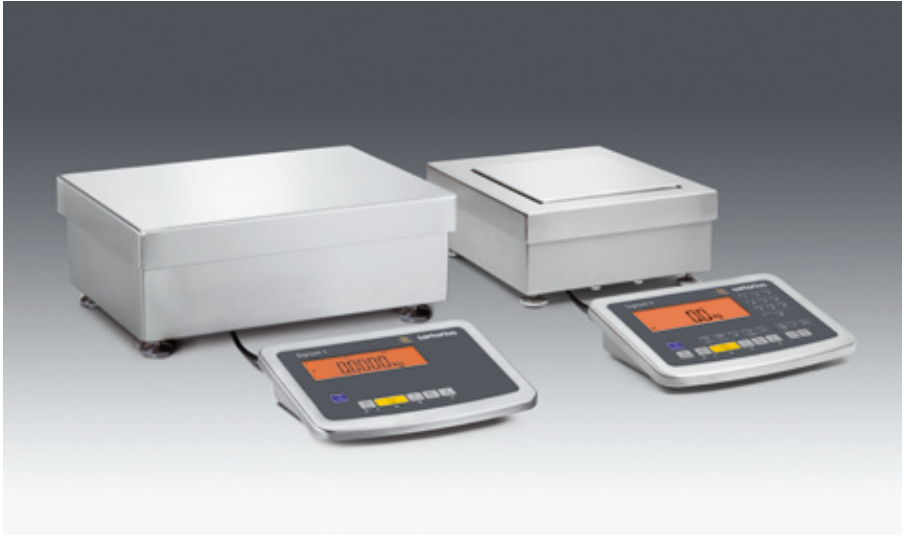


# Signum® Complete Scales

## Supreme Stainless Steel SIWSBBS and SIWSDCS



- Monolithic weighing system
- Resolutions of 60,000 d to 620,000 d
- Class II “verified at the factory” with built-in motorized calibration weight
- Includes multiple application levels
- Overload protection (300 kg)
- Variety of options for special requirements | data communication
- IP65 protection
- Optional use in areas subject to explosion hazards zones 2 and 22

Signum® by Sartorius is the latest in a long line of market leading weighing technology. It combines the high precision and accuracy of a laboratory balance with the rugged robustness and longevity of an industrial scale.

With simplicity of use at the fore front of its design, Signum® provides intuitive controllers ensuring that no matter how complicated the procedure, Signum® not only makes it easy but minimizes the risk for inputting errors. Built-in calibration weights help to maintain its accuracy and an internal product memory allows large amounts of data to be stored on the machine.

A choice of three indicators and three platforms ensures that Signum® is the best choice no matter what your process. A wealth of features are provided depending on the level of indicator and platform chosen, these include;

- SQ Min
- Full label printing and formatting
- Counting
- Checkweighing
- Totalizing
- Formulation
- Classification

To fit seamlessly into your existing infrastructure, Signum® is equipped with a wide range of connectivity options such as Ethernet, Profibus DP, PS2, RS232, RS422 and RS485. To further facilitate its easy integration into any process, Signum® is built with an IP65 housing and is approved for use in ATEX zones 2/22.

Any application utilizing weighing technology can be a potentially damaging environment to the accuracy of the equipment. To combat this fully, Signum® is built to withstand massive overloads (up to 300 kg) and to be resilient to large side shocks and lateral vibrations.

Whatever your application, Signum® can be guaranteed to support you. The wealth of options and customizable features makes it the perfect scale no matter what your budget or requirements.

Signum®, the complete scale to complete your process.

## General Specifications

### Material

Brushed stainless steel 1.4301

### Humidity

85% relative (non-condensing)  
up to 31°C; 50% relative 40°C

### Use at an altitude above sea level

Up to 2,000 m; indoors

### Weighing system

Monolithic weighing system

### Resolution (not verifiable)

SIWSBBS:

Depending on model up to 620,000 d

SIWSDCS:

Depending on model up to 350,000 d

### Resolution (verified at the factory)\*

SIWSDCS:

Depending on model up to 35,000 e

### Transient emissions

In compliance with EN 61326-1, Class B  
(IEC 61326-1)

### Electrical safety

In compliance with EN 61010-1  
(IEC 61010-1)

### Interference resistance

In compliance with EN 61326-1,  
Industrial areas  
(IEC 61326-1)

### Preload

Up to 100 % of the scale area

\* Models "verified at the factory"  
with built-in motorized calibration weight  
(all non-verifiable scales come without built-  
in motorized calibration weight by default)

### IP Protection Rating

IP65

### Net weight | Gross weight

SIWSBBS: 9.0 | 10.8 kg

SIWSDCS: 15.0 | 18.0 kg

### Packaging dimensions

SIWSBBS: 570 × 400 × 370 mm

SIWSDCS: 510 × 440 × 410 mm

### Ambient temperature

SIWSBBS: - 10°C to +40°C

SIWSDCS: - 10°C to +40°C

### Ambient temperature

(for use in legal  
metrology only)

