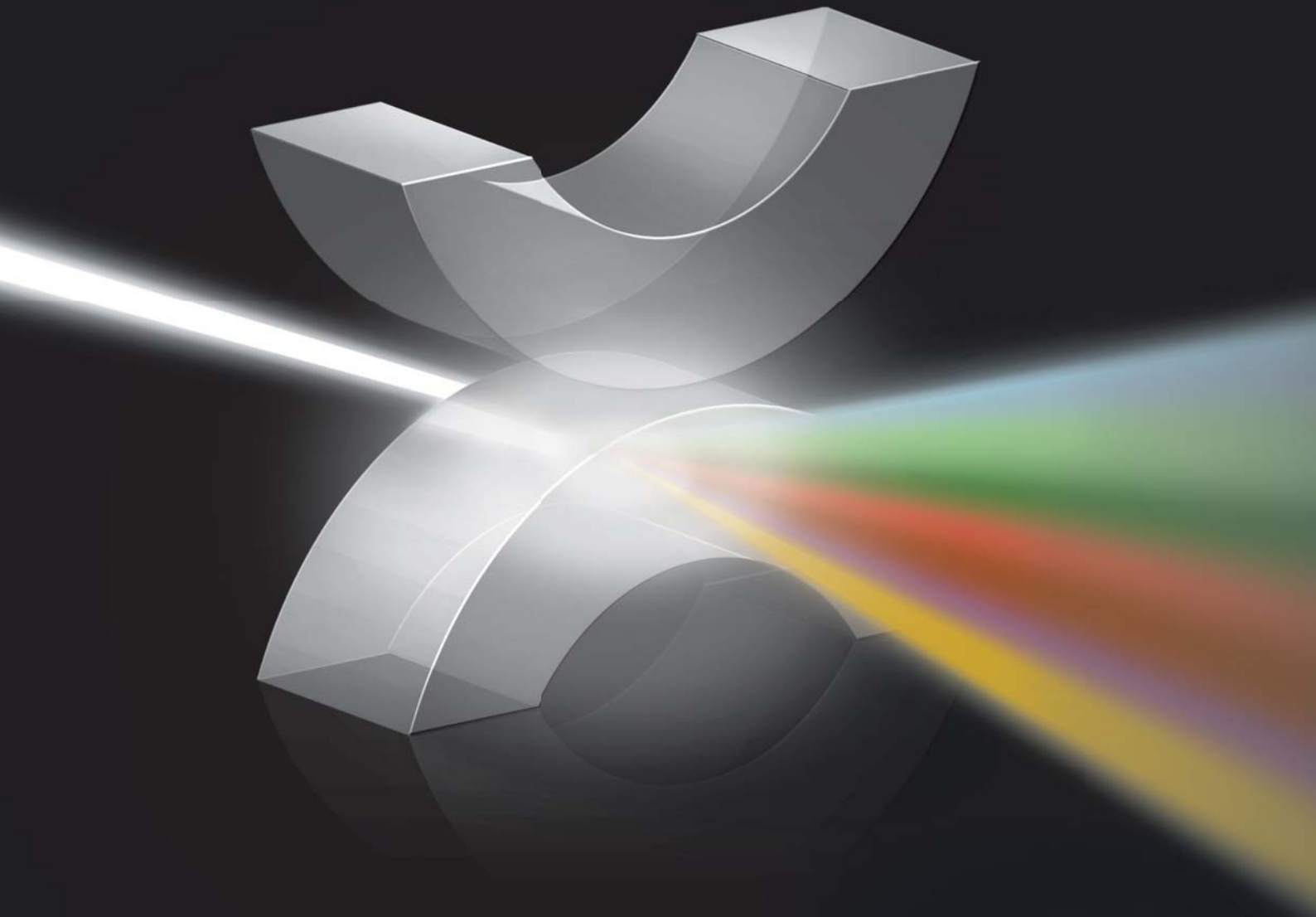


# GENERAL CATALOG



**The Precisa Range of high-tech  
Balances and Analytical Equipment.**



## **Swiss Precision.**

Continually investing in development of new technologies, Precisa Gravimetrics AG funds wide-ranging research by an in-house team of highly skilled engineers and technicians. In addition, Precisa maintains close cooperation with national and international universities, technical colleges and colleges of applied science to ensure that product innovations meet the latest technological requirements.

The result is a state-of-the-art product range, which fully reflects traditional Swiss characteristics such as precision, quality and reliability – plus a complete range of customer specific benefits.

## **World-Wide Performance.**

Our uncompromising quality standards in research, manufacturing, design and after-sales service have made Precisa one of the leading brands in our business field world-wide. As a result, Precisa products are available in more than 100 countries around the globe, exceeding the expectations of their excellent image in countless laboratories and institutions. Precisa users throughout the world benefit daily from our unique levels of competent support, quick processing time and individual, customer-oriented solutions. Anytime, anywhere.



**Semi-micro Balances**



**Analytical Balances**



**Precision Balances**



**Standard Balances**



**Moisture Analyzers**



**Moisture Analysis and  
Ash Determination System**

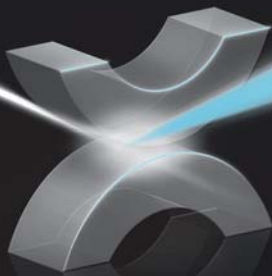


**Industrial Scales**

Carat Balances  
Gold Balances  
Education  
DC Ionizers  
Weights  
Miscellaneous

**Special products**





360 EP: Sensor-controlled automatic draft shield which can be operated from left or right



360 ES: Draft shield design provides optimum air-current suppression inside the weighing chamber



Weighing pan  $\varnothing$  80 mm

Options	360 EP	360 ES
Set for EC / OIML verification, fitted at factory, not verified, available only for balances with EC (/ OIML) Type approval	350-8671	350-8671
EC-Verification according to 90/384/ECC by Precisa (initial verification) available only for balances with EC (/ OIML) Type approval and SCS	350-8679	350-8679
SCS: Self Calibration System with clock, automatic on temperature change and real-time programmable	standard	standard
Clock	standard	standard

