 1 g	2 s	490-9530-00x**
IBK 34000D	34 100 g	0.1 g	0.1 g	0.2 g	400 x 300	II / 1 g	2 s	490-9531-00x**
IBK 34000D-DR	1 2000 g / 3 4 100 g *	0.1 g / 1 g	0.1 g	0.2 g	400 x 300	II / 1 g	2 s	490-9805-00x**
IBK 34000D-FR	1 2000 g - 3 4 100 g *	0.1 g / 1 g	0.1 g	0.2 g	400 x 300	II / 1 g	2 s	490-9532-00x**
IBK 20000G	20 100 g	1 g	0.5 g	1 g	400 x 300	II / 1 g	2 s	490-9606-00x**
IBK 30000G	30 100 g	1 g	0.5 g	1 g	400 x 300	II / 1 g	2 s	490-9607-00x**
IBK 40000G	40 100 g	1 g	0.5 g	1 g	400 x 300	II / 2 g	2 s	490-9608-00x**
IBK 60000G	60 100 g	1 g	1 g	1.5 g	400 x 300	II / 10 g	2 s	490-9609-00x**

Terminal IBK as standard

Protection platform IP54 (IP65 optional)

Options	490
EC-Verification according to 2014/31/EU by Precisa (initial verification) available only for balances with EU/OIML type approval	350-8578
Protection IP65: protection against ingress of dust and low pressure water jets, fitted at factory	350-8646

Accessories	490
Wall bracket for terminal	350-8654
Post for rear mounted terminal	350-8655
Connection cable terminal to platform, length 3m	350-8586-030
Connection cable terminal to platform, length 5.5m	350-8586-055
Connection cable terminal to platform, length 10m	350-8586-100
Below the balance weighing feature, up to 40kg	350-8630
Below the balance weighing feature, up to 40kg, IP65 version	350-8635
Protective cover 490 for terminal, set of 5 pieces	350-8599

Additional Accessories & Applications
- PrecisaBUS accessories, see Special Products / Accessories
- SmartBox® applications, see Special Products / Accessories
- Further accessories, see Special Products / Accessories

\* Approved up to max. 30 100 g

\*\* -001 for Terminal IBK, -002 for Terminal ITK, -003 for Terminal ISK Count, -004 for Terminal ISK FPVO

# SERIES 490 FEATURES



**IBK TERMINAL**

User-friendly indicator.

Standard keyboard layout with 10 keys.  
4 freely definable function keys.

Large digital display, 20 digit display information line.

Vacuum fluorescent display.

Weighing-in guide +/-



**ITK TERMINAL**

User-friendly, multi-application indicator.

Additional keyboard for alphanumerical inputs for manual tare and reference weight input.

Vacuum fluorescent display.



**ISK TERMINAL**

Multi-application indicator for special applications.

Additional keyboard with 30 keys for alphanumerical inputs for manual tare and reference weight input.

Vacuum fluorescent display.  
Weighing-in guide +/-

All applications as per Indicator IT and additional SmartBox

	+	VFD	SCS	RS485	BUS	BD PO	3	LOCK	RBC 123	IDS	232	HID	BT	WIFI	BLUETOOTH	I/O	E	PICTURE	%	ICON	DBW	X	+/-	SUM	PPM	MBW	ART	MSW
IBK	✓	✓	✓	✓	✓	✓	✓	✓				✓	AC	AC	AC	AC	OD	AC	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ITK	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AC	AC	AC	AC	OD	AC	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ISK	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AC	AC	AC	AC	OD	AC	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Operating Temperature		Line Voltage, Tolerance		Power Consumption				Frequency	
5 .. 40 °C (41°F .. 104°F)		115V / 230V, +15% / -20%		25 VA				50 - 60 Hz	

# MOISTURE ANALYZERS



## SERIES 365

CUSTOMIZABLE GRAPHIC SCREEN  
12 MEMBRANE KEYPAD OPERATION

Model	Capacity	Readability	Repeatability	Linearity	Temperature Range	Pan Size (mm)	Response Time
EM 120-HR	124 g	0.1 mg / 0.001%	1 g / 0.1 % 10 g / 0.01 %	0.2 mg	50 - 230 °C	Ø 100	4 s