SIWSDCS: +10°C to +30°C

### Data interfaces

RS232

Optional

RS232

RS-485/422

Analog output 0/4..20 mA, 0-10 V, 16-bit

Digital I | O (5 inputs and 5 outputs)

PROFIBUS DP

Ethernet TCP | IP

PS/2

2nd built-in A/D converter

### Internal alibi memory

Optional 130,000 data records

### Comprehensive range of accessories

### Battery operation

Optional

Internal rechargeable battery in display unit  
(different housing dimensions)

### EX approval

Zones 2 and 22

### Power supply

100 – 240 V AC (-15% | +10%), 50 – 60 Hz,  
Max. 17 W | 23 VA

Optional

15.5–24 VDC (±10%), max. 12 W

13–17 VAC (±10%), 50–60 Hz, max. 12 W

### Cable length between display unit and platform

2 m

## Order code

Series	Sensor technology	Dimensions	Base frame material	–	Application level	–	Maximum load	–	Display resolution	CE approval
SIW	S	BB	S	–	1	–	3	–	S	SCE
		DC	S		2		6		H	HCE
					3		16			
							35			

## Signum® Supreme Resolutions

### Non-verifiable

-S	Resolution > = 60,000 d
-H	Resolution > 100,000 d

### Factory-verified

-SCE	Single range, Class II < 10,000 e, e = 10 d
-HCE	Single range, Class II > 10,000 e, e = 10 d

## Display and control unit



## Application levels

	Level 1	Level 2	Level 3
Keyboard	6 keys	14 keys	28 keys
Display	14 segments	14 segments 20 mm weight display plus application icons	14 segments 20 mm weight display plus application icons
Weighing	•	•	•
Data transfer to printer   PC	•	•	•
isoTEST	•	•	•
Counting		•	•
Weighing in percent		•	•
Averaging		•	•
Checkweighing		•	•
Totalizing		•	•
Combination of 3 applications			•
Weighing and counting to target value (from memory)			•
50 min (minimum sample weight)	•	•	•
Identifiers (4 × 40 characters)			•
Product data memory			•
Date   Time		•	•
Reference scale connection		•	•
Internal alibi memory (optional)		○	○

**Signum® Supreme SIWSBBS Weighing Data****Non-verifiable models**

Capacity code	-3	-6
Resolution code	-H	-H
Weighing capacity (kg)	3.1	6.1
Readability (g)	0.01	0.01
Calibration weight value (g)	2,000	5,000
Accuracy class	E1	E2
Preload (kg)	3	0
Repeatability (g)	0.01	0.01
Linearity (g)	0.02	0.02
Ambient temperature	-10°C to +40°C	

**Signum® Supreme SIWSDCS Weighing Data****Non-verifiable models**

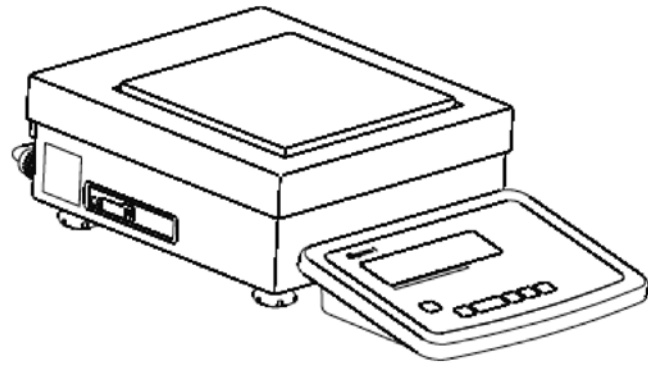
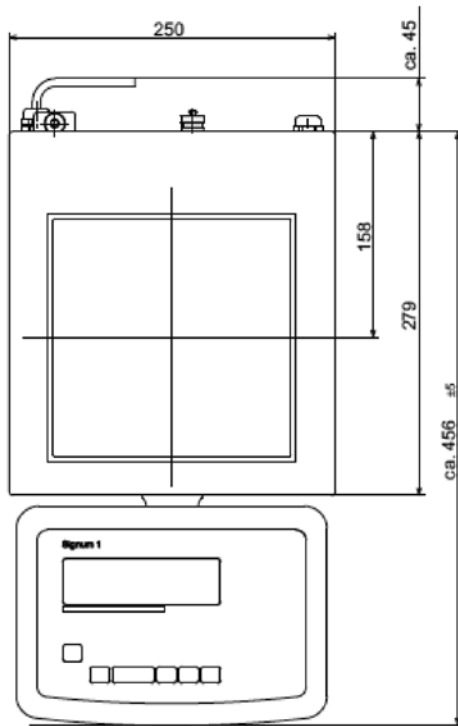
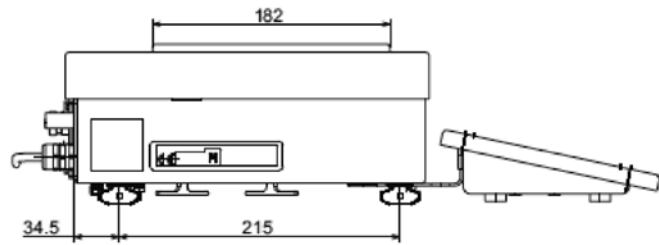
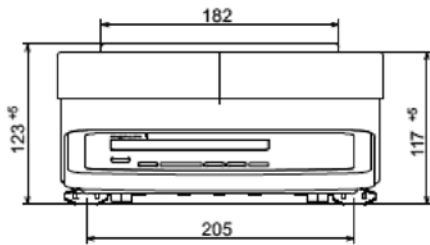
Capacity code	-6	-16	-35
Resolution code	-S	-H	-H
Weighing capacity (kg)	6	16	35
Readability (g)	0.1	0.1	0.1
Calibration weight value (g)	5,000	10,000	10,000
Accuracy class	F2	F1	F1
Preload (kg)	5	5	5
Repeatability (g)	0.08	0.08	0.08
Linearity (g)	0.2	0.2	0.2
Ambient temperature	-10°C to +40°C		

