



sartorius

Signum® Complete Scale Advanced SIWABBP | SIWADCP | SIWAEDG

Signum® Complete Scales



- Mechatronic weighing system
- SIWABBP: Resolutions of up to 150,000 d
- SIWADCP | EDG: Resolutions of up to 80,000 d
- Includes multiple application levels
- Overload protection (300 kg)
- Variety of options for special requirements | data communication
- Optional 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 optional 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

Display unit stainless steel
Platform Industrial strength epoxide resin coating
Color: NCSS3502-B (RAL7040), or SIWAEDG: galvanized steel
Stainless steel load plate

Display and control unit

Supplied, with metal sheet attachment (screw connection), or optional column that can be attached to the platform

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

Mechatronic weighing cell

Resolution

SIWABBP: Depending on model up to 150,000 d
SIWADCP | EDG: Depending on model up to 80,000 d

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

IP Protection Rating

IP43
optional IP65
SIWAEDG: IP65

Net weight | Gross weight

SIWABBP: 6.8 kg | 8.6 kg
SIWADCP: 11.4 kg | 13.0 kg
SIWAEDG: 12.5 kg | 14.4 kg

Packaging dimensions

SIWABBP: 570 × 400 × 370 mm
SIWADCP: 570 × 400 × 370 mm
SIWAEDG: 560 × 420 × 300 mm

Ambient temperature

-10°C to 40°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 (SIWAEDG: 3 m)

Order code

Example - order code SIWABBP-2-8-1:

Series	Sensor technology	Dimensions	Base frame material	-	Application level	-	Maximum load	-	Display resolution
SIW	A	BB	P	-	1	-	1	-	H
		DC	G		2		7		I
		ED			3		8		S
							16		
							35		
							65		

Signum® Advanced Resolutions

Non-verifiable

-H	Resolution > 100,000 d
-I	Resolution > 30,000 d
-S	Resolution > = 60,000 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)			•
SQ min (minimum sample weight)	•	•	•
Identifiers (4 x 40 characters)			•
Product data memory			•
Date Time		•	•
Reference scale connection		•	•
Internal alibi memory (optional)		○	○

* Not available for SIWAEDG

Signum® Advanced SIWABBP Weighing Data

Capacity code	-1	-8
Resolution code	-H	-I
Weighing capacity (kg)	1.5	8
Readability (g)	0.01	0.1
Calibration weight value (g)	1,000	5,000
Accuracy class	F1	F2
Preload (kg)	0	3
Repeatability (g)	0.03	0.2
Linearity (g)	0.03	0.3
Ambient temperature	-10°C to +40°C	

Signum® Advanced SIWADCP Weighing Data

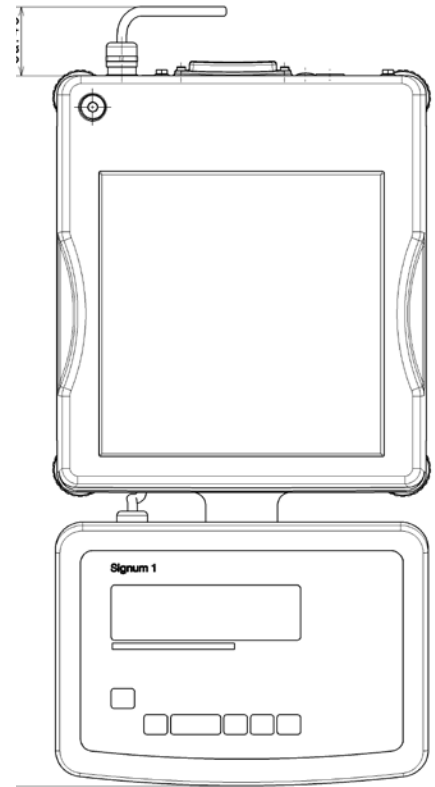
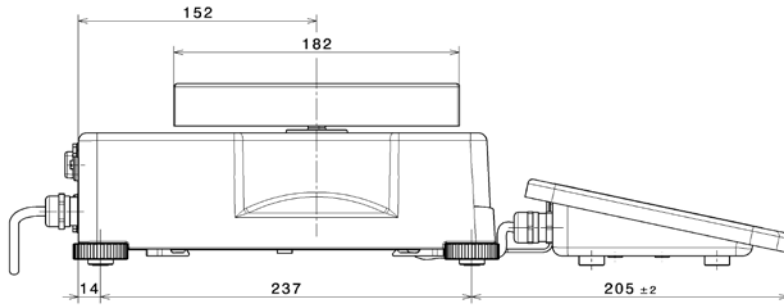
Capacity code	-7	-16	-35	65
Resolution code	-S	-S	-S	-S
Weighing capacity (kg)	7	16	35	65
Readability (g)	0.1	0.2	0.5	1
Calibration weight value (g)	5,000	5,000	10,000	20,000
Accuracy class	F2	F2	F2	F2
Preload (kg)	-	-	-	-
Repeatability (g)	0.2	0.4	1	2
Linearity (g)	0.3	0.6	1.5	3
Ambient temperature	-10°C to +40°C			