## SERIES 330

10 MEMBRANE KEYPAD OPERATION

Model	Capacity	Readability	Repeatability	Linearity	Temperature Range	Pan Size (mm)	Response Time
XM 60-HR	124 g	0.1 mg / 0.001 %	1 g / 0.1 % 10 g / 0.01 %	0.2 mg	30 - 230 °C	Ø 100	4 s
XM 60	124 g	1 mg / 0.01 %	1 g / 0.2 % 10 g / 0.02 %	1.5 mg	30 - 230 °C	Ø 100	3 s
XM 66	310 g	1 mg / 0.01 %	1 g / 0.2 % 10 g / 0.02 %	1.5 mg	30 - 230 °C	Ø 100	3 s

## SERIES 335

10 MEMBRANE KEYPAD OPERATION

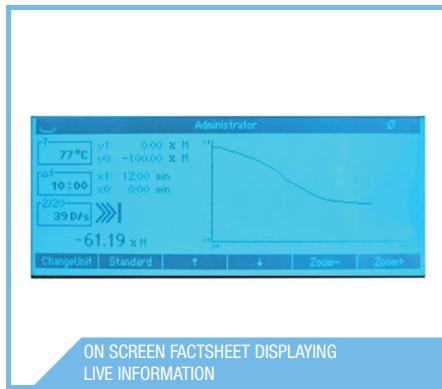
Model	Capacity	Readability	Repeatability	Linearity	Temperature Range	Pan Size (mm)	Response Time
XM 50	52 g	1 mg / 0.01 %	1 g / 0.5 % 10 g / 0.05 %	3.0 mg	30 - 170 °C	Ø 100	4 s

## ITEM NUMBERS\*

Radiator	EM 120-HR	XM 60-HR	XM 60	XM 66	XM 50
Halogen radiator, 230 V	365-9245-001	330-9243B-001	330-9324B-001	330-9329B-001	335-9360-001
Halogen radiator, 115 V	365-9245-002	330-9243B-002	330-9324B-002	330-9329B-002	335-9360-002
Infrared radiator, 230 V	365-9245-003	330-9243B-003	330-9324B-003	330-9329B-003	335-9360-003
Infrared radiator, 115 V	365-9245-004	330-9243B-004	330-9324B-004	330-9329B-004	335-9360-004
Infrared dark radiator, 230 V	365-9245-007	330-9243B-007	330-9324B-007	330-9329B-007	335-9360-007
Infrared dark radiator, 115 V	365-9245-008	330-9243B-008	330-9324B-008	330-9329B-008	335-9360-008

\* The item numbers include the moisture analyzer with the corresponding heating source

# MOISTURE ANALYZERS OPTIONS & ACCESSORIES



EM 120-HR	✓	✓		✓		✓	✓	✓	✓	✓	✓	AC	AC	AC	✓	✓	✓	
XM 60-HR	✓		✓		✓	✓		✓	✓		✓					✓	✓	
XM 60	✓		✓		✓	✓		✓	✓		✓					✓	✓	
XM 66	✓		✓		✓	✓		✓	✓		✓						✓	
XM 50	✓		✓		✓	✓		✓	✓		✓					✓	✓	

Accessories	EM 120-HR	XM 60-HR	XM 60	XM 66	XM 50
Sample pans, aluminum, Ø 100mm, set of 80 pieces	350-2032	350-2032	350-2032	350-2032	350-2032
Sample pan reusable, stainless steel, Ø100mm, 1 piece	330-2018	330-2018	330-2018	330-2018	330-2018
Fiberglass filters, Ø 90mm, set of 100 pieces	350-4130	350-4130	350-4130	350-4130	350-4130
Temperature calibration disc, sensor - type K	350-8580	350-8580	350-8580	350-8580	350-8580
Temperature calibration set, with certificate	350-8585	350-8585	350-8585	350-8585	350-8585
Temperature calibration set, without certificate	350-8584	350-8584	350-8584	350-8584	350-8584
Calibration weight, 50 g, E2	350-8241	350-8241	350-8241	350-8241	350-8241
Dust filter set for moisture analyzers	350-8687	350-8687	350-8687	350-8687	350-8687
Protective cover 320 for terminal, set of 5 pieces	—	350-8590	350-8590	350-8590	350-8590

