

# The New Quintix®

Redefining Standard.

Laboratory Balances



- Intuitive application guidance
- Maximum accuracy at all time
- Easy cleaning
- "Plug & Work" connectivity to printer or computer

## AC Adapter

Sartorius AC adaptor module	6971790 with interchangeable country-specific plug-in AC adaptors
Primary	100 – 240 V~, -10%   +10%, 50 – 60 Hz, 0.2 A
Secondary	15 V DC, ± 5%, 530 mA (max.)   8 Watt (max.): 0 to +40°C and 15 V DC, ± 5%, 330 mA (max.)   5 Watt (max.): 0 to +50°C
Other data	protection class II, in accordance with EN   IEC 60950-1 up to 3000 m above sea level; IP40 as per EN   IEC 60529

## Balance

Power supply	only via Sartorius AC adaptor module 6971790
Input voltage	12.0 ... 18.0 V DC
Power consumption	2 W (typically)

## Ambient Conditions

The specifications apply when the following ambient conditions are in place:	
Environment	for indoor use only
Ambient temperature *	+10°C to +30°C
Operational capacity	guaranteed between +5°C and +45°C +45 °C
Storage and shipping	-10 °C to +60 °C
Elevation	up to 3000 m above sea level
Relative humidity**	15% to 80% for temperatures up to 31°C; non-condensing, decreasing linearly to 50% relative humidity at 40°C and 20% at 50°C

<b>Safety of electrical equipment</b>	in accordance with EN 61010-1/IEC 61010-1. Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements
---------------------------------------	---

<b>Electromagnetic compatibility</b>	in accordance with EN 61326-1/IEC 61326-1. Electrical equipment for measurement, control, and laboratory use – EMC requirements – Part 1: General requirements
--------------------------------------	--

Defined immunity to interference	Suitable for use in industrial areas
----------------------------------	--------------------------------------

Interference emission	Class B (suitable for use in residential areas and areas that are connected to a low voltage network that also supplies residential buildings). The device can therefore be used in both areas.
-----------------------	---

Balances verified for use in legal metrology comply with the requirements of Council Directive 2009/23/EC, EN 45501:1992, and OIML R76:2006.

\* For balances verified for use in legal metrology in accordance with EU requirements, refer to the information on the balance.

\*\* For balances verified for use in legal metrology in accordance with the requirements of the legal metrology regulations, refer to the information on the balance.

## Technical Specifications

### Standard Equipment

Levelling	Glass level indicator with air bubble for centering
Calibration	Internal calibration isoCAL, External calibration
Selectable weight units <sup>1</sup>	Gram, kilogram, carat, pound, ounce, troy ounce, Hong Kong tael, Singapore tael, Taiwan tael, grain, pennyweights, milligram, parts per pound, China tael, mommes, Austrian carat, tola, baht, mesghal and Newton
Interface	mini USB – Automatic recognition of Sartorius printer models YDP30 or YDP40 – Direct data transfer to Microsoft® Windows programs – Programmable interval for data output – Data transfer protocols SBI, xBPI, table format, text format
Display	Touch screen with Sartorius graphical user interface optimized for users in pharmaceutical laboratories
Standard built-in applications	Weighing, Density, Percentage, Checkweighing, Peak Hold, Counting, Unstable Conditions
Special built-in lab applications	Mixing, Components, Statistics, Conversion
Languages	English, German, French, Spanish, Italian, Russian, Chinese, Polish, Japanese, Portuguese
Protection	– Chemical resistant finish of the housing – In-use cover – Dust cover for analytical balances
Password protection	Supervisor lock for protection against unintentional changes
Anti-theft lock	Kensington lock and lockdown capability for cable or chain
Underfloor weighing	Integrated

<sup>1</sup> Limited for verified models



### Analytical Balances Quintix®

Model		224	124
Weighing capacity	g	220	120
Readability	mg	0.1	0.1
Repeatability (standard deviation)	mg	0.1	0.1
Linearity deviation	mg	0.2	0.2
Sensitivity drift between +10 and +30°C	± ppm/K	1.5	1.5
Typical stabilization time	s	3	2
isoCAL:			
– Temperature change	K	1.5	1.5
– Time interval	h	4	4
Display result (depending on the set filter level)	s	0.2	0.2
Weighing pan size	mm	Ø 90	Ø 90
Weighing chamber height	mm	209	209
Net weight, approx.	kg	4.9	4.9
Dimensions, D × W × H	mm Inch	360 × 216 × 320 14.1 × 8.5 × 12.6	