Accessories	360 EP	360 ES
Draft shield 360 automatic, height 260 mm	standard	350-8657
Draft shield 360 automatic, height 180 mm	350-8658	350-8658
Draft shield 360 manual, height 260 mm	350-8659	standard
Draft shield 360 manual, height 180 mm	350-8660	350-8660
Podest for draft shield 360	350-8678	350-8678
Draft shield 320 XB, height 260 mm	350-8519	350-8519
Draft shield 320 XB, height 180 mm	350-8518	350-8518
Hook for weighing below the balance	350-8527	350-8527
Cable for balance used as reference balance	350-8661	350-8661
External USV accu power pack for continuous operation	350-8662	350-8662
Power supply / Adapter with Euro plug for balances with IP65 protection (80 V - 240 V)	350-8372	350-8372
Density kit for 0.01 mg and 0.1 mg balances Container size $\varnothing=75$ 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 $\varnothing=75$ mm, h= 100 mm	350-8637	350-8637
Glass body 10ccm for density determination of liquids	350-7054	350-7054
Downholder for samples with density $< 1$ g/cm <sup>3</sup>	350-7194	350-7194
Evaporation trap for pipette calibration complete, for 0.01 mg and 0.1 mg balances	350-8633	350-8633
Adapter to assemble Eppendorf Humidity Trap, for 0.01 mg and 0.1 mg balances	350-8634	350-8634
Dust cover for the whole balance, set of 20 pieces	350-8676	350-8676

Series 360, slide-in modules	360 EP	360 ES
Precisa BUS converter, enables connection to almost all Precisa BUS accessories	-	350-8664
USB Host	350-8665	-
Ethernet wired	350-8666	-
Ethernet wireless	350-8667	-
Bluetooth	350-8668	-
PS 2 Female & RS 232 DB9 Female	350-8670	-

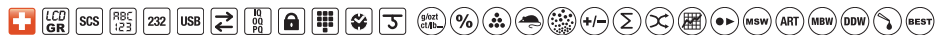
### Additional Applications & Features

- SmartBox® Applications, see Special Accessories
- Precisa BUS accessories, see Special Accessories
- Further special accessories and options, see Special Accessories

# Analytical Balances 0.1 mg



## EXECUTIVE PRO Series 360 EP



Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm/inch)	Class / „e“
EP 120A	120 g	0.1 mg	0.1 mg	0.2 mg	Ø 90 / 3.5	Class I / 1 mg
EP 220A	220 g	0.1 mg	0.1 mg	0.2 mg	Ø 90 / 3.5	Class I / 1 mg
EP 320A	320 g	0.1 mg	0.1 mg	0.2 mg	Ø 90 / 3.5	Class I / 1 mg
EP 420A	420 g	0.1 mg	0.15 mg	0.4 mg	Ø 90 / 3.5	Class I / 1 mg
EP 520A	520 g	0.1 mg	0.15 mg	0.4 mg	Ø 90 / 3.5	-
EP 420A-FR	120 g - 420 g	0.1 mg / 1 mg	0.15 / 1 mg	0.3 / 1 mg	Ø 90 / 3.5	Class I / 1 mg



## EXECUTIVE Series 360 ES



Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm/inch)	Class / „e“
ES 120A	120 g	0.1 mg	0.1 mg	0.2 mg	Ø 90 / 3.5	Class I / 1 mg
ES 220A	220 g	0.1 mg	0.1 mg	0.2 mg	Ø 90 / 3.5	Class I / 1 mg
ES 320A	320 g	0.1 mg	0.1 mg	0.2 mg	Ø 90 / 3.5	Class I / 1 mg
ES 420A	420 g	0.1 mg	0.15 mg	0.4 mg	Ø 90 / 3.5	Class I / 1 mg
ES 520A	520 g	0.1 mg	0.15 mg	0.4 mg	Ø 90 / 3.5	-
ES 420A-FR	120 g - 420 g	0.1 mg / 1 mg	0.15 / 1 mg	0.3 / 1 mg	Ø 90 / 3.5	Class I / 1 mg



## PREMIUM Series 321 LX



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



## MASTER Series 320 XB



Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm/inch)	Class / „e“
XB 120A	120 g	0.1 mg	0.1 mg	0.2 mg	Ø 80 / 3.1	Class I / 1 mg
XB 220A	220 g	0.1 mg	0.1 mg	0.2 mg	Ø 80 / 3.1	Class I / 1 mg



360 EP: Sensor-controlled automatic draft shield which can be operated from left or right



360 ES: Draft shield with small weighing chamber for appropriate handling of particularly delicate samples



321 LX: Ergonomically designed draft shield provides optimum user-control



320 XB: Simple draft shield can be operated using either the left or right hand

Options	360 EP	360 ES	321 LX	320 XB
Set for EC / OIML verification, fitted at factory, not verified, available only for balances with EC (/ OIML) Type approval	350-8671	350-8671	350-8684	350-8528
EC-Verification according to 90/384/ECC by Precisa (initial verification) available only for balances with EC (/ OIML) Type approval and SCS	350-8679	350-8679	350-8685	350-8587
SCS: Self Calibration System with clock, automatic on temperature change and real-time programmable	standard	standard	available	available
Clock	standard	standard	standard	350-8532

Accessories	360 EP	360 ES	321 LX	320 XB
Draft shield 360 automatic, height 260 mm	standard	350-8657	-	-
Draft shield 360 automatic, height 180 mm	350-8658	350-8658	-	-
Draft shield 360 manual, height 260 mm	350-8659	standard	-	-
Draft shield 360 manual, height 180 mm	350-8660	350-8660	-	-
Podest for draft shield 360	350-8678	350-8678	-	-
Draft shield 321 LX, height 260 mm	-	-	350-8689	-
Draft shield 320 XB, height 260 mm	350-8519	350-8519	-	standard
Draft shield 320 XB, height 180 mm	350-8518	350-8518	-	350-8518
Hook for weighing below the balance	350-8527	350-8527	350-8527	350-8527
Cable for balance used as reference balance	350-8661	350-8661	350-8661	350-8534
External USV accu power pack for continuous operation	350-8662	350-8662	350-8662	350-8662
Power supply / Adapter with Euro plug for balances with IP65 protection (80 V - 240 V)	350-8372	350-8372	350-8372	350-8372
Density kit for 0.01 mg and 0.1 mg balances Container size $\varnothing=75$ mm, h= 100 mm	350-8636	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 $\varnothing=75$ mm, h= 100 mm	350-8637	350-8637	350-8637	350-8637
Glass body 10ccm for density determination of liquids	350-7054	350-7054	350-7054	350-7054
Downholder for samples with density $< 1$ g/cm <sup>3</sup>	350-7194	350-7194	350-7194	350-7194
Evaporation trap for pipette calibration complete, for 0.01 mg and 0.1 mg balances	350-8633	350-8633	350-8633	350-8633
Adapter to assemble Eppendorf Humidity Trap, for 0.01 mg and 0.1 mg balances	350-8634	350-8634	350-8634	350-8634
Dust cover for the whole balance, set of 20 pieces	350-8676	350-8676	350-8686	350-8589
Dust cover 320 over display, set of 20 pieces	-	-	-	350-8590
Night cover 320 for balance without draft shield	-	-	-	350-4097
Night cover 320 for balance with draft shield	-	-	-	350-4107