Slide-in Modules, Slide-in Modules, on demand only	EM 120-HR
USB Host	350-8665
LAN Ethernet connection	350-8666
WiFi connection	350-8667
Bluetooth connection	350-8668
PS 2 female & RS232 DB9 female	350-8670

Additional Accessories & Applications
- PrecisaBUS accessories, see Special Products / Accessories
- Further accessories, see Special Products / Accessories

Operating Temperature	Line Voltage, Tolerance	Power Consumption	Frequency
5 .. 40 °C (41°F .. 104°F)	115V / 230V, +15% / -20%	420 W	50 - 60 Hz

# 340

## AUTOMATIC MOISTURE & ASH ANALYZERS

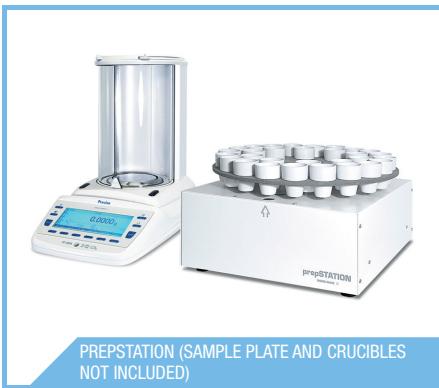
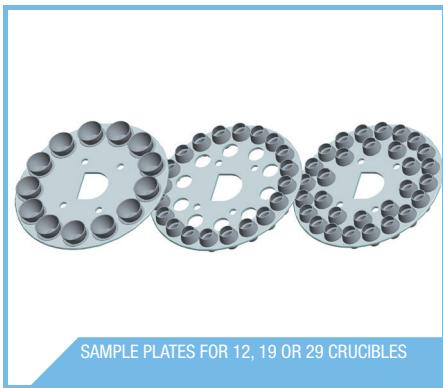


### prepASH® MODEL

Model	Capacity	Readability	Repeatability	Temperature Range	Crucibles	Response Time	Item No.
prepASH 229	120 g	0.1 mg / 0.01 %	1 g / 0.2 % 10 g / 0.02 %	50 - 1 000 °C	29 pcs. / 35 ml	4 s	340-9220-002
prepASH 219	120 g	0.1 mg / 0.01 %	1 g / 0.2 % 10 g / 0.02 %	50 - 1 000 °C	19 pcs. / 35 ml	4 s	340-9221-002
prepASH 212	120 g	0.1 mg / 0.01 %	1 g / 0.2 % 10 g / 0.02 %	50 - 1 000 °C	12 pcs. / 40 ml	4 s	340-9222-002

Options	prepASH 229	prepASH 219	prepASH 212	Standard Applications	Recommendations	
					Sulphuric Acid Applications	Volatile (Coal, Coke)
3 inputs gas flow control unit for air and 2 additional gases (N2, O2)	340-8502	340-8502	340-8502	yes	yes	essential
prepSTATION includes:						
- prepSTATION unit						
- EP 120A analytical balance	340-9010	340-9010	340-9010	yes	yes	no
- Data cable for the connection between prepSTATION and balance						
Scrubber, Condensation-neutralization-absorption unit for e.g. determination of sulfated ash with sulfuric acid	340-9001	340-9001	340-9001	optional	essential	no
Scrubber, Condensation-Absorption-Connection-Set	340-9002	340-9002	340-9002	optional	essential	no
ECD Enhanced cooling device	340-8504	340-8504	340-8504	yes	yes	yes
ECD Enhanced cooling device, as retrofit kit	340-9004	340-9004	340-9004	yes	yes	yes