**Verified models**

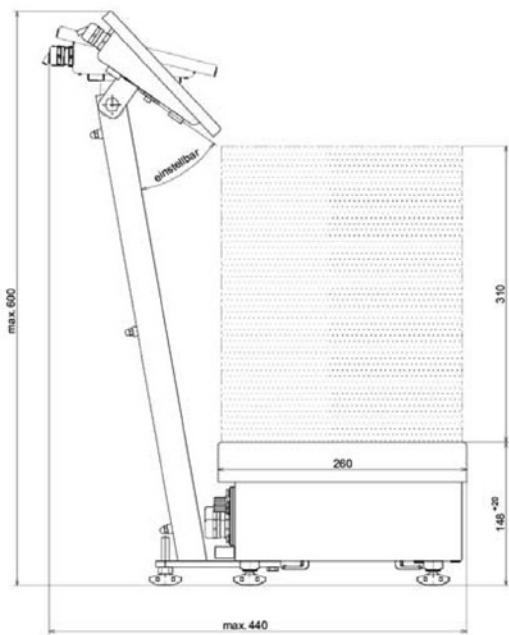
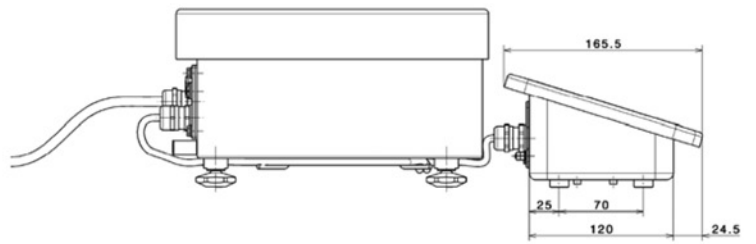
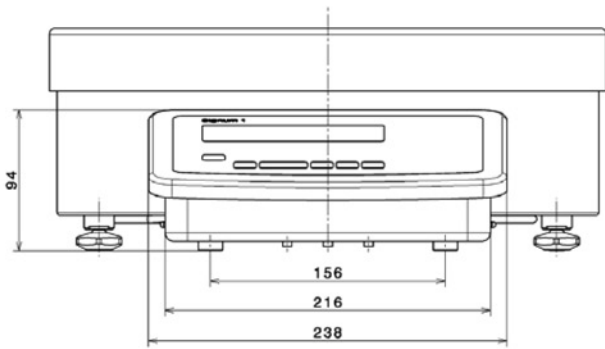
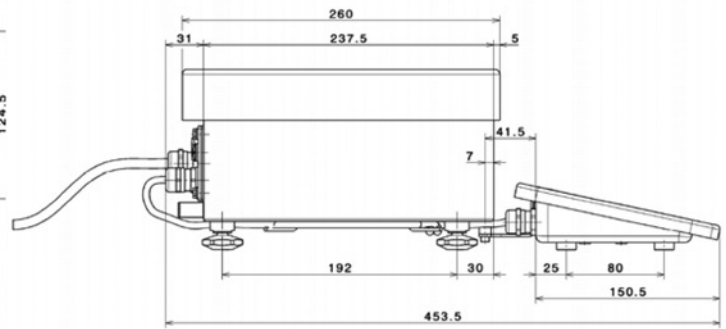
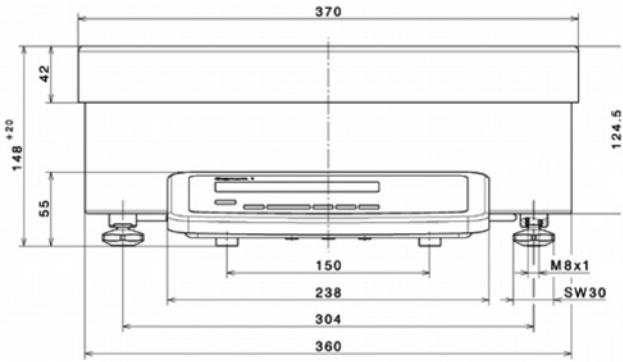
Capacity code	-6	-16	-35
Resolution code	-SCE	-HCE	-HCE
Weighing capacity (kg)	6	16	35
Readability (g)	0.1	0.1	0.1
Verification scale interval (g)	1	1	1
Calibration weight value (g)	5,000	10,000	10,000
Accuracy class	F2	F1	F1
Preload (kg)	5	5	5
Repeatability (g) (in compliance with EN45501)	0.08	0.08	0.08
Linearity (g) (in compliance with EN45501)	0.2	0.2	0.2
Ambient temperature (for use in legal metrology only)	+10°C to +40°C		