### Precision Balances Quintix®

Model		513	313	213	5102	3102	2102	1102	612	5101	5100	
Weighing capacity	g	510	310	210	5100	3100	2100	1100	610	5100	5100	
Readability	mg	1	1	1	10	10	10	10	10	100	1000	
Repeatability (standard deviation)	mg	1	1	1	10	10	10	10	10	100	500	
Linearity deviation	mg	2	2	2	20	20	30	30	30	300	1000	
Sensitivity drift between +10 and +30°C	± ppm/K	3	3	3	3	3	5	5	5	10	10	
Typical stabilization time	s	1.5	1.5	1.5	1.5	1.5	2	2	2	2	2	
isoCAL:												
– Temperature change	K	2	4	4	2	4	4	4	4	4	4	
– Time interval	h	6	12	12	6	12	12	24	24	24	24	
Display result (depending on the set filter level)	s	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	
Weighing pan size	mm	Ø 120	Ø 120	Ø 120	Ø 180	Ø 180	Ø 180	Ø 180	Ø 180	Ø 180	Ø 180	
Weighing chamber height	mm	209	209	209	–	–	–	–	–	–	–	
Net weight, approx.	kg	4.9	4.9	4.9	5.2	5.2	4.7	4.7	4.7	4.7	4.7	
Dimensions, D × W × H	mm Inch	360 × 216 × 320 14.1 × 8.5 × 12.6						360 × 216 × 95 14.1 × 8.5 × 3.75				

**Verified Models with Country-specific Type Approval Certificate**

**Analytical Balances Quintix®**

Model		224-1x <sup>1</sup>	124-1x <sup>1</sup>
Accuracy class		Ⓡ	Ⓡ
Type <sup>2</sup>		SQP-A	SQP-A
Max	g	220	120
Scale interval d	mg	0.1	0.1
Verification scale interval e	mg	1	1
Min	mg	10	10
Tare (subtractive)		<100 % of the max. weighing capacity	
Typical stabilization time	s	3	2
isoCAL:			
- Temperature change	K	1.5	1.5
- Time interval	h	4	4
Display result (depending on the set filter level)	s	0.2	0.2
Weighing pan size	mm	∅ 90	∅ 90
Weighing chamber height	mm	209	209
Net weight, approx.	kg	4.9	4.9
Dimensions, D x W + H	mm Inch	360 x 216 x 320 14.1 x 8.5 x 12.6	

**Precision Balances Quintix®**

Model		513-1x <sup>1</sup>	313-1x <sup>1</sup>	213-1x <sup>1</sup>	5102-1x <sup>1</sup>	3102-1x <sup>1</sup>	2102-1x <sup>1</sup>	1102-1x <sup>2</sup>	612-1x <sup>1</sup>	5101-1x <sup>1</sup>	5100-1x <sup>1</sup>	
Accuracy class		Ⓡ	Ⓡ	Ⓡ	Ⓡ	Ⓡ	Ⓡ	Ⓡ	Ⓡ	Ⓡ	Ⓡ	
Type <sup>2</sup>		SQP-B	SQP-B	SQP-B	SQP-C	SQP-C	SQP-D	SQP-D	SQP-D	SQP-E	SQP-E	
Max	g	510	310	210	5100	3100	2100	1100	610	5100	5100	
Scale interval d	mg	1	1	1	10	10	10	10	0.01	0.1	1	
Verification scale interval e	mg	10	10	10	100	100	100	100	0.1	1	1	
Min	mg	20	20	20	500	500	500	500	0.5	5	50	
Tare (subtractive)		< 100% of the max. weighing capacity										
Typical stabilizations time		1.5	1.5	1.5	1.5	1.5	2	2	2	2	2	
isoCAL:												
- Temperature change	K	2	2	2	2	2	2	2	2	2	2	
- Time interval	h	4	6	6	6	6	6	6	6	6	6	
Display result (depending on the set filter level)	s	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	0.1   0.2	
Weighing pan size	mm	∅ 120	∅ 120	∅ 120	∅ 180	∅ 180	∅ 180	∅ 180	∅ 180	∅ 180	∅ 180	
Weighing chamber height	mm	209	209	209	-	-	-	-	-	-	-	
Net weight, approx.	kg	4.9	4.9	4.9	5.2	5.2	4.7	4.7	4.7	4.7	4.7	
Dimensions, D x W x H	mm Inch	360 x 216 x 320 14.1 x 8.5 x 12.6						360 x 216 x 95 14.1 x 8.5 x 3.75				

<sup>1</sup> Possible terms for country-specific models:

x = CEU: Verified balances with EC Type Approval Certificate D12-09-014 (for EU except France, Italy, and Switzerland)

x = CFR: Verified balances with EC Type Approval Certificate D12-09-014 for France only

x = CIT: Verified balances with EC Type Approval Certificate D12-09-014 for Italy only

x = CCH: Verified balances with EC Type Approval Certificate D12-09-014 for Switzerland only

x = NUS: NTEP Certificate for USA  
x = CN: CMC Type Approval Certificate for China

x = OJP: Balance with Type Approval Certificate for Japan

x = OBR: Balance with Type Approval Certificate for Brazil

x = OAR: Balance with Type Approval Certificate for Argentina

x = OKR: Balance with Type Approval Certificate for South Korea

x = ORU: Balance with Type Approval Certificate for Russia

x = OIN: Balance with Type Approval Certificate for India

x = OCA: Balance with Type Approval Certificate for Canada

<sup>2</sup> All models with "...CN": type "SQP"