Series 360, slide-in modules	360 EP	360 ES
Precisa BUS converter, enables connection to almost all Precisa BUS accessories	-	350-8664
USB Host	350-8665	-
Ethernet wired	350-8666	-
Ethernet wireless	350-8667	-
Bluetooth	350-8668	-
PS 2 Female & RS 232 DB9 Female	350-8670	-

### Additional Applications & Features

- SmartBox® Applications, see Special Accessories
- Precisa BUS accessories, see Special Accessories
- Further special accessories and options, see Special Accessories

# Precision Balances 0.001 g



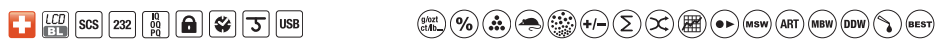
## EXECUTIVE PRO Series 360 EP



Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e“
EP 320M	320 g	1 mg	1 mg	1.5 mg	135 x 135	Class II / 10 mg
EP 620M	620 g	1 mg	1 mg	1.5 mg	135 x 135	Class II / 10 mg
EP 920M	920 g	1 mg	1 mg	1.5 mg	135 x 135	Class I / 10 mg
EP 1220M	1 220 g	1 mg	1 mg	2 mg	135 x 135	Class I / 10 mg
EP 2220M	2 220 g	1 mg	1 mg	2 mg	135 x 135	Class I / 10 mg
EP 620M-FR	120 g - 620 g	1 mg / 10 mg	1 mg / 10 mg	1.5 mg / 10 mg	135 x 135	Class II / 10 mg
EP 1220M-FR	240 g - 1 220 g	1 mg / 10 mg	1 mg / 10 mg	1.5 mg / 10 mg	135 x 135	Class I / 10 mg



## EXECUTIVE Series 360 ES



Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e“
ES 320M	320 g	1 mg	1 mg	1.5 mg	135 x 135	Class II / 10 mg
ES 620M	620 g	1 mg	1 mg	1.5 mg	135 x 135	Class II / 10 mg
ES 920M	920 g	1 mg	1 mg	1.5 mg	135 x 135	Class I / 10 mg
ES 1220M	1 220 g	1 mg	1 mg	2 mg	135 x 135	Class I / 10 mg
ES 2220M	2 220 g	1 mg	1 mg	2 mg	135 x 135	Class I / 10 mg
ES 620M-FR	120 g - 620 g	1 mg / 10 mg	1 mg / 10 mg	1.5 mg / 10 mg	135 x 135	Class II / 10 mg
ES 1220M-FR	240 g - 1 220 g	1 mg / 10 mg	1 mg / 10 mg	1.5 mg / 10 mg	135 x 135	Class I / 10 mg



## PREMIUM Series 321 LX



Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e“
LX 320M	320 g	1 mg	1 mg	1.5 mg	135 x 135	Class II / 10 mg
LX 620M	620 g	1 mg	1 mg	1.5 mg	135 x 135	Class II / 10 mg
LX 920M	920 g	1 mg	1 mg	1.5 mg	135 x 135	Class I / 10 mg
LX 1220M	1 220 g	1 mg	1 mg	2 mg	135 x 135	Class I / 10 mg



## MASTER Series 320 XB



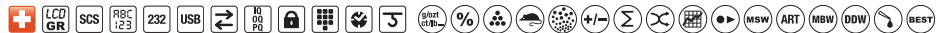
Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm/inch)	Class / „e“
XB 160M	160 g	1 mg	1 mg	1.5 mg	135 x 135	Class II / 10 mg
XB 320M	320 g	1 mg	1 mg	1.5 mg	135 x 135	Class II / 10 mg
XB 620M *	620 g	1 mg	1 mg	1.5 mg	135 x 135	Class II / 10 mg

\* models available with EC/OIML type approval, requires SCS

# Precision Balances 0.01 g



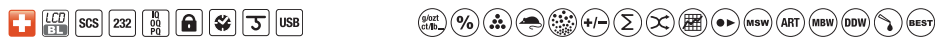
## EXECUTIVE PRO Series 360 EP



Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e“
EP 1200C	1 200 g	0.01 g	0.01 g	10 mg	200 x 200	Class II / 0.1 g
EP 2200C	2 200 g	0.01 g	0.01 g	15 mg	200 x 200	Class II / 0.1 g
EP 4200C	4 200 g	0.01 g	0.01 g	15 mg	200 x 200	Class II / 0.1 g
EP 6200C	6 200 g	0.01 g	0.01 g	15 mg	200 x 200	Class II / 0.1 g
EP 8200C	8 200 g	0.01 g	0.01 g	15 mg	200 x 200	Class II / 0.1 g
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	Class II / 0.1 g
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	Class II / 0.1 g



## EXECUTIVE Series 360 ES



Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e“
ES 1200C	1 200 g	0.01 g	0.01 g	10 mg	200 x 200	Class II / 0.1 g
ES 2200C	2 200 g	0.01 g	0.01 g	15 mg	200 x 200	Class II / 0.1 g
ES 4200C	4 200 g	0.01 g	0.01 g	15 mg	200 x 200	Class II / 0.1 g
ES 6200C	6 200 g	0.01 g	0.01 g	15 mg	200 x 200	Class II / 0.1 g
ES 8200C	8 200 g	0.01 g	0.01 g	15 mg	200 x 200	Class II / 0.1 g
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	Class II / 0.1 g
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	Class II / 0.1 g



## PREMIUM Series 321 LX



Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e“
LX 620C	620 g	0.01 g	0.005 g	10 mg	200 x 200	Class II / 0.1 g
LX 1200C	1 200 g	0.01 g	0.01 g	10 mg	200 x 200	Class II / 0.1 g
LX 2200C	2 200 g	0.01 g	0.01 g	15 mg	200 x 200	Class II / 0.1 g
LX 4200C	4 200 g	0.01 g	0.01 g	15 mg	200 x 200	Class II / 0.1 g
LX 6200C	6 200 g	0.01 g	0.01 g	15 mg	200 x 200	Class II / 0.1 g