Signum® Advanced SIWAEDG Weighing Data

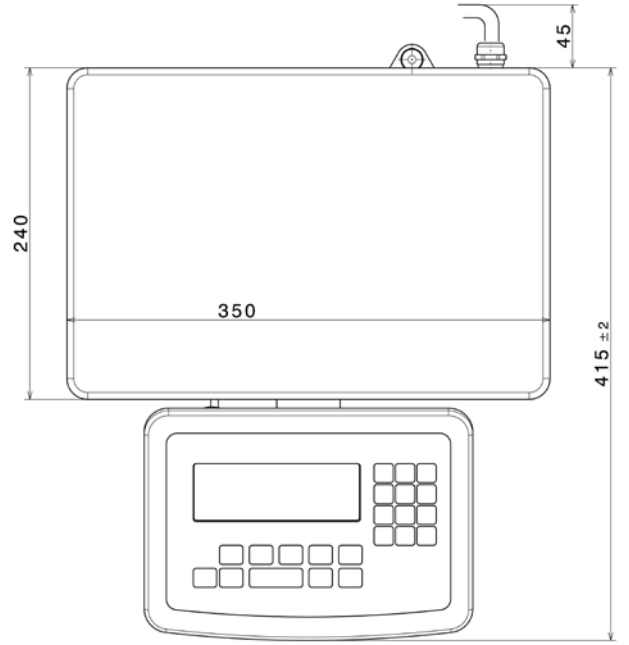
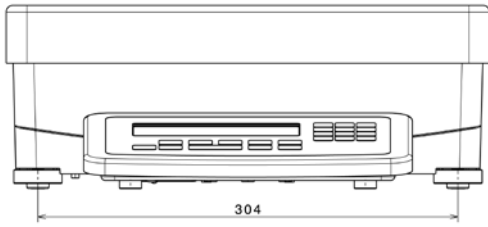
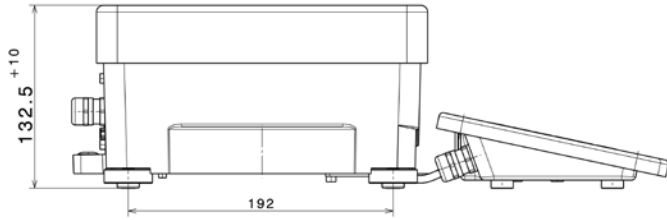
Capacity code	-16	-35	-65
Resolution code	-S	-S	-S
Weighing capacity (kg)	16	35	65
Readability (g)	0.2	0.5	1
Calibration weight value (g)	5,000	10,000	20,000
Accuracy class	F2	F2	F2
Preload (kg)	-	-	-
Repeatability (g)	0.4	1	2
Linearity (g)	0.6	1.5	3
Ambient temperature	-10°C to +40°C		

Scale drawings:

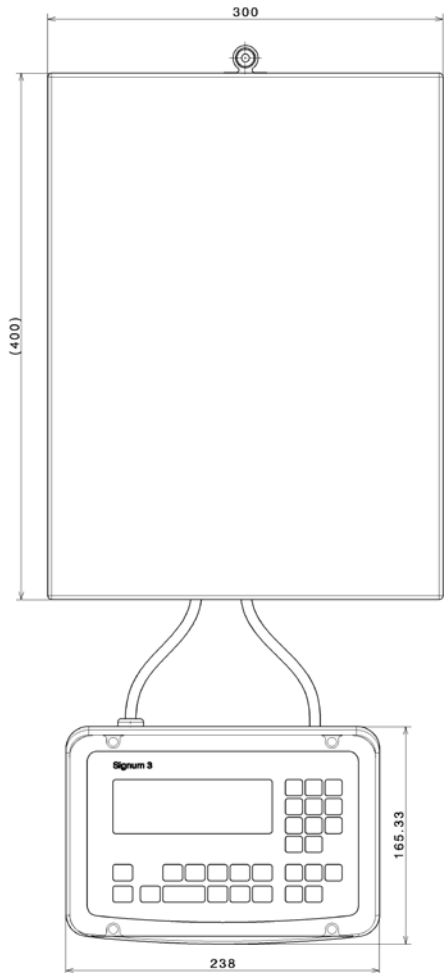
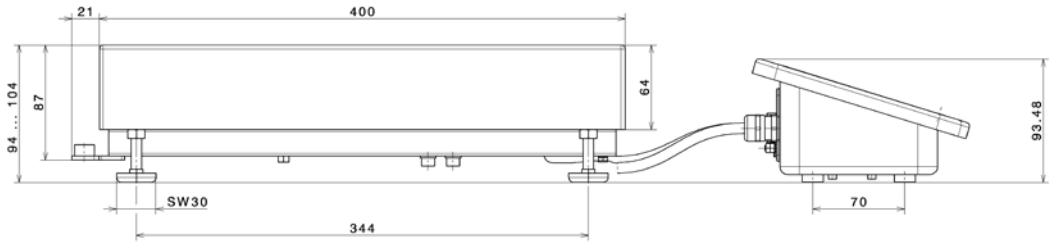
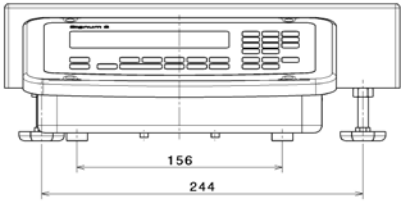
SIWABBP



