

# XSR Small Precision Balances

## Efficient, Robust, Ergonomic



### Fast Performance

The SmartPan™ weighing pan minimizes the effects of air currents on the weighing cell to deliver faster and more accurate results. In most conditions a draft shield is no longer needed, significantly reducing process steps.



### Ergonomic Operation

Placing the display at eye-level on the adjustable ErgoStand™ saves space and eliminates excessive bending of the neck. The touchscreen display simplifies operation and has large bright figures which are easy to read.



### Error-free Data Transfer

You no longer need to record results by hand or spend time typing in data. Simply transfer task parameters and results to a PC or software application via USB. Large volumes of data can be transferred quickly and without error.



### Extremely Durable

The new Monobloc™ weighing cell delivers fast and precise results. Integrated overload protection and the full metal housing safeguard the weighing cell and help ensure a long balance lifetime.



## XSR Precision Balances

### Go Beyond Weighing

XSR small platform precision balances are ideal when you have high sample throughput and tight deadlines. Even under the toughest conditions, you can rely on XSR to get the job done – quickly, and without errors.

Weighing methods can be saved in the integrated method library providing fast access to daily tasks and ensuring consistency between users. All results and task parameters are saved automatically to the results notepad and can be easily transferred to a PC via USB or Ethernet. Transcription errors are eliminated.

With ease-of-use, fast performance and secure data handling, XSR balances fit comfortably into your workflows.



	XSR303SN <sup>1</sup>	XSR303S
Material number	30316500	30315757
<b>Limit values</b>		
Maximum capacity	310 g	310 g
Readability	1 mg	1 mg
Repeatability	0.9 mg	0.9 mg
Linearity deviation	2 mg	2 mg
<b>Typical values</b>		
Repeatability	0.5 mg	0.5 mg
Linearity deviation	0.6 mg	0.6 mg
Sensitivity offset (test weight)	1.2 mg (300 g)	1.2 mg (300 g)
Minimum weight (5% load, k=2, U=1.0%)	100 mg	100 mg
USP minimum weight (5% load, k=2, U=0.10%)	1 g	1 g
Settling time	1.5 s	1.5 s
<b>Dimensions</b>		
Weighing pan size (mm)	127 x 127	127 x 127
Weighing pan	SmartPan	Standard pan, SmartPan
Draft shield	Optional	MagicCube draft shield

<sup>1</sup> Supplied without draft shield (available as an accessory)

	XSR603SN <sup>1</sup>	XSR603S	XSR1203S
Material number	30316544	30316497	30316567
<b>Limit values</b>			
Maximum capacity	610 g	610 g	1210 g
Readability	1 mg	1 mg	1 mg
Repeatability	0.9 mg	0.9 mg	0.8 mg
Linearity deviation	2 mg	2 mg	2 mg
<b>Typical values</b>			
Repeatability	0.5 mg	0.5 mg	0.4 mg
Linearity deviation	0.6 mg	0.6 mg	0.6 mg
Sensitivity offset (test weight)	1.2 mg (600 g)	1.2 mg (600 g)	1.5 mg (1.2 kg)
Minimum weight (5% load, k=2, U=1.0%)	100 mg	100 mg	82 mg
USP minimum weight (5% load, k=2, U=0.10%)	1 g	1 g	820 mg
Settling time	1.5 s	1.5 s	1.5 s
<b>Dimensions</b>			
Weighing pan size (mm)	127 x 127	127 x 127	127 x 127
Weighing pan	SmartPan	Standard pan, SmartPan	Standard pan, SmartPan
Draft shield	Optional	MagicCube draft shield	MagicCube draft shield

<sup>1</sup> Supplied without draft shield (available as an accessory)

	XSR1202S	XSR2002S	XSR4002S
Material number	30317127	30317407	30317443
<b>Limit values</b>			
Maximum capacity (full range/fine range)	1210 g	2.1 kg	4.1 kg
Readability	0.01 g	0.01 g	0.01 g
Repeatability	8 mg	8 mg	8 mg
Linearity deviation	20 mg	20 mg	20 mg
<b>Typical values</b>			
Repeatability	4 mg	4 mg	4 mg
Linearity deviation	6 mg	6 mg	6 mg
Sensitivity offset (test weight)	15 mg (1.2 kg)	25 mg (2 kg)	25 mg (4 kg)
Minimum weight (5% load, k=2, U=1.0%)	820 mg	820 mg	820 mg
USP minimum weight (5% load, k=2, U=0.10%)	8.2 g	8.2 g	8.2 g
Settling time	1.2 s	1.2 s	1.2 s
<b>Dimensions</b>			
Weighing pan size (mm)	172 x 205	172 x 205	172 x 205
Weighing pan	Standard pan, SmartPan	Standard pan, SmartPan	Standard pan, SmartPan
Draft shield	Optional	Optional	Optional