## MASTER Series 320 XB

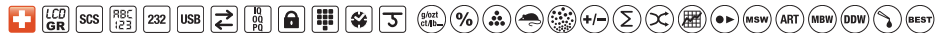


Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm/inch)	Class / „e“
XB 620C	620 g	0.01 g	5 mg	10 mg	170 x 170	Class II / 0.1 g
XB 2200C	2 200 g	0.01 g	0.01 g	15 mg	170 x 170	Class II / 0.1 g
XB 3200C	3 200 g	0.01 g	0.01 g	15 mg	170 x 170	Class II / 0.1 g
XB 4200C *	4 200 g	0.01 g	0.01 g	15 mg	170 x 170	Class II / 0.1 g
XB 6200C *	6 200 g	0.01 g	0.01 g	15 mg	170 x 170	Class II / 0.1 g

\* models available with EC/OIML type approval, requires SCS

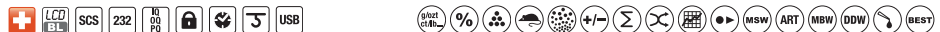
# Precision Balances 0.1 – 1 g

## EXECUTIVE PRO Series 360 EP



Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e“
EP 6200D	6 200 g	0.1 g	0.05 g	0.1 g	200 x 200	Class II / 1 g
EP 8200D	8 200 g	0.1 g	0.1 g	0.15 g	200 x 200	Class II / 1 g
EP 12200D	12 200 g	0.1 g	0.1 g	0.15 g	200 x 200	Class II / 1 g
EP 12200G	12 200 g	1 g	0.5 g	0.5 g	200 x 200	Class II / 1 g

## EXECUTIVE Series 360 ES



Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e“
ES 6200D	6 200 g	0.1 g	0.05 g	0.1 g	200 x 200	Class II / 1 g
ES 8200D	8 200 g	0.1 g	0.1 g	0.15 g	200 x 200	Class II / 1 g
ES 12200D	12 200 g	0.1 g	0.1 g	0.15 g	200 x 200	Class II / 1 g
ES 12200G	12 200 g	1 g	0.5 g	0.5 g	200 x 200	Class II / 1 g

## PREMIUM Series 321 LX

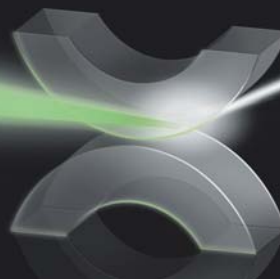


Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e“
LX 3200D	3 200 g	0.1 g	0.05 g	0.1 g	200 x 200	Class II / 0.1 g
LX 6200D	6 200 g	0.1 g	0.05 g	0.1 g	200 x 200	Class II / 1 g
LX 10200D	10 200 g	0.1 g	0.1 g	0.15 g	200 x 200	Class II / 1 g
LX 10200G	10 200 g	1 g	0.5 g	0.5 g	200 x 200	Class II / 1 g

## MASTER Series 320 XB



Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm/inch)	Class / „e“
XB 3200D	3 200 g	0.1 g	0.05 g	0.1 g	200 x 200	Class II / 0.1 g
XB 6200D	6 200 g	0.1 g	0.05 g	0.1 g	200 x 200	Class II / 1 g
XB 10200D	10 200 g	0.1 g	0.1 g	0.15 g	200 x 200	Class II / 1 g
XB 10200G	10 200 g	1 g	0.5 g	0.5 g	200 x 200	Class II / 1 g



Series EP: large, high-resolution bright graphic-display for improved readability



Series ES: easy-to-read display with chemically-resistant sealed keypad



RS 232 and USB interfaces are included as standard - wireless, Bluetooth, USB Host etc are optional



Bubble-level located at the front of the unit for easier adjustment



Special draft shield for mg balances with cover is optional

Options	360 EP	360 ES	321 LX	320 XB
Set for EC / OIML verification, fitted at factory, not verified, available only for balances with EC (/ OIML) Type approval	350-8671	350-8671	350-8684	350-8528
EC-Verification according to 90/384/ECC by Precisa (initial verification) available only for balances with EC (/ OIML) Type approval and SCS	350-8679	350-8679	350-8585	350-8587
SCS: Self Calibration System with clock, automatic on temperature change and real-time programmable	standard	standard	available	available
Clock	standard	standard	standard	350-8532
Protection IP65: protection against ingress of dust and low pressure water jets, fitted at factory, not all types available	350-8681	350-8681	350-8688	350-8649

Accessories	360 EP	360 ES	321 LX	320 XB
Draft shield 320 XB, height 260 mm, requires adapter*	350-8519	350-8519	-	350-8519
Draft shield 320 XB, height 180 mm, requires adapter*	350-8518	350-8518	-	350-8518
*adapter for 1 mg, 0.01 g balances	350-7402	350-7402	350-7402	350-7402
Draft shield mg, glass with cover	320-8504	320-8504	320-8504	320-8504
Hook for weighing below the balance	350-8527	350-8527	350-8527	350-8527
Cable for balance used as reference balance	350-8661	350-8661	350-8661	350-8534
External USV accu power pack for continuous operation	350-8662	350-8662	350-8662	350-8662
Power supply / Adapter with Euro plug for balances with IP65 protection (80 V - 240 V)	350-8372	350-8372	350-8372	350-8372
Glass body 10 ccm for density determination of liquids	350-7054	350-7054	350-7054	350-7054
Animal weighing bowl complete for 0.01g balances	350-8551	350-8551	350-8551	350-8550
Animal weighing bowl complete for 0.1 g and 1 g balances	350-8551	350-8551	350-8551	350-8551
Dust cover for the whole balance, set of 20 pieces	350-8663	350-8663	350-8686	350-8589
Dust cover 320 over display, set of 20 pieces	-	-	-	350-8590
Night cover 320 for balance without draft shield	-	-	-	350-4097
Night cover 320 for balance with draft shield	-	-	-	350-4107

Series 360, slide-in modules	360 EP	360 ES
Precisa BUS converter, enables connection to almost all Precisa BUS accessories	-	350-8664
USB Host	350-8665	-
Ethernet wired	350-8666	-
Ethernet wireless	350-8667	-
Bluetooth	350-8668	-
PS 2 Female & RS 232 DB9 Female	350-8670	-