# SERIES 340 ACCESSORIES



229	✓	✓	✓	✓	✓	✓	✓	✓	✓
219	✓	✓	✓	✓	✓	✓	✓	✓	✓
212	✓	✓	✓	✓	✓	✓	✓	✓	✓

Accessories	prepASH 229	prepASH 219	prepASH 212	Standard Applications	Recommendations	
					Sulphuric Acid Applications	Volatile (Coal, Coke)
Sample plate for 29/19 crucibles, silicate ceramic SiC, for prepASH 229 and prepASH 219	standard (340-4065)	standard (340-4065)	–	standard 229/219	standard 229/219	standard 229/219
Crucible 35ml, porcelain glazed, set of 5 pieces APPROVED for applications with acid	standard	standard	340-8037	standard 229/219	standard 229/219	no
Crucible 26ml, Al203, for use with lid Al203, set of 5 pieces, use with sample plate 29/19 and crucible-lid 340-8033 NOT recommended for applications with acid	340-8032	340-8032	340-8032	yes	yes	standard 229/219
Crucible-lid, Al203, set of 5 pieces use with sample plate 29/19 and crucible 340-8032	340-8033	340-8033	340-8033	yes	yes	standard 229/219
Sample plate for 12 large crucibles, silicate ceramic SiC, for prepASH 229/219/212 use with adapter 340-8035	340-4072	340-4072	standard	standard 212	standard 212	no
Adapter for crucible, silicate ceramic SiC, set of 5 pieces use only with sample plate 12 and standard crucible 340-8034, 340-8038 or other crucible available from the market	340-8035	340-8035	standard	standard 212	standard 212	no
Crucible 40ml, porcelain glazed, SiC ASTM D 189-65, set of 5 pieces, use only with sample plate 12 and adapter 340-8035 APPROVED for applications with acid	340-8034	340-8034	standard	standard 212	standard 212	no
Crucible 50ml, porcelain glazed, set of 5 pieces use only with sample plate 12 and adapter 340-8035 APPROVED for applications with acid	340-8038	340-8038	340-8038	yes	yes	no
Sample plate holder	340-8012	340-8012	340-8012	yes	recommended	yes
Crucible tongs	PN 3950-099	PN 3950-099	PN 3950-099	standard	standard	–
Crucible tongs for crucible with lids	340-7090	340-7090	340-7090	–	–	standard
Protection for Thermocouple	340-8516	340-8516	340-8516	optional	optional	optional

## Additional Accessories & Applications

- Further accessories, see Special Products / Accessories

Operating Temperature	Line Voltage, Tolerance	Power Consumption	Frequency
5 .. 40 °C (41°F .. 104°F)	115V / 230V, +15% / -20%	5.5 kW (230 W, 25 A)	50 - 60 Hz

# SPECIAL PRODUCTS



## LS CARAT MODEL

## SERIES 321

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e”	Response Time	Item No.
LS 600M-C	600 ct / 120 g	0.001 ct / 0.001 g	0.001 ct / 0.001 g	0.001 ct / 0.001 g	ø 90	I / 0.01 ct*	2 s	321-9371-002**
LS 1100M-C	1100 ct / 200 g	0.001 ct / 0.001 g	0.001 ct / 0.001 g	0.001 ct / 0.001 g	ø 90	I / 0.01 ct*	2 s	321-9372-002**
LS 3100C-C	3100 ct / 620 g	0.01 ct / 0.01 g	0.01 ct / 0.005 g	0.01 ct / 0.01 g	135 x 135	II / 0.1 ct*	1.5 s	321-9469-002**

## LX/LS-STB STIRRER MODEL

## SERIES 321

Model	Capacity	Readability	Repeatability	Linearity	Pan Size / Stirring module B x T x H (mm)	Dimensions Stirrer balance B x T x H (mm)	Class / „e”	Response Time	Item No.
LS 2200C-STB	2 200 g	0.01 g	0.01 g	15 mg	190 x 190 x 30	228 x 381 x 99	II / 0.1 g	1.5 s	321-9461-801
LS 4200C-STB	4 200 g	0.01 g	0.01 g	15 mg	190 x 190 x 30	228 x 381 x 99	II / 0.1 g	1.5 s	321-9463-801
LX 4200C-STB	4 200 g	0.01 g	0.01 g	15 mg	190 x 190 x 30	228 x 381 x 99	II / 0.1 g	1.5 s	321-9456-801

## DC IONIZERS

Power supply	Neutralization	Power	Airflow	Temp. Range	Item No.
<b>Stat-FAN</b>					
230 V AC, 115 V AC or 18 V AC by an adapter (-00x: -001=EU, -002=UK, -003=AUS, -004=USA)	< +/- 20 V	2 W	max. 225 l/min	0-40 °C	350-8682-00x