	<b>XSR6002SDR</b>	<b>XSR6002S</b>	<b>XSR10002S</b>
Material number	30317462	30317453	30317437
<b>Limit values</b>			
Maximum capacity (full range/fine range)	6.1 kg / 1.2 kg	6.1 kg	10.1 kg
Readability (full range/fine range)	0.1 g / 0.01 g	0.01 g	0.01 g
Repeatability (full range/fine range)	60 mg / 8 mg	8 mg	8 mg
Linearity deviation	60 mg	20 mg	20 mg
<b>Typical values</b>			
Repeatability (full range/fine range)	40 mg / 5 mg	4 mg	4 mg
Linearity deviation	20 mg	6 mg	6 mg
Sensitivity offset (test weight)	30 mg (6 kg)	12 mg (6 kg)	12 mg (10 kg)
Minimum weight (5% load, k=2, U=1.0%)	1 g	820 mg	820 mg
USP minimum weight (5% load, k=2, U=0.10%)	10 g	8.2 g	8.2 g
Settling time	1.2 s	1.2 s	1.5 s
<b>Dimensions</b>			
Weighing pan size (mm)	172 x 205	172 x 205	172 x 205
Weighing pan	Standard pan, SmartPan	Standard pan, SmartPan	Standard pan, SmartPan
Draft shield	Optional	Optional	Optional



	<b>XSR4001S</b>	<b>XSR6001S</b>	<b>XSR8001S</b>	<b>XSR10001S</b>
Material number	30317501	30317496	30317515	30317487
<b>Limit values</b>				
Maximum capacity	4.1 kg	6.1 kg	8.1 kg	10.1 kg
Readability	0.1 g	0.1 g	0.1 g	0.1 g
Repeatability	80 mg	80 mg	80 mg	80 mg
Linearity deviation	60 mg	60 mg	100 mg	100 mg
<b>Typical values</b>				
Repeatability	40 mg	40 mg	40 mg	40 mg
Linearity deviation	20 mg	20 mg	30 mg	30 mg
Sensitivity offset (test weight)	50 mg (4 kg)	50 mg (6 kg)	120 mg (8 kg)	120 mg (10 kg)
Minimum weight (5% load, k=2, U=1.0%)	8.2 g	8.2 g	8.2 g	8.2 g
USP minimum weight (5% load, k=2, U=0.10%)	82 g	82 g	82 g	82 g
Settling time	0.8 s	0.8 s	1 s	1 s
<b>Dimensions</b>				
Weighing pan size (mm)	190 x 223	190 x 223	190 x 223	190 x 223
Weighing pan	Standard pan	Standard pan	Standard pan	Standard pan
Draft shield	Optional	Optional	Optional	Optional

## Features

### Weighing Performance

- Max capacity from 300 g to 10 kg
- Readability from 1 mg to 0.1 g
- SmartPan weighing pan

### Quality Assurance

- Customizable tolerance profiles, with pre-defined quality and weighing settings
- MinWeigh warning function
- Balance ready StatusLight™
- LevelControl: level warning with graphical leveling guide
- Temperature and time programmable automatic adjustment (proFACT)
- Password protected configuration

### Efficient Operation

- 4.3 inch color capacitive touchscreen terminal, glove compatible
- Storage of weighing methods
- Integrated results notepad

### Seamless Process

- Multiple interfaces for easy connectivity and data export: 4 x USB, 1 LAN
- Easy connection of peripheral devices: printers, PC, barcode readers, footswitches and sensors
- Export of process and results data to XML or Excel

### Sustainable Value

- Integrated overload protection
- Chemically resistant materials
- Designed for easy cleaning

## Selected Accessories



### Printers

The P-50 family of printers generate fast, high-quality printouts on paper, continuous label and individual labels with IDs and barcodes.



### Barcode Reader

Read in sample and user IDs quickly and without error with a handheld barcode reader.



### Terminal Stand

Place your terminal on a stand which is quickly mounted at the back of your balance. The display is easier to read and good posture is maintained.



### Hand/foot Switches

Keep your hands free to handle your sample and equipment by using a remote switch to perform selected balance operations.



### Protective Covers

Disposable terminal covers protect your balance and help avoid cross-contamination. A dust cover shields your balance against soiling.



### CarePacs

CarePac certified weight sets fully support routine testing to limit the risks of working outside process tolerances.

[www.mt.com/carepacs](http://www.mt.com/carepacs)

## Accessory Material Numbers

P-52 RUE dot matrix printer, RS232, USB, Ethernet, optional BT	30237290
P-56 RUE thermal direct printer, RS232, USB, Ethernet, optional BT	30094673
P-58 RUE thermal direct printer, RS232, USB, Ethernet, optional BT	30094674
USB barcode reader	30417466
Protective cover for XSR terminal	30300968
Protective cover for S-platform balances: 10 mg and 0.1 g	30106207
Protective cover for S-platform balances: 0.1 mg, 1 mg	30300967
Protective cover for standard weighing pan, S-platforms: 10 mg (172 x 205 mm)	30106207
Protective cover for standard weighing pan, S-platforms: 0.1 g (190 x 223 mm)	30106204
ErgoSens: infrared sensor for touch-free remote operation (USB connection)	30300915
Footswitch: switch for remote operation (USB connection)	30312558
Terminal stand for S-platform balances, requires adapter 30300956	30125077
Bluetooth adapter, connects via USB	30416089
USB-RS232 converter: connects peripheral devices to the balance via RS232	64088427
Terminal extension cable: length 4.5 m	30300920

[www.mt.com/lab-accessories](http://www.mt.com/lab-accessories)



## LabX Laboratory Software

Connect your balance to LabX software to benefit from a fully integrated solution which can satisfy all your data handling needs.

- SOP user guidance on the instrument
- Automatic data handling and calculations
- Easy data access and documentation
- Full process and results traceability
- Centralized management of multiple instruments

[www.mt.com/xsr-precision](http://www.mt.com/xsr-precision)

For more information

### METTLER TOLEDO Group

Laboratory Weighing

Local contact: [www.mt.com/contacts](http://www.mt.com/contacts)

Subject to technical changes

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