Additional Applications & Features
- SmartBox® Applications, see Special Accessories
- Precisa BUS accessories, see Special Accessories
- Further special accessories and options, see Special Accessories

# Standard Balances 0.001 – 1 g



## STANDARD Series 165 BJ
















 Optional

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm/inch)
BJ 100M	102 g	1 mg	1 mg	2 mg	Ø 100 / 3.9
BJ 410C	410 g	0.01 g	0.01 g	0.02 g	135 x 135
BJ 610C *	610 g	0.01 g	0.01 g	0.02 g	135 x 135
BJ 1000C	1 020 g	0.01 g	0.01 g	0.02 g	135 x 135
BJ 1200C	1 200 g	0.01 g	0.01 g	0.02 g	135 x 135
BJ 2200C	2 200 g	0.01 g	0.01 g	0.02 g	135 x 135
BJ 2100D	2 100 g	0.1 g	0.1 g	0.2 g	170 x 140
BJ 4100D	4 100 g	0.1 g	0.1 g	0.2 g	170 x 140
BJ 6100D	6 100 g	0.1 g	0.1 g	0.2 g	170 x 140
BJ 8100D	8 100 g	0.1 g	0.1 g	0.2 g	170 x 140
BJ 6100G	6 100 g	1 g	1 g	2 g	170 x 140
BJ 12100G	12 100 g	1 g	1 g	2 g	170 x 140

Density application optional

\* models available with EC/OIML type approval



Easy-access draft shield for BJ balances



High-contrast, backlit LCD-display



Below-balance weighing fixture

Options	165 BJ
Set for EC / OIML verification, fitted at factory, not verified, available only for balances with EC (/ OIML) Type approval	350-8591
Density application	350-8632
Battery operation with 9V Alkaline Battery	standard

Accessories	165 BJ
Hook for weighing below the balance	350-8561
Cable for balance 165 used as reference balance	350-8534
External USV accu power pack for continuous operation	350-8662
Dust cover 165 for the whole balance, set of 20 pieces	350-8598

Additional Application & Features
- Further special accessories and options, see Special Accessories

# Moisture Analyzers



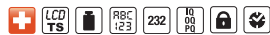
## EXECUTIVE PRO Series 330 XM



Model	Capacity	Readability	Repeatability	Linearity	Temperature range	Pan Size (mm/inch)
EM 120-HR	124 g	0.1 mg / 0.001%	1 g / 0.1% 10 g / 0.01 %	0.2 mg	30 - 230 °C	Ø 100 / 3.9



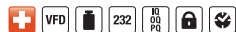
## PREMIUM Series 330 XM



Model	Capacity	Readability	Repeatability	Linearity	Temperature range	Pan Size (mm/inch)
XM 120-HR	124 g	0.1 mg / 0.001%	1 g / 0.1% 10 g / 0.01 %	0.2 mg	30 - 230 °C	Ø 100 / 3.9



## MASTER Series 330 XM



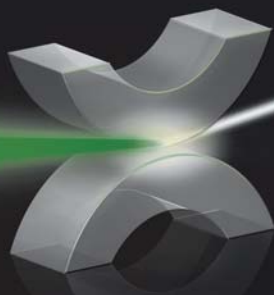
Model	Capacity	Readability	Repeatability	Linearity	Temperature range	Pan Size (mm/inch)
XM 60-HR	124 g	0.1 mg / 0.001%	1 g / 0.1% 10 g / 0.01 %	0.2 mg	30 - 230 °C	Ø 100 / 3.9
XM 60	124 g	1 mg / 0.01 %	1 g / 0.2% 10 g / 0.02 %	1.5 mg	30 - 230 °C	Ø 100 / 3.9
XM 66	310 g	1 mg / 0.01 %	1 g / 0.2% 10 g / 0.02 %	1.5 mg	30 - 230 °C	Ø 100 / 3.9



## STANDARD Series 330 XM



Model	Capacity	Readability	Repeatability	Linearity	Temperature range	Pan Size (mm/inch)
XM 50	52 g	1 mg / 0.01 %	1 g / 0.5 % 10 g / 0.05%	3.0 mg	30 - 170 °C	Ø 100 / 3.9



Choice of radiation heat-source: halogen, quartz infrared or dark infrared



Graphic-display for easy user-guidance and real-time results



Easy access sample-holder

Options	EM 120-HR	XM 120-HR	XM 60-HR	XM 60	XM 66	XM 50
Halogen heating system	standard	standard	standard	standard	standard	available
Infrared heating system	available	available	available	available	available	available
Dark radiator heating system	available	available	available	available	available	standard
Application for rapid gypsum analysis	-	available	-	-	-	-

Accessories	EM 120-HR	XM 120-HR	XM 60-HR	XM 60	XM 66	XM 50
Aluminum dishes, Ø 100 mm, (box with 80 pcs.)	350-2032	350-2032	350-2032	350-2032	350-2032	350-2032
Fiberglass-filters, Ø 90 mm, (box with 80 pcs.)	350-4130	350-4130	350-4130	350-4130	350-4130	350-4130
Temperature sensor plate (Sensor - type K)	350-8580	350-8580	350-8580	350-8580	350-8580	350-8580
Temperature calibration set (Sensor - type K) with certificate	350-8585	350-8585	350-8585	350-8585	350-8585	350-8585
Temperature calibration set (Sensor - type K) without certificate	350-8584	350-8584	350-8584	350-8584	350-8584	350-8584
Stainless steel dish, reusable, Ø 100 mm, (1 pcs.)	330-2018	330-2018	330-2018	330-2018	330-2018	330-2018
Calibration weight, 50 g, E2	350-8241	350-8241	350-8241	350-8241	350-8241	350-8241
Dust cover 320 over display, set of 20 pieces	-	350-8590	350-8590	350-8590	350-8590	350-8590
XM Filter	350-8687	350-8687	350-8687	350-8687	350-8687	350-8687

### Additional Applications & Features

- Precisa BUS accessories, see Special Accessories
- Further special accessories and options, see Special Accessories

Slide-in modules	EM 120-HR
USB Host	350-8665
Ethernet wired	350-8666
Ethernet wireless	350-8667
Bluetooth	350-8668
PS 2 Female & RS 232 DB9 Female	350-8670

# Moisture Analysis and Ash Determination Systems



## prepASH Series 340



Model	Capacity	Readability	Repeatability	Temp. Range	Crucibels
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
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
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



prepSTATION  
Turn-table and crucibles are not included in the prepSTATION standard delivery