SIWADCP



SIWAEDG



The display unit and the weighing module for the Signum® Advanced 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
Secure fixing via a holder (not for SIWAEDG)



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

Options*

		Level 1		Level 2		Level 3		
		IP43	IP65	IP43	IP65	IP43	IP65	
Interfaces								
COM 1: RS232, real-time clock + PS2	A32			•		•		
UniCom: RS232	A1	•	•	•	•	•	•	YD001SW-232
UniCom: RS422	A2	•	•	•	•	•	•	YD001SW-485/422
UniCom: RS485	A3	•	•	•	•	•	•	YD001SW-485/422
UniCom: Ethernet	B9	•	•	•	•	•	•	YD001SW-ETH
UniCom: 5 dig. In 5 dig. Out	A5	•	•	•	•	•	•	YD001SW-DIO
UniCom: Analog output	A9	•	•	•	•	•	•	YD001SW-AO
UniCom: Profibus	B1	•	•	•	•	•	•	YD001SW-DP
Analog interface for second scale	A15			•	•	•	•	
Other Features								
Protection class IP65	I65	•	•	•	•	•	•	
24 volt AC adapter	L8	•	•	•	•	•	•	
Internal rechargeable battery pack	L9	•	•	•	•	•	•	
Separable connection for second scale	X1			•	•	•	•	
Under-scale weighing port (only SIWADCP)	U1	•		•		•		
ATEX zones 2 and 22 protection class	Y2		•		•		•	
Internal alibi memory	E5	•	•	•	•	•		
Manufacturer's final inspection test report								
Final inspection test report (scale)	Z3	•	•	•	•	•	•	

* Options not available for SIWAEDG

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

Mechanical accessories

Column for DCP model, height 500 mm	YDH01P
Column for BBP model, height 400 mm	YDH02P
Column for EDG model, height 500 mm	YDH02CWP
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

Cable for BBP, DCP model (25-pin D-SUB plug to ...)

Connection cable for printer YDP14/04IS, - 9-pin D-SUB plug, 3 m	YCC01-01CISLM3
Connection cable for PC connection, - to 9-pin D-SUB socket, approx. 1.5 m	7357314
Connection cable for dig. Sartorius balances, - 25-pin D-SUB plug, 3 m	YCCDI-01M3
Connection cable for PC connection, - 25-pin D-SUB socket, approx. 2 m	7357312
Connection cable for dig. Sartorius balances, - 12-pin round plug, 6 m	YCC01-02ISM3
Connection cable for various accessories and the IS platform, - 12-pin round socket, 6 m	YCC01-03CISLM3
Connection cable with open cable ends, 6 m	YCC02-RELAIS01
Connection cable from RS-232 data interface to USB port on PC, - USB plug, 2 m	YCC01-USBM2
Connection cable for current interface YDA01x-20MA, with open cable ends, e.g. 5 × 5 m	6906926

Cable for EDG model (open cable ends to ...)

Connection cable for barcode reader YBR03FC, - 5-pin DIN socket, 1 m	YCC02-BR02
Connection cable for various accessories - 25-pin D-SUB socket, 6 m	YCC02-D25F6
Connection cable for various accessories - 25-pin D-SUB plug, 6 m	YCC02-D25M6
Connection cable for YDP20-OCE printer or PC - 9-pin D-SUB socket	YCC02-D09F6
Connection cable for printer YDP14/04IS, - 9-pin D-SUB plug, 6 m	YCC02-D09M6
Connection cable for dig. Sartorius balances, - 12-pin round plug, 6 m	YCC02-R12M6
Connection cable for various accessories and the IS platform, - 12-pin round socket, 6 m	YCC02-R12F6
Connection cable with open cable ends, 6 m	YCC02-RELAIS02
Ethernet connection cable with RJ45 plug, 7 m	YCC02-RJ45M7

Accessories

Interfaces

UniCom – RS232 interface module*	YD001SW-232
UniCom – RS485/422 interface module*	YD001SW-485/422
UniCom – Analog Out interface module*	YD001SW-AO
UniCom – Ethernet interface module*	YD001SW-ETH
UniCom – Dig. I/O interface module*	YD001SW-DIO
UniCom – Profibus DP interface module*	YD001SW-DP
External USB interface cable	YCC01-USBM2

*for future installation by service or dealer

Electrical accessories

2nd display	YRD02Z
External red-green-red display	YRD11Z
Barcode reader, 120 mm scanning width with PS/2 connector	YBR03PS2

Software

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

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Subject to change without notice.
Printed in Germany
on paper that has been bleached
without any use of chlorine. | W
Publication No.: WI-2012-e12074
Order No.: 98649-012-71