## Optional Accessories

### Printers and Communications

Premium GLP Laboratory Printer	YDP30
- Printer paper for GLP laboratory printer	69Y03285
- Endless labels for GLP laboratory printer	69Y03286
Standard Laboratory Printer	YDP40
- Printer paper for standard laboratory printer	69Y03287
Data Cable Mini USB   USB A	YCC04-D09
Data Cable Mini USB   RS232 9-pin	YCC03-D09

### General

Battery Pack for Standard Lab Balances	YRB11Z
Draft ring for analytical balances	YDS01SQP
In-use cover for analytical balances	6960SE01
In-use cover for precision balances	6960SE02
Dust cover for analytical balances with draft shield	6960SE03

### Density Determination

Density kit for analytical balances	YDK03
Density kit for precision balances - for lab balance model 2102; 1102; 612	YDK04

### Calibration Weights

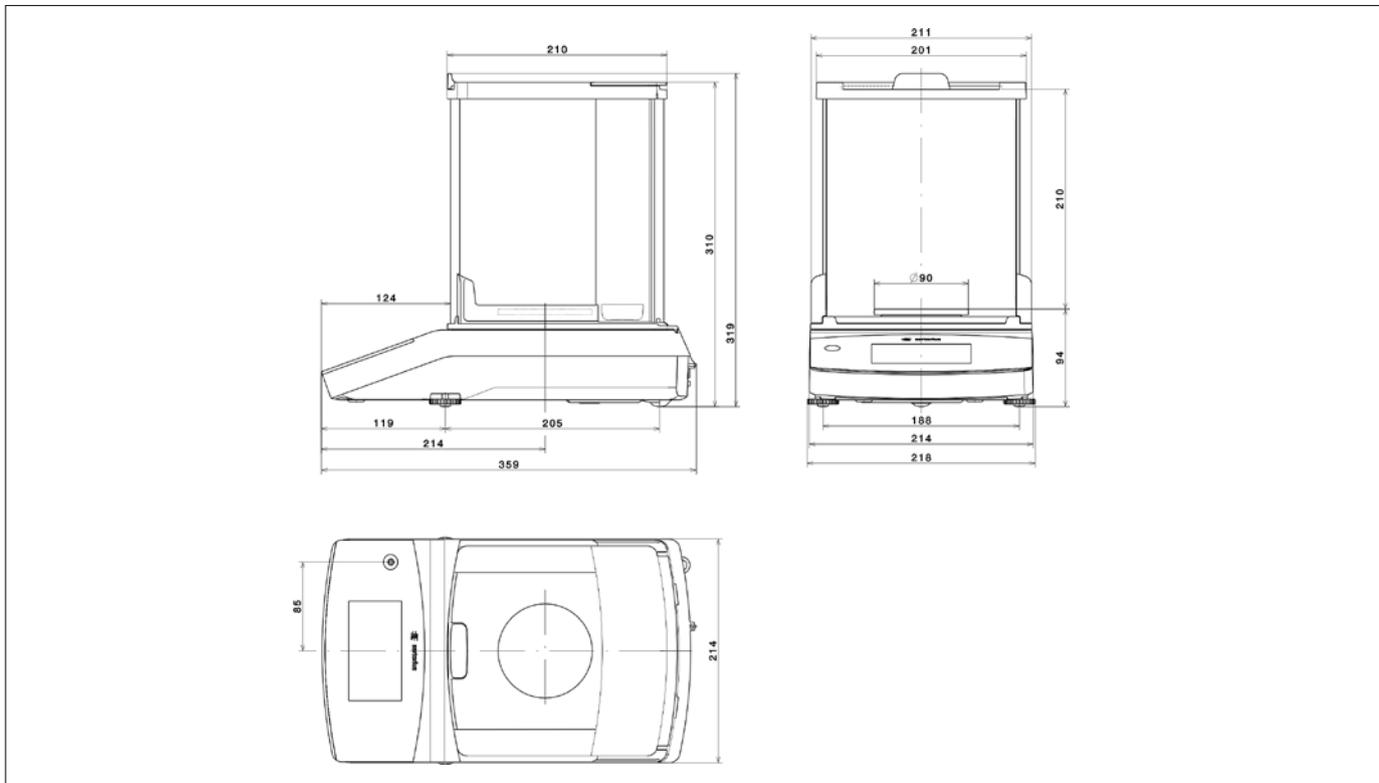
Calibration for lab balance model 124 - Proof Line knob weight 100 g, OIML class E2, with DAkkS certificate	YCW512-AC-02
Calibration for lab balance model 224; 313; 213 - Proof Line knob weight 200 g, OIML class E2, with DAkkS certificate	YCW522-AC-02
Calibration for lab balance model 513; 612 - Proof Line knob weight 500 g, OIML class E2, with DAkkS certificate	YCW552-AC-02
Calibration for lab balance model 1102 - Proof Line knob weight 1 kg, OIML class E2, with DAkkS certificate	YCW612-AC-02
Calibration for lab balance model 3102; 2102 - Proof Line knob weight 2 kg, OIML class E2, with DAkkS certificate	YCW622-AC-02
Calibration for lab balance model 5102; 5101; 5100 - Proof Line knob weight 5 kg, OIML class E2, with DAkkS certificate	YCW652-AC-02