Power supply	Neutralization	Power	Temp. Range	IP Class	Item No.
<b>Stat-PEN</b>					
> 100 V AC 50-60 Hz (-00x: -001=EU, -002=UK, -003=AUS, -004=USA)	< +/- 30 V	0.1 W	- 20 + 40 °C	IP60	350-8683-00x

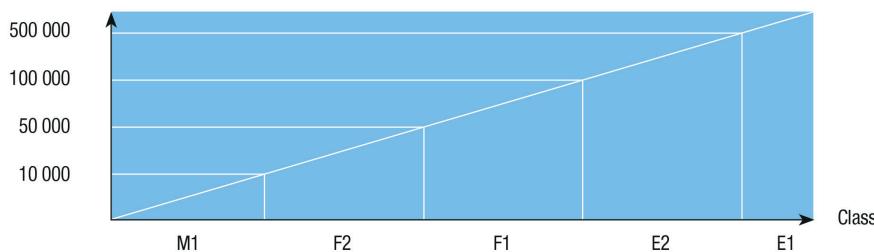
\* Initially verified with SCS (-001) only

\*\* -001 for balance with SCS / -002 for balance without SCS, see „Options“ of Series 321 LS



## CALIBRATION WEIGHTS

Nominal Value	Class	Accuracy	Item No. without Certificate	Item No. with Certificate
50 g	E2	0.15 mg	350-8200	350-8260
100 g	E2	0.15 mg	350-8201	350-8261
200 g	E2	0.3 mg	350-8202	350-8262
500 g	E2	0.75 mg	350-8203	350-8263
100 g	F1	0.5 mg	350-8243	350-8264
200 g	F1	1.0 mg	350-8244	350-8265
500 g	F1	2.5 mg	350-8245	350-8266
1 000 g	F1	5.0 mg	350-8246	350-8267
100 g	F2	1.5 mg	350-8247	350-8268
200 g	F2	3 mg	350-8248	350-8269
500 g	F2	7.5 mg	350-8249	350-8270
1 000 g	F2	15 mg	350-8250	350-8271
2 000 g	F2	30 mg	350-8251	350-8272
5 000 g	F2	75 mg	350-8252	350-8273
2 000 g	M1	0.1 g	350-8253	350-8274
5 000 g	M1	0.25 g	350-8254	350-8275
10 000 g	M1	0.5 g	350-8255	350-8276
1 mg - 500 g	F1		350-8257	350-8277
1 mg - 1 000 g	F1		350-8256	350-8278
1 mg - 500 g	F2		350-8258	350-8279
1 mg - 1 000 g	F2		350-8259	350-8280



number of scale intervals = capacity / readability  
(e.g. 3 200C => d = 3 200g / 0.01g = 320 000)

scale interval on non-verified balances = d  
scale interval on verified balances = e