Options	prepASH 229	prepASH 219	prepASH 212	Recommendations		
				Standard applications	Sulphuric acid applications	Volatiles determination (coke, coal)
3 inputs gas flow control unit for N <sub>2</sub> , O <sub>2</sub> and air	340-8502	340-8502	340-8502	yes	yes	essential
prepSTATION - prepSTATION unit - EP 120A Analytical balance - Date cable RJ45 / 0.7 m for the connection of prepSTATION with balance	340-9010	340-9010	340-9010	yes	yes	no
Condensation-Absorption-Unit B-414 Acid scrubber module for e.g. sulfuric acid	340-9001	340-9001	340-9001	no	essential	no
Condensation-Absorption-Connection-Set	340-9002	340-9002	340-9002	no	essential	no



Condensation-Absorption-Unit B-414

### Additional Applications & Features

- Further special accessories and options, see Special Accessories



Turn-table for 29 samples



Turn-table for 19 samples



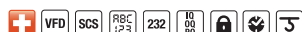
Turn-table for 12 large crucibles

Accessories	prepASH 229	prepASH 219	prepASH 212	Recommendations		
				Standard applications	Sulphuric acid applications	Volatiles determination (coke, coal)
Turn-table holder	340-8012	340-8012	340-8012	yes	recommended	yes
Crucible-tweezers	PN 3950-099	PN 3950-099	PN 3950-099	standard	standard	-
Crucible-tweezers for crucible-lid handling	340-7090	340-7090	340-7090	-	-	standard
Turn-table for 29/19 samples, „Volatiles“ for prepASH 229 and prepASH 219	340-4065	340-4065	-	yes	no	standard 229, 219
Turn-table for 29/19 samples, SiC for prepASH 229 and prepASH 219	standard	standard	-	standard 229, 219	standard 229, 219	no
Turn-table for 12 samples, SiC for prepASH 229, prepASH 219 and prepASH 212	340-4072	340-4072	standard	standard 212	standard 212	no
Crucible, silicate ceramic, set of 5 pieces use with turn-table 29/19	340-8030	340-8030	340-8030	standard 229, 219	standard 229, 219	no
Crucible, Al <sub>2</sub> O <sub>3</sub> , set of 5 pieces use with turn-table 29/19	340-8031	340-8031	340-8031	yes	yes	no
Crucible for use with lid Al <sub>2</sub> O <sub>3</sub> , set of 5 pieces use with turn-table 29/19 and crucible-lid 340-8033	340-8032	340-8032	340-8032	yes	yes	standard 229, 219
Crucible-lid, Al <sub>2</sub> O <sub>3</sub> , set of 5 pieces use with turn-table 29/19 and crucible 340-8032	340-8033	340-8033	340-8033	yes	yes	standard 229, 219
Standard Crucible, silicate ceramic, set of 5 pieces use only with turn-table 12 and adapter 340-8035	340-8034	340-8034	standard	standard 212	standard 212	no
Adapter for standard crucible, silicate ceramic, set of 5 pieces use only with turn-table 12 and standard crucible 340-8034 or other crucible available from the market	340-8035	340-8035	standard	standard 212	standard 212	yes

# Industrial Scales



## PREMIUM Series 490 IBK/ITK/ISK



Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e“
IBK 12000D	12 100 g	0.1 g	0.1 g	0.2 g	400 x 300	Class II / 1 g
IBK 18000D	18 100 g	0.1 g	0.1 g	0.2 g	400 x 300	Class II / 1 g
IBK 24000D	24 100 g	0.1 g	0.1 g	0.2 g	400 x 300	Class II / 1 g
IBK 34000D	34 100 g*	0.1 g	0.1 g	0.2 g	400 x 300	Class II / 1 g
IBK 34000D-DR	12 100 / 34 100 g*	0.1 g / 1 g	0.1 g	0.2 g	400 x 300	Class II / 1 g
IBK 34000D-FR	12 100 - 34 100 g*	0.1 g / 1 g	0.1 g	0.2 g	400 x 300	Class II / 1 g
IBK 20000G	20 100 g	1 g	0.5 g	1 g	400 x 300	Class II / 1 g
IBK 30000G	30 100 g	1 g	0.5 g	1 g	400 x 300	Class II / 1 g
IBK 40000G	40 100 g	1 g	0.5 g	1 g	400 x 300	Class II / 2 g
IBK 60000G	60 100 g	1 g	1 g	1.5 g	400 x 300	Class II / 10 g

\*approved max. 30 100 g

Terminal IBK included  
Protection platform IP 54 (IP65 optional)



User-friendly multi-application indicator (IBK)

### Terminal IBK



Options, Series 490	Series 490
Set for EC / OIML verification, fitted at factory, not verified, available only for balances with EC / OIML Type approval	350-8577
EC-Verification according to 90/384/ECC by Precisa (initial verification), available only for balances with EC / OIML Type approval	350-8578
Protection IP65: protection against ingress of dust and low pressure water jets, fitted at factory	350-8646



Indicator with alpha-numeric input and manual tare (ITK)

### Terminal ITK



Accessories, Series 490	Series 490
Wall bracket for display	350-8654
Post for rear mounted display	350-8655
Connection-cable indicator to platform, length 3 m	350-8586-030
Connection-cable indicator to platform, length 5.5 m	350-8586-055
Connection-cable indicator to platform, length 10 m	350-8586-100
Below the balance weighing feature up to 40 kg	350-8630
Below the balance weighing feature IP65 version up to 40 kg	350-8635
Dust cover for indicator, set of 20 pieces	350-8599
External USV accu power pack for continuous operation	350-8662

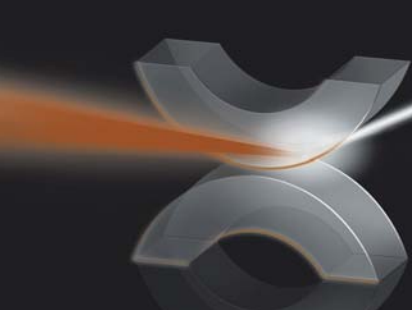


Indicator with integrated SmartBox® (ISK) with Applications Counting or finished goods packing Control, FPVO

### Terminal ISK



Additional Application & Features 490
- SmartBox® Applications, see Special Accessories
- Precisa BUS accessories, see Special Accessories
- Further special accessories and options, see Special Accessories



