

High Resolution Ex Scales

Electromagnetic Signum and IS Series



Explosion
Protection



Built in
Germany

When precision measurement is required for weighing hazardous materials Minebea Intec has the answer. All models are Factory Mutual approved. Scales 3 kg and higher are approved for operation in Class I,II and III, Division 1 and 2 hazardous areas for all material groups. Instrumentation can be located almost anywhere, in or out of the hazardous area and up to 1,000 feet from the scale base.

Consider these standard attributes:

- ① Cast aluminum or stainless steel enclosures are rugged and chemical resistant.
- ① Laboratory balance accuracy for bench scales down to 0.001 gram and up to 300 kg capacity floor scales.
- ① Power supplies can be operated in the hazardous area including battery options for portable applications.
- ① Convenience features include backlit displays and optional motorized internal calibration. Easy transfer of data to safe area for processing and storage.

Hazardous Area Scale Specifications



Application Level 3

- RS 232 interface
- 0-9 data entry keypad
- IP65 dust & water protection
- Post, base or wall mount
- Multiple weight conversions
- Lot number / product ID
- Time and date
- ISO test (cal. documentation)
- Multiple application programs
- Backlit display

| | |
|--------------|------------------------------------|
| Ex Approvals | USA: |
| | IS/CL I,II,III/DIV 1/GP ABCDEFG T4 |
| Ex Approvals | Canada: |
| | IS/CL I,II,III/DIV 1/GP ABCDEFG T4 |



BBS 304 Stainless



BBP Cast Aluminum



DCP Cast Aluminum



DCS 304 Stainless

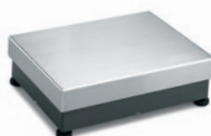
Signum Complete Scales - Indicator and Base

| Model Number | Capacity | | Readability | | Reproducibility grams (<±) | Non-linearity grams (<±) | Construction Material | Calibration Weight Kg | Weighing Platform in. | Platform IP Rating | Ship Weight lb. |
|------------------|----------|------|-------------|----------|-------------------------------|-----------------------------|--------------------------|--------------------------|--------------------------|-----------------------|--------------------|
| | Kg | lb | g | lb | | | | | | | |
| SIWXSBBP-3-06-H* | 0.6 | 1.3 | 0.001 | 0.000002 | 0.001 | 0.002 | Cast Aluminum | 0.5 | 4.5 diameter | 43 | 20 |
| SIWXSBBP-3-3-H | 3.1 | 6.8 | 0.01 | 0.00002 | 0.01 | 0.02 | Cast Aluminum | 2 | 7.1 x 7.1 | 65 | 21 |
| SIWXSBBP-3-3-H | 3.1 | 6.8 | 0.01 | 0.00002 | 0.01 | 0.02 | 304 Stainless | 2 | 7.1 x 7.1 | 65 | 21 |
| SIWXSBBP-3-6-H | 6.1 | 13.5 | 0.01 | 0.00002 | 0.01 | 0.02 | Cast Aluminum | 5 | 7.1 x 7.1 | 65 | 21 |
| SIWXSBBP-3-6-H | 6.1 | 13.5 | 0.01 | 0.00002 | 0.01 | 0.02 | 304 Stainless | 5 | 7.1 x 7.1 | 65 | 21 |
| SIWXSBBP-3-35-H | 35 | 77 | 0.1 | 0.0002 | 0.2 | 0.2 | Cast Aluminum | 10 | 13.7 x 9.5 | 65 | 43 |
| SIWXSBBP-3-35-H | 35 | 77 | 0.1 | 0.0002 | 0.2 | 0.2 | 304 Stainless | 10 | 14.6 x 10.2 | 65 | 43 |

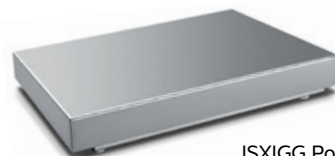
* SIWXSBBP-3-06-H approved for Class I, Div.1, Group ABCD