# SPECIAL PRODUCTS ACCESSORIES

Common Accessories	520	390 H_	360 EP	360 ES
Printer LP4024, 230V / 115V	350-8391	350-8391	350-8391	350-8391
Paper roll for Printer LP4024, set of 4 pieces	350-8392	350-8392	350-8392	350-8392
Ribbon for Printer LP4024	PN 3953-013	PN 3953-013	PN 3953-013	PN 3953-013
Paper roll for Printer CBM910	350-8366	350-8366	350-8366	350-8366
Ribbon for Printer CBM910	350-8367	350-8367	350-8367	350-8367
Multiplexor for up to 7 instruments for serial (RS232) data transmission to PC or Printer (at least one instrument must be a series 320, 321, 330, 335, 365 or 490)	-	-	350-8513	350-8513
Data cable RJ45, 0.75m	-	-	-	-
Data cable RJ45, 1.5m	-	-	-	-
Data cable RJ45, 3m	-	-	-	-
Adapter RJ45-DB9f, (PC/Printer LP4024)	-	-	-	-
Adapter RJ45-DB25m, (Printer CBM910)	-	-	-	-
Data cable DB9m-RJ45, 1.5m, for balance used as reference balance	350-8661	350-8661	350-8661	350-8661
Data cable RJ45, crossed, 1.5m, for balance used as reference balance	-	-	-	-
Data cable RJ45-DB9f, 1.5m, (PC/Printer LP4024)	-	-	-	-
Data cable RJ45-DB25m, 1.5m, (Printer CBM910)	-	-	-	-
Data cable DB9m-DB9f, 1.5m, (PC/Printer LP 4024, 1:1)	350-8672	350-8672	350-8672	350-8672
Data cable DB9m-DB25m, 1.5m, (Printer CBM910)	350-8673	350-8673	350-8673	350-8673
Data cable DB9f-DB9f, 1.5m, (PC/Printer LP4024, 1:1)	-	-	-	-
Data cable DB9f-DB25m, 1.5m, (Printer CBM910)	-	-	-	-
USB cable A-B, 1.5m, (PC)	PN 3950-125	PN 3950-125	PN 3950-125	PN 3950-125
Interface box, Interface and power splitter	350-8940-000	350-8940-000	350-8940-000	350-8940-000
Interface box, LAN Ethernet connection	see also 520	built-in	see also 360	350-8940-001
Interface box, WiFi connection	see also 520	see 390	see also 360	350-8940-002
Interface box, Bluetooth connection	see also 520	see also 390	see also 360	350-8940-003
HID cable, RS232, DB9m-USB-A, 1.5m, (PC), (x: 0=e, 1=d, 2=f)	use PN 3950-125	on demand	350-8816-x00	350-8816-x00
External USV accu power pack for continuous operation	350-8662	350-8662	350-8662	350-8662
Power splitter cable	350-8399	350-8399	350-8399	350-8399
Anti-theft device, mechanical	350-8555	350-8555	350-8555	350-8555
Carat bowl (for diamond weighing)	350-8322	350-8322	350-8322	350-8322

PrecisaBUS Accessories (available on demand only)	520	390 H_	360 EP	360 ES
Remote display free-standing, incl. 1.5 m cable	see 520	-	-	350-8504*
Remote display mounted to the balance	-	-	-	-
Remote display with wall bracket, incl. 1.5 m cable	see 520	-	-	350-8516*
RS232 interface box for data transmission, DB25f: - to PC, Printer or Barcode-Printer - from Barcode-Reader (350-8856) or reference balance	-	-	-	350-8506*
Interface 20mA current loop passive	-	-	-	350-8526*
LAN Ethernet connection	-	-	-	350-8573*
WiFi connection	-	-	-	350-8588*
Signal Lamp, indicator with 3 lamps, green / red / yellow	350-8734	350-8734	350-8734	350-8510*
Horn for signal lamp	350-8533	350-8533	350-8533	350-8533*
Input / Output module with 6 TTL inputs / 8 relay outputs	on demand	on demand	on demand	350-8509*
CCE-Barcode scanner BCS5040, DB25m, with push button, to be connected to the Interface RS232 350-8506	-	-	-	350-8856

SmartBox® Applications	520	390 H_	360 EP	360 ES
SmartBox® Counting	-	-	-	350-8511-011*
SmartBox® FPV0 (Finished Goods Packing Control)	-	-	-	350-8511-012*
CCE-Barcode scanner BCS5040, RJ45, with push button to be connected to the SmartBox®	-	-	-	350-8531

## SPECIAL PRODUCTS ACCESSORIES

321 LT/LX/LS	165 BJ	490 IBK/ITK/ISK	330 XM	EM 120-HR
350-8391	350-8391	350-8391	350-8391	350-8391
350-8392	350-8392	350-8392	350-8392	350-8392
PN 3953-013	PN 3953-013	PN 3953-013	PN 3953-013	PN 3953-013
350-8366	350-8366	350-8366	350-8366	350-8366
350-8367	350-8367	350-8367	350-8367	350-8367
350-8513	350-8513	350-8513	350-8513	350-8513
-	350-8525	350-8525	350-8525	-
-	350-8520	350-8520	350-8520	-
-	350-8521	350-8521	350-8521	-
-	350-8522	350-8522	350-8522	-
-	350-8524	350-8524	350-8524	-
350-8661	-	-	-	-
-	350-8534	-	-	-
-	350-8557	350-8557	350-8557	-
-	350-8559	350-8559	350-8559	-
350-8672	-	-	-	350-8672
350-8673	-	-	-	350-8673
-	-	-	-	-
PN 3950-125	-	-	-	PN 3950-125
350-8940-000	350-8940-000	350-8940-000	350-8940-000	350-8940-000
350-8940-001	350-8940-001	350-8940-001	350-8940-001	350-8940-001
350-8940-002	350-8940-002	350-8940-002	350-8940-002	350-8940-002
350-8940-003	350-8940-003	350-8940-003	350-8940-003	350-8940-003
350-8816-x00	-	350-8816-x00	-	-
350-8662	350-8662	350-8662	-	-
350-8399	350-8399	-	-	-
350-8555	350-8555	350-8555	350-8555	350-8555
350-8322	350-8322	350-8322	-	-

