



## Signum® Complete Scale Supreme SIWS



- Monolithic weigh cell
- Resolutions of 60,000 d to 350,000 d
- Class II, verified at the factory for use in legal metrology: 1 x 30,000 e (e=d) 1 x 6000 e and 35,000 e (single and dual range) with built-in motorized calibration weight
- Compact scale with all application levels available for selection
- Flexible and ergonomic thanks to flexible mounting options of slim-line display and control unit
- Overload protection
- Variety of options for special requirements/Data communication
- Optional IP65 protection and optional approval for zone 2 and 22 hazardous areas 22

### General Specifications

#### Power supply (built-in)

100-240 V AC (-15%/+10%), 50-60 Hz, up to 17W/23VA

#### Material, housing base

Die-cast aluminum painted with highly resistant industrial paint

#### Humidity

85% relative (non-condensing) to 31°C; 50% relative 40°C (104°F)

#### Use at elevation above sea level

up to 2,000 m; indoors

#### Measurement technology

Monolithic weigh cell with integrated A/D converter

#### Resolution (verifiable)

Depends on model: 1 x 40,000 e

#### Max. resolution (non-verifiable)

Depends on model: 1 x 4,000,000 d

#### Limitation of emissions

Acc. to EN 61326-1, Class B (IEC 61326-1)

### Immunity to interference

Acc. to EN 61326-1, industrial areas (IEC 61326-1)

### Electrical safety

Acc. to EN 61010-1 (IEC 61010-1)

### IP-protection

IP43

### Net weight

11,4 kg

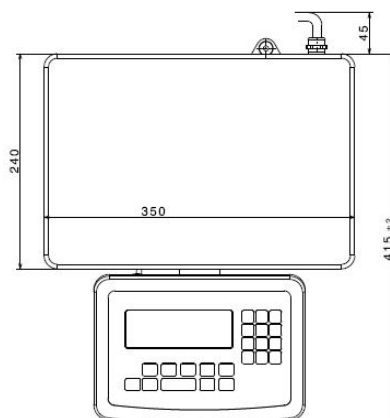
### Net weight

(incl. built-in motorized calibration weight)

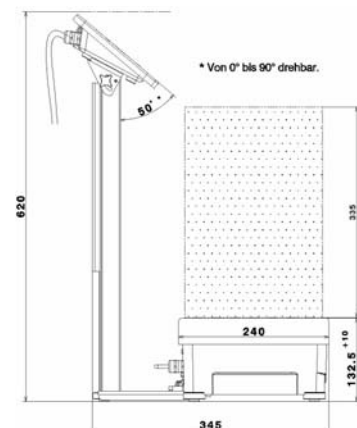
11.9 kg

### Ambient temperatures (e only)

10°C to 30°C (50°F to 86°F)



Front-mounted display



Raised display



## Application levels

|                                  | Level 1     | Level 2                              | Level 3                              |
|----------------------------------|-------------|--------------------------------------|--------------------------------------|
| Keypad                           | 6 keys      | 14 keys                              | 17 keys                              |
| Display                          | 14 segments | 14 segments plus application symbols | 14 segments plus application symbols |
| Weighing                         | •           | •                                    | •                                    |
| Averaging                        |             | •                                    | •                                    |
| Reference scale connection       |             | •                                    | •                                    |
| Counting                         |             | •                                    | •                                    |
| Totalizing                       |             | •                                    | •                                    |
| Checkweighing                    |             | •                                    | •                                    |
| Product data memory              |             |                                      | •                                    |
| Date/time                        |             | •                                    | •                                    |
| SQ min (minimum sample quantity) | •           | •                                    | •                                    |
| ID codes (4x40 characters)       |             |                                      | •                                    |

## Order number

| Series | Sensor technology | Dimensions | Base frame material | Application level | Max. cap. | Display resolution | CE approval |
|--------|-------------------|------------|---------------------|-------------------|-----------|--------------------|-------------|
| SIW    | S                 | DC         | P                   | 1                 | 6         | S                  | SCE         |
|        |                   |            |                     | 2                 | 15        | H                  | HCE         |
|        |                   |            |                     | 3                 | 16        | K                  | KCE         |
|        |                   |            |                     |                   | 35        | T                  | TCE         |
|        |                   |            |                     |                   |           | D                  | DCE         |
|        |                   |            |                     |                   |           | P                  | PCE         |