ISXBS 304 Stainless



ISXEDE Powder Coated



ISXIGG Powder Coated

IS Series - Base Only

| Model Number | Capacity | | Readability | | Reproducibility grams (<±) | Non-linearity grams (<±) | Construction Material | Calibration Weight Kg | Weighing Platform in. | Platform IP Rating | Ship Weight lb. |
|--------------|----------|------|-------------|---------|-------------------------------|-----------------------------|--------------------------|--------------------------|--------------------------|-----------------------|--------------------|
| | Kg | lb | g | lb | | | | | | | |
| ISXSBBS-3-H | 3.1 | 6.8 | 0.01 | 0.00002 | 0.01 | 0.002 | 304 Stainless | 2 | 7.1 x 7.1 | 65 | 19 |
| ISXSBBS-6-H | 6.1 | 13.5 | 0.01 | 0.00002 | 0.01 | 0.02 | 304 Stainless | 5 | 7.1 x 7.1 | 65 | 19 |
| IS16EDE-HX | 16 | 35 | 0.1 | 0.0002 | 0.05 | 0.2 | Powder Coated | 10 | 11.8 x 15.7 | 65 | 41 |
| IS34EDE-HX | 34 | 75 | 0.1 | 0.0002 | 0.1 | 0.2 | Powder Coated | 10 | 11.8 x 15.7 | 65 | 41 |
| IS64EDE-SX | 64 | 141 | 1.0 | 0.002 | 0.3 | 1.0 | Powder Coated | 10 | 11.8 x 15.7 | 65 | 41 |
| IS64EDE-HX | 64 | 141 | 0.1 | 0.0002 | 0.1 | 0.3 | Powder Coated | 10 | 11.8 x 15.7 | 65 | 41 |
| IS150IGG-HX | 150 | 330 | 1.0 | 0.002 | 1.0 | 4.0 | Powder Coated | 50 | 31.5 x 23.6 | 65 | 184 |
| IS300IGG-HX | 300 | 660 | 2.0 | 0.005 | 2.0 | 8.0 | Powder Coated | 50 | 31.5 x 23.6 | 65 | 184 |

Ex Instrumentation for IS-X Series



APPROVED
Class: III, IIIL
C of C: 19-055



CAIXS2-U Hazardous Area Indicator

Intended for use with all IS-X products, the CAIX2-U is designed to complement the high accuracy digital bases. Specify the following interface and cabling options when ordering:

- Option A19 - RS485 digital base interface card
- Option M26 - Digital base cable between CAIXS and IS-X scale base

Other Features

- RS232 switchable to RS485/RS422 for base or long distance data transmission
- Multiple weighing applications with 0-9 keyboard for tare or data entries
- Dual base connection possible, one analog and one digital scale
- Operation in safe or hazardous area with secondary remote indicator option

NOTE: Separate power supply required for base and indicator

| | |
|----------------------------------|---|
| Data Interfaces | RS232 Switchable RS485 or RS422 |
| Power Supplies USA & Canadian | Via external power supply unit 14-pin round connector FM (US): YPS02-XUR CSA: YPS02-XKR FM/CSA: YPS02-ZKR safe area YRB02-X FM/CSA |
| Ex Approvals | USA: IS/CL I,II,III/DIV 1/GP ABCDEFG T4 Canada: IS/CL I,II,III/DIV 1/GP ABCDEFG T4 |

Hazardous Area Accessories

Ex Display Mounting Hardware

| Part Number | Description | Use with Product | Type |
|-------------|---|-----------------------|---------------------|
| YDH01P | Stainless steel rear mounted column 19.6" height | Signum | DCP cast aluminum |
| YDH02P | Stainless steel rear mounted column 15.75" height | Signum | BBP cast aluminum |
| YDH01CWSUS | Stainless steel rear mounted column 13" height | Signum | DCS stainless steel |
| YDH02CWSUS | Stainless steel rear mounted column 19.6" height | Signum | DCS stainless steel |
| YDH03CWSUS | Stainless steel rear mounted column 25.5" height | Signum | DCS stainless steel |
| YDH02CISUS | Stainless steel tiltable wall mount kit | All Signum & CAIXS2-U | All versions |