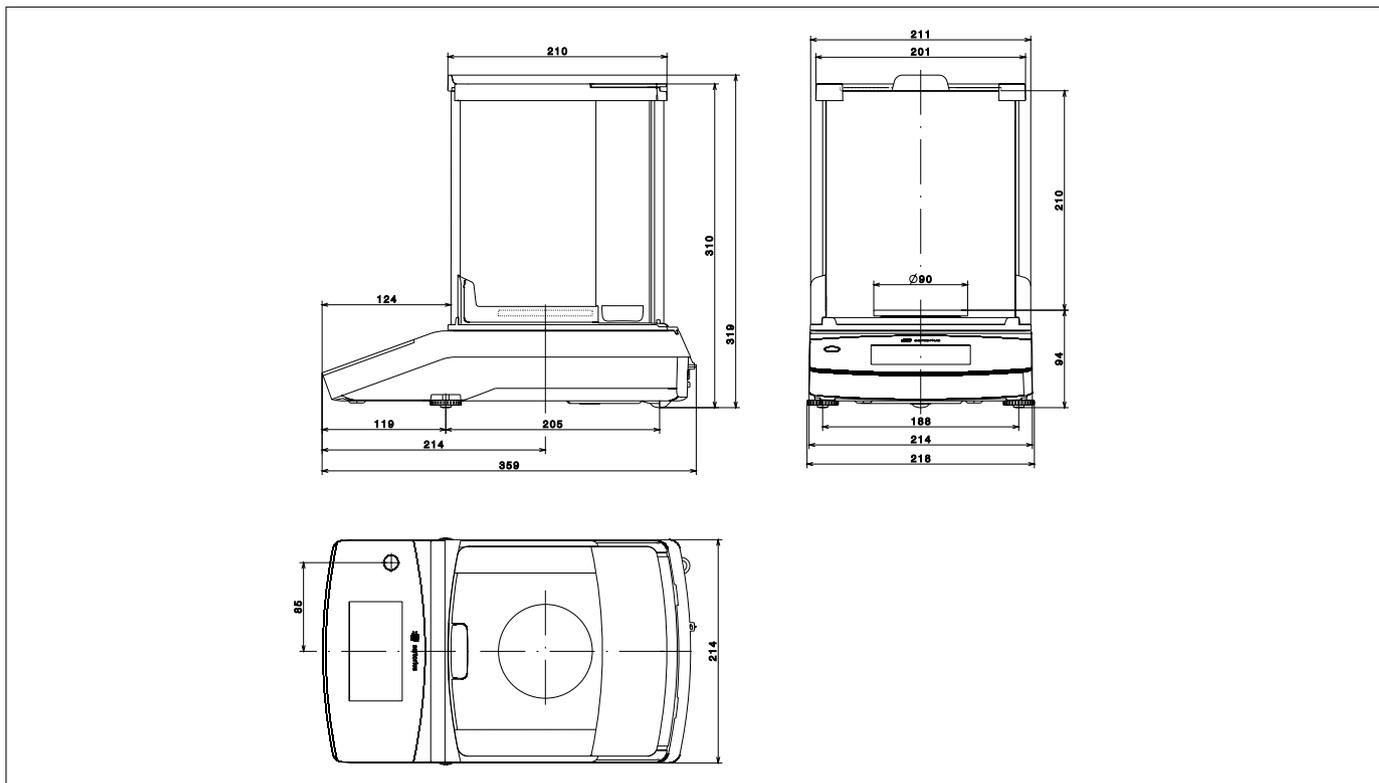
YDP40, Standard Laboratory Printer

## Technical Drawings

Models with a readability of 0.1 mg, in mm



Models with a readability of 1 mg, in mm



Models with a readability of  $\geq 10$  mg, in mm