## MASTER Series 410 SRS steel painted IP65

(depending on terminal SRD/SRM)

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e“
SRS 75K	75 kg	5 g	5 g	5 g	500 x 400	Class III / 50 g
SRS 150K	150 kg	10 g	10 g	10 g	500 x 400	Class III / 50 g
SRS 300K	300 kg	20 g	20 g	40 g	500 x 400	Class III / 100 g

Protection IP 65

\* technical data in connection with terminal SRD or SRM



## MASTER Series 410 SRC stainless steel IP67

(depending on terminal SRD/SRM)

Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm)	Class / „e“
SRC 75K	75 kg	5 g	5 g	5 g	500 x 380	Class III / 50 g
SRC 150K	150 kg	10 g	10 g	10 g	500 x 380	Class III / 50 g

Protection IP 67

\* technical data in connection with terminal SRD or SRM



Easy-to-read indicator (SRD) with backlit LCD (ABS)

### Terminal SRD

Model	Type approval	Dimensions WxLxH (mm)	Net weight	Protection
SRD ABS	EC / OIML, III	240 x 160 x 120	1.6 kg	IP42
SRD SST	none	280 x 190 x 180	3 kg	IP67



Indicator (SRM) with numeric input (stainless steel)

### Terminal SRM

Model	Type approval	Dimensions WxLxH (mm)	Net weight	Protection
SRM ABS	EC / OIML, III	240 x 160 x 120	1.6 kg	IP42
SRM SST	none	280 x 190 x 180	3 kg	IP67

### Options

Set for EC / OIML verification, not verified, available only for balances with EC (/ OIML) Type approval

410

350-8680

### Accessories, Series 410

	SRD ABS	SRM ABS	SRD SST	SRM SST
Wall bracket for display	350-8626	350-8626	-	-
Post for rear mounted display to platform SRS	350-8627	350-8627	-	-
Post for rear mounted display to platform SRC	-	-	350-8629	350-8629

# Special products



## GOLD/CARAT BALANCES Series 320 XB



Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm/inch)	Class / „e“
XB 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 80 / 3.1	Class I / 0.01 ct
XB 1100M-C	1 100 ct / 220 g	0.001 ct / 0.001 g	0.001 ct / 0.001 g	0.001 ct / 0.001 g	Ø 80 / 3.1	Class I / 0.01 ct
XB 3100C-C	3 100 ct / 620 g	0.01 ct / 0.01 g	0.01 ct / 0.005 g	0.01 ct / 0.01 g	135 x 135	Class II / 0.1 ct
XB 620C-G	620 g	0.01 g	0.01 g	0.01 g	170 x 170	Class II / 0.1 g
XB 2200C-G	2 200 g	0.01 g	0.01 g	0.015 g	170 x 170	Class II / 0.1 g
XB 4200C-G	4 200 g	0.01 g	0.01 g	0.01g	170 x 170	Class II / 0.1 g



## EDUCATION Series 320 XE



Model	Capacity	Readability	Repeatability	Linearity	Pan Size (mm/inch)	Class / „e“
XE 220A	220 g	0.0001 g	0.1 mg	0.2 mg	Ø 80 / 3.1	Class I / 1 mg
XE 320M	320 g	0.001 g	1 mg	1.5 mg	135 x 135	Class II / 10 mg
XE 1200C	1200 g	0.01 g	0.01 g	10 mg	170 x 170	Class II / 0.1 g
XE 2200C	2200 g	0.01 g	0.01 g	15 mg	170 x 170	Class II / 0.1 g
XE 6200D	6200 g	0.1 g	0.05 g	0.1 g	200 x 200	Class II / 1 g

## DC Ionizers



Stat-FAN				
Power supply	Neutralization	Power	Airflow	Temp. range
230 V AC, 115 V AC or 18 V AC by an adapter	< +/- 20 V	2 W	max. 225 l/min.	0-40° C



Stat-PEN				
Power supply	Neutralization	Power	Temp. range	IP-Class
> 100 V AC 50-60 Hz	+/- 30 V	0.1 W	- 20+40° C	IP60



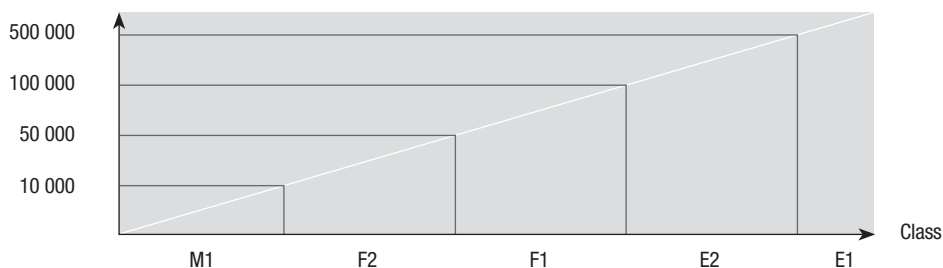
### Calibration Weights

Nominal value	Class	Accuracy	Order number	Weights 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
50 g	(E2)	0.1 mg	350-8205	certificate not available
100 g	(E2)	0.1 mg	350-8206	certificate not available
200 g	(E2)	0.1 mg	350-8207	certificate not available
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

(E2): recommended calibration weights for Precisa analytical balances

approved balances = e  
non-approved balances = d

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



# Special products



Signal Lamp



SmartBox®



Printer



Ethernet interface

Common Accessories	360 EP	360 ES	321 LX	320 XB
Printer CBM910 230V - with cable and paper roll	350-8379	350-8379	350-8379	350-8363
Printer CBM910 115V - with cable and paper roll	350-8380	350-8380	350-8380	350-8370
Paper roll for Printer CMB910	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 balances of Series 165, 320, 321, 490 and 360 for serial (RS232) data transmission to PC or Printer	350-8513	350-8513	350-8513	350-8513
Data cable RJ45 / 0.75 m	-	-	-	350-8525
Data cable RJ45 / 1.5 m	-	-	-	350-8520
Data cable RJ45 / 3 m	-	-	-	350-8521
Adapter RJ45 / DB9 Female (PC)	350-8522	350-8522	350-8522	350-8522
Adapter RJ45 / DB25 Male (Printer)	350-8524	350-8524	350-8524	350-8524
Data cable RJ45 / DB9 Female 1.5 m (PC)	-	-	-	350-8557
Data cable RJ45 / DB25 Male 1.5 m (Printer)	-	-	-	350-8559
Data cable DB9 Male / DB9 Female 1.5 m (PC)	350-8672	350-8672	350-8672	-
Data cable DB9 Male / DB25 Male 1.5 m (Printer)	350-8673	350-8673	350-8673	-
Data cable DB9 Female / DB9 Female 1.5 m (PC)	-	-	-	-
Data cable DB9 Female / DB25 Male 1.5 m (Printer)	-	-	-	-
External USV accu power pack, for continuous operation	350-8662	350-8662	350-8662	350-8662
Anti-theft device	350-8555	350-8555	350-8555	350-8555
Diamond weighing pan	350-8322	350-8322	350-8322	350-8322