Scale drawings:

SIWSBBS



SIWSDCS



The display unit and the weighing module for the Signum® Supreme are mechanically decoupled and only connected via one cable.



**Display unit has flexible positioning options**  
A 2 m long connection cable enables free positioning of the unit

**Advantages:**  
1. No corruption of weighing results due to vibrations even during rough handling.  
2. The placement of the display unit can be adjusted to all room sizes and enables ergonomic operation at all times.



**Forward position of display unit**  
The unit can be secured in place by latching it into a holder



**Elevated display unit**  
Column with shielded cable channel and variable tip angle setting (optional)

## Options

		Level 1 IP65	Level 2 IP65	Level 3 IP65
<b>Interfaces</b>				
UniCom: RS232	A1	•	•	•
UniCom: RS422	A2	•	•	•
UniCom: RS485	A3	•	•	•
UniCom: Ethernet	B9	•	•	•
UniCom: 5 dig. In   5 dig. Out	A5	•	•	•
UniCom: Analog output	A9	•	•	•
UniCom: Profibus	B1	•	•	•
Analog interface for second scale	A15		•	•
<b>Cables</b>				
Connection cable RJ45 connector, 7 m	M38	•	•	•
<b>Other Features</b>				
24 volt AC adapter	L8	•	•	•
Internal rechargeable battery pack	L9	•	•	•
Separable connection for second scale	X1		•	•
ATEX zones 2 and 22 protection class	Y2	•	•	•
Built-in weight adjustment control (for *-CE version already built-in for serial production)	E7	•	•	•
Internal alibi memory	E5	•	•	•
<b>Manufacturer's final inspection test report</b>				
Final inspection test report (scale)	Z3	•	•	•



## Accessories

### Printer

Data printer with date, time, and statistics program	YDP20-OCE
Strip   label printer, 60 mm paper width	YDP04IS-OCEUV
Strip   label printer, 108 mm paper width	YDP14IS-OCEUV
Thermal transfer printer, 108 mm paper width	YDP14IS-OCEUVTH
Column for DCS model, stainless steel, height 330 mm	YDH01CWS
Column for DCS model, stainless steel, height 500 mm	YDH02CWS
Column for DCS model, stainless steel, height 750 mm	YDH03CWS
Wall mounting bracket for display, stainless steel	YDH01CIS
Wall mounting bracket for display, stainless steel, display tiltable	YDH02CIS
Dust covers for display unit (2 units)	YDC01SW
Kit for control panel installation	YAS03MI

### Cables

PC connection cable, 12-pin round plug socket on 25-pin D-SUB-plug, 5 m	YCC01-03ISM5
PC connection cable, 12-pin round plug socket on 9-pin D-SUB-plug, 5 m	YCC01-09ISM5
Connection cable for Sartorius accessories with default interface MP8/MC1, 12-pin round plug socket, 25-pin D-SUB-plug, 3 m	YCC01-0016M3
Extension cord, 12-pin round plug socket on 12-pin round socket, 6 m	YCC01-01ISM6
Connection cable, 12-pin round plug socket on open cable ends, 5 m	YCCDI-03M5

### Electrical Accessories

Round plug socket for own cable assembly, 12-pin, IP65	69QC0010
Barcode scanner, 120 mm scanning width with 12-pin round plug socket	YBR03IS

### Software

SNLE Sartorius Nice Label Express software	YAD02IS
WinScale for Windows® 95   98   2000   NT	YSW03
SartoCollect	YSC02
SartoConnect	YSC01L





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