Zenier Barriers

| Part Number | Description | Use with Product | Cabling | Scale Output to Barrier Output |
|-------------|--|--------------------|-------------------------------|----------------------------------|
| YDI05-ZU2 | Zenier barrier from hazardous to safe area | Signum | 20 meters included | RS232 to RS232 or RS485 to RS485 |
| YDI05-ZU3 | Zenier barrier from hazardous to safe area | Signum or CAIXS2-U | YCC422-X or YCC485-X (A or B) | RS422 to RS232 or RS485 to RS485 |
| YDI05-ZU1 | Zenier barrier from hazardous to safe area | CAIXS2-U | 20 meters included | RS232 to RS232 or RS485 to RS485 |

Cables

| Part Number | Description | Use with Product | Cable Length | Barrier Type |
|-----------------|---|-------------------|------------------------|-----------------------|
| YCC422-X type A | RS422 cable to barrier, conversion to RS232 | CAIXS2-U | Specify length in feet | Use barrier YDI05-ZU3 |
| YCC422-X type B | RS422 cable to barrier, conversion to RS232 | Signum | Specify length in feet | Use barrier YDI05-ZU3 |
| YCC485-X type A | RS485 cable to barrier, no conversion | CAIXS2-U | Specify length in feet | Use barrier YDI05-ZU3 |
| YCC485-X type B | RS485 cable to barrier, no conversion | Signum | Specify length in feet | Use barrier YDI05-ZU3 |
| YCC01-03ISM5 | RS485 & RS232 from barrier to DB25 female | Signum & CAIXS2-U | 5 meters | Use any barrier |
| YCC01-09ISM5 | RS485 & RS232 from barrier to DB9 female | Signum & CAIXS2-U | 5 meters | Use any barrier |

Ex Power Supplies

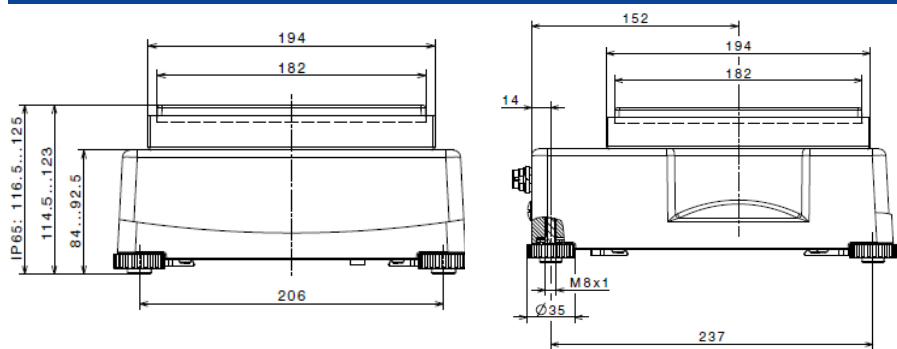
| Part Number | Description | Application |
|-------------|---|--|
| YPS02-XUR | Power supply, 100-240 V, Canada hazardous area use, 16 foot cable | All Signum & CAIXS2-U, hardwired to wall |
| YPS02-XKR | Power supply, 100-240 V, Canada hazardous area use, 16 foot cable | All Signum & CAIXS2-U, hardwired to wall |
| YPS02-ZKR | Power supply, 100-240 V, USA + Canada outside hazardous area | All Signum & CAIXS2-U, plug to wall |
| YRB02-X | Power supply, USA + Canada external rechargeable battery | All Signum & CAIXS2-U, plug to indicator |
| YRB02LD | Battery charger for use outside hazardous area | Use with YRB02-X battery |

Optional Data Output Boards