321 LT/LX/LS	165 BJ	490 IBK/ITK/ISK	330 XM	EM 120-HR
350-8504	-	350-8504	350-8504	-
-	-	-	-	-
350-8516	-	350-8516	350-8516	-
350-8506	-	350-8506	350-8506	-
350-8526	-	350-8526	350-8526	-
350-8573	-	350-8573	350-8573	-
350-8588	-	350-8588	350-8588	-
350-8510	-	350-8510	350-8510	-
350-8533	-	350-8533	350-8533	-
350-8509	-	350-8509	350-8509	-
350-8856	-	350-8856	350-8856	-

321 LT/LX/LS	165 BJ	490 IBK/ITK/ISK	330 XM	EM 120-HR
350-8511-011	-	350-8511-011**	-	-
350-8511-012	-	350-8511-012**	-	-
350-8531	-	350-8531	-	-

# ICONS

The following symbols stand for the most important features and applications of Precisa scales and provide a fast overview of each product

## FEATURES

 Swiss made	 Swiss technology
 Colour touch screen	 USB device (for PC)
 Backlit graphic LCD	 Human Interface Device (for PC)
 Backlit LCD	 LAN Ethernet connection
 Vacuum fluorescent display	 WiFi connection
 Self-linearization system, fully automated	 Bluetooth connection
 Self-calibration system, fully automated	 Communications modules (LAN, WiFi, USB host, Bluetooth, ...)
 External Calibration, with calibration warning	 Touchless-Sensor (draft shield, tare, print, ...)
 Motorized draft shield (works with TLS automatic)	 External I/O (tare, print, ..., relay)
 Clock (GLP/GMP printout, auto-cal, etc.)	 Precisa BUS
 Below balance weighing	 EU/OIML type approval
 Anti-theft protection (mechanical and code)	 Integrated alibi memory (with EU type approval)
 Easy alphanumeric input	 Support IQ/OO/PQ
 Direct tare and reference weight entry	 Integrated audit trail
 Identifier and label handling	 Electrostatic cancellation system
 RS232 interface (for PC/printer)	 Ambient observation system
 USB host (barcode, flash drive, ...)	

## APPLICATIONS

 Units, g, mg, ozt, lb, tael, etc.	 Statistics
 Percent weighing	 Recorder
 Piece counting	 Density Determination (of liquids, solids, ...)
 Animal weighing	 Buoyancy error suppression technology
 Dynamic Difference Weighing (e.g. weighing on a ship)	 Multilevel back weighing
 Free conversion, Area conversion	 Pipette calibration, optionally with evaporation trapweighing
 Check weighing	 Automatic repeatability test
 Net total application (add up, summation, dosing)	 Minimum sample weight (USP, Chapter 41)
 Mixtures, Recipes	 Maintenance service package

	Series 390				Series 360		Series 321			Series 520		Series 165	Series 490		
	HF	HA	HE	HM	EP	ES	LT	LX	LS	PT	PB	BJ	ISK	ITK	IBK
<b>FEATURES</b>															
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
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	OD	OD	OD	OD	OD	AC	AC	AC	AC	✓	✓		AC	AC	AC
	✓	✓	✓	✓	✓	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC
	AC	AC	AC	AC	AC	AC	AC	AC	AC	OD	OD	OD		AC	AC
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	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
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	✓	AC	AC												
<b>APPLICATIONS</b>															
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
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	✓	✓	✓	✓	✓					✓					

AC = accessory or optional built-in at factory

OD = on demand

# TECHCOMP GROUP

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ISO 9001:2015  
BUREAU VERITAS  
Certification  
Nº CH10355934