## Weight-determination specifications

|                                   |  |      |      |        |        |       |       |      |
|-----------------------------------|--|------|------|--------|--------|-------|-------|------|
| Capacity code                     | -6   | -15  | -16  | -16    | -16    | -35   | -35   | -35  |
| Resolution code                   | -S   | -I   | -H   | -K     | -T     | -D    | -P    | -H   |
| Weighing capacity (kg)            | 6  | 15   | 16   | 3.5/16 | 3.5/16 | 7/35  | 7/35  | 35   |
| Readability (g)                   | 0.1  | 0.5  | 0.1  | 0.1/1  | 0.1/1  | 0.1/1 | 0.1/1 | 0.1  |
| Resolution code, verified models  | -SCE   | -ICE | -HCE | -KCE   | -TCE   | -DCE  | -PCE  | -HCE |
| Verification scale interval e (g) | 1  | 0.5  | 1    | 1      | 1      | 1     | 1     | 1    |
| Preload (kg)                      | 5  | 5    | 5    | 5      | 5      | 5     | 5     | 5    |
| Standard deviation [s] in g       | 0.08 (verified models in acc. with EN 45501) |      |      |        |        |       |       |      |
| Linearity (g)                     | 0.2 (verified models in acc. with EN 45501)  |      |      |        |        |       |       |      |

## Resolutions and Approvals

| Non-verifiable |   | Verified at the factory: CE |  |
|----------------|---|-----------------------------|--|
| -S             | Resolution $\geq 60,000$ d  | -SCE                        | Single range, Class II - $< 10,000$ e, $e = 10$ d                            |
| -H             | Resolution $\geq 100,000$ d   | -HCE                        | Single range, Class II - $> 10,000$ e, $e = 10$ d                            |
| -K             | Resolution $\leq 50,000$ d (fine range only for spec. capacity level) | -KCE                        | Dual range (fine range only for spec. capacity level) Class II $\leq 5000$ e |
| -T             | Resolution $\leq 50,000$ d (fine range can be continuously used)      | -TCE                        | Dual range (fine range can be continuously used) Class II - $\leq 5000$ e    |
| -D             | Resolution $> 50,000$ d (fine range only for spec. capacity level)    | -DCE                        | Dual range (fine range only for spec. capacity level) Class II $> 5000$ e    |
| -P             | Resolution $> 50,000$ d (fine range can be continuously used)         | -PCE                        | Dual range (fine range can be continuously used) Class II - $> 5000$ e       |
| -I             | Resolution $> 30,000$ d   | -ICE                        | Single range, Class II - $30,000$ e, $e = d$                                 |

## Options

| Equipment  |      | Level 1 |      | Level 2 |      | Level 3 |      |   |
|--|------|---------|------|---------|------|---------|------|---|
|  |      | IP43    | IP65 | IP43    | IP65 | IP43    | IP65 |   |
| Type of protection   | IP65 | •       | •    | •       | •    | •       | •    |   |
| 24 volt AC adapter   | L8   | •       | •    | •       | •    | •       | •    | Details: see data sheet for Options L8 / L9 |
| Built-in rechargeable battery pack                                       | L9   | •       | •    | •       | •    | •       | •    |   |
| Analog second interface  | A15  |         |      | •       | •    | •       | •    | Details: see data sheet for Option A15      |
| Separable connection of second scale                                     | X1   |         |      | •       | •    | •       | •    |   |
| Below-balance weighing port  | U1   | •       |      | •       |      | •       |      |   |
| Base covering plate, stainless steel                                     | E8   | •       | •    | •       | •    | •       | •    |   |
| Protection rating, ATEX Zones 2 and 22                                   | Y2   |         | •    |         | •    |         | •    | Details: see data sheet for Option Y2       |
| Internal calibration weight (only for non-verifiable models, without*CE) | E7   | •       | •    | •       | •    | •       | •    |   |