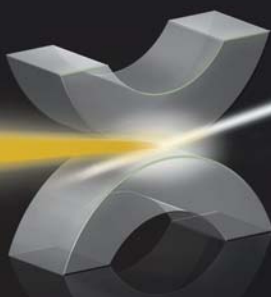
Precisa BUS Accessories	360 EP	360 ES	321 LX	320 XB
Remote / secondary display free-standing with cable 1.5m	-	350-8504*	350-8504	350-8504
Remote / secondary display mounted to the balance	-	350-8505*	350-8505	350-8505
Remote / secondary display mounted to the wall with cable 3m	-	350-8516*	350-8516	350-8516
Interface RS232 for data transmission: - to PC, Printer or Barcode-Printer - from Barcode Reader (350-8856) or Reference-Balance	-	350-8506*	350-8506	350-8506
Interface 20mA current loop passive	-	350-8526*	350-8526	350-8526
Analog output -10V... +10V (Resolution 10mV)	-	350-8508*	350-8508	350-8508
Ethernet Interface, Wired	-	350-8573*	350-8573	350-8573
Ethernet Interface, Wireless	-	350-8588*	350-8588	350-8588
Signal Lamp, indicator with 3 lamps, green / red / yellow	on demand	350-8510*	350-8510	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	350-8509*	350-8509	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	350-8856	350-8856

\* needs Precisa BUS converter, 350-8664

SmartBox® Applications	360 EP	360 ES	321 LX	320 XB
SmartBox® Counting	-	350-8511-011*	350-8511-011	350-8511-011
SmartBox® Finished Goods Packing Control, FPVO	-	350-8511-012*	350-8511-012	350-8511-012
CCE-Bar code scanner BCS5040 with push button and plug to be connected to the SmartBox® (Connector RJ45)	-	350-8531	350-8531	350-8531

\* needs Precisa BUS converter, 350-8664

Special Options	360 EP	360 ES	321 LX	320 XB
Conversion set to separate weighing cell from electronics with 2 sets of housing (conversion has to be done by the manufacturer)	on demand	on demand	on demand	350-8552



165 BJ	490 IBK	490 ITK	490 ISK-Count	490 ISK-FPVO	Terminal SRD	Terminal SRM	330 XM	EM 120-HR
350-8363	350-8363	350-8363	350-8363	350-8363	350-8381	350-8381	350-8363	350-8379
350-8370	350-8370	350-8370	350-8370	350-8370	350-8382	350-8382	350-8370	350-8380
350-8366	350-8366	350-8366	350-8366	350-8366	350-8366	350-8366	350-8366	350-8366
350-8367	350-8367	350-8367	350-8367	350-8367	350-8367	350-8367	350-8367	350-8367
350-8513	350-8513	350-8513	350-8513	350-8513	-	-	350-8513	350-8513
350-8525	350-8525	350-8525	350-8525	350-8525	-	-	350-8525	-
350-8520	350-8520	350-8520	350-8520	350-8520	-	-	350-8520	-
350-8521	350-8521	350-8521	350-8521	350-8521	-	-	350-8521	-
350-8522	350-8522	350-8522	350-8522	350-8522	350-8522	350-8522	350-8522	350-8522
350-8524	350-8524	350-8524	350-8524	350-8524	350-8524	350-8524	350-8524	350-8524
350-8557	350-8557	350-8557	350-8557	350-8557	-	-	350-8557	-
350-8559	350-8559	350-8559	350-8559	350-8559	-	-	350-8559	-
-	-	-	-	-	-	-	-	350-8672
-	-	-	-	-	-	-	-	350-8673
-	-	-	-	-	350-8674	350-8674	-	-
-	-	-	-	-	350-8675	350-8675	-	-
350-8662	350-8662	350-8662	350-8662	350-8662	350-8662	350-8662	350-8662	350-8662
350-8555	350-8555	350-8555	350-8555	350-8555	-	-	350-8555	350-8555
350-8322	350-8322	350-8322	350-8322	350-8322	-	-	-	-

165 BJ	490 IBK	490 ITK	490 ISK-Count	490 ISK-FPVO	Terminal SRD	Terminal SRM	330 XM	EM 120-HR
-	350-8504	350-8504	350-8504	350-8504	-	-	350-8504 not for XM120-HR	-
-	-	-	-	-	-	-	-	-
-	350-8516	350-8516	350-8516	350-8516	-	-	350-8516 not for XM120-HR	-
-	350-8506	350-8506	350-8506	350-8506	-	-	350-8506	-
-	350-8526	350-8526	350-8526	350-8526	-	-	350-8526	-
-	350-8508	350-8508	350-8508	350-8508	-	-	350-8508	-
-	350-8573	350-8573	350-8573	350-8573	-	-	350-8573	-
-	350-8588	350-8588	350-8588	350-8588	-	-	350-8588	-
-	350-8510	350-8510	350-8510	350-8510	-	-	350-8510	-
-	350-8533	350-8533	350-8533	350-8533	-	-	350-8533	-
-	350-8509	350-8509	350-8509	350-8509	-	-	350-8509	-
-	350-8856	350-8856	350-8856	350-8856	-	-	350-8856	-

165 BJ	490 IBK	490 ITK	490 ISK-Count	490 ISK-FPVO	Terminal SRD	Terminal SRM	330 XM	EM 120-HR
-	350-8511-011	350-8511-011	standard	350-8511-011	-	-	-	-
-	350-8511-012	350-8511-012	350-8511-012	standard	-	-	-	-
-	350-8531	350-8531	350-8531	350-8531	-	-	-	-

165 BJ	490 IBK	490 ITK	490 ISK-Count	490 ISK-FPVO	Terminal SRD	Terminal SRM	330 XM	EM 120-HR
-	-	-	-	-	-	-	-	-



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