## Interfaces

|   |     |   |   |   |   |   |   |  |
|---|-----|---|---|---|---|---|---|--|
| COM 1: "RS-232 connectivity": as for "RS-232 clock" plus PS/2 connector for bar code scanner or keyboard and slot prepared for later installation of a UniCOM interface (see "Accessories") | A32 |   |   | • |   | • |   |  |
| UniCOM: RS-232  | A1  | • | • | • | • | • | • | Details: see data sheet for Options A1 / A2 / A3 |
| UniCOM: RS-422  | A2  | • | • | • | • | • | • |  |
| UniCOM: RS-485  | A3  | • | • | • | • | • | • |  |
| UniCOM: Ethernet  | B9  | • |   | • |   | • |   | Details: see data sheet for Option B9            |
| UniCOM: 5 dig. IN/5 dig. OUT*   | A5  | • | • | • | • | • | • | Details: see data sheet for Option A5            |
| UniCOM: Analog output port*   | A9  | • | • | • | • | • | • | Details: see data sheet for Option A9            |
| UniCOM: Profibus  | B1  | • | • | • | • | • | • |  |
| Others  |     |   |   |   |   |   |   |  |
| Internal Alibi memory device  | E5  | • | • | • | • | • | • |  |

## Test record, manufacturer's final inspection

|  |    |   |   |   |   |   |   |  |
|--|----|---|---|---|---|---|---|--|
| Test record, production final inspection (scale) | Z3 | • | • | • | • | • | • |  |
|--|----|---|---|---|---|---|---|--|

## Calibrated/adjusted and/or verified at the factory for use in legal metrology

|   |    |   |   |   |   |   |   |  |
|---|----|---|---|---|---|---|---|--|
| Factory verification for use in legal metrology | F1 | • | • | • | • | • | • |  |
|---|----|---|---|---|---|---|---|--|

Base cover plate option and below-scale weighing port cannot be combined  
 Analog second scale connection and rechargeable battery pack cannot be combined

## Accessories/Options

### Printer

|  |                 |
|--|-----------------|
| Printer for hard copies with the date, time and statistical evaluation | YDP20-OCE       |
| Strip/label printer, 60 mm paper width                                 | YDP04IS-OCEUV   |
| Strip/label printer, 108 mm paper width                                | YDP12IS-OCEUV   |
| Thermal transfer printer, 108 mm paper width                           | YDP12IS-OCEUVTH |

### Mechanical Accessories

|  |          |
|--|----------|
| Column, height 500 mm  | YDH01P   |
| Bracket for wall mounting of display and control unit; stainless steel           | YDH01CIS |
| Bracket for wall mounting of display and control unit; stainless steel; tiltable | YDH02CIS |
| Dust covers for display and control unit (2 pcs)                                 | YDC01SW  |

### Cables

|   |                |
|---|----------------|
| Connecting cable for computer; 1.5 m                          | 7357314        |
| Connecting cable for printer; 3 m                             | YCC01-01CISLM3 |
| Connecting cable for analog output port, with open cable ends | 6906926        |

### Interfaces

|   |                |
|---|----------------|
| UniCOM RS-232 interface module*               | YD001SW-232    |
| UniCOM RS-485/422 interface module*           | YD001SW-485422 |
| UniCOM analog OUT interface module*           | YD001SW-AO     |
| UniCOM Ethernet interface module*             | YD001SW-ETH    |
| UniCOM interface module, digital I/O*         | YD001SW-DIO    |
| UniCOM Profibus-DP interface module*          | YD001SW-DP     |
| Bluetooth scale adapter with external antenna | YBT01          |
| External USB interface cable                  | YCC01-USBM2    |

\*for retrofitting by service technician or dealer

### Electrical Accessories

|  |           |
|--|-----------|
| External Alibi memory  | YAM01IS   |
| Power supply for YAM01IS Alibi memory                        | YAM11IS   |
| Second display   | YRD02Z    |
| External red/green/red display                               | YRD11Z    |
| Bar code scanner, 120 mm scanning width, with PS/2 connector | YBR02-PS2 |

### Software

|                                     |         |
|-------------------------------------|---------|
| Sartorius NICE Label Express (SNLE) | YAD02IS |
| WinScale for Windows 95/98/2000/NT  | YSW03   |
| SartoCollect                        | YSC02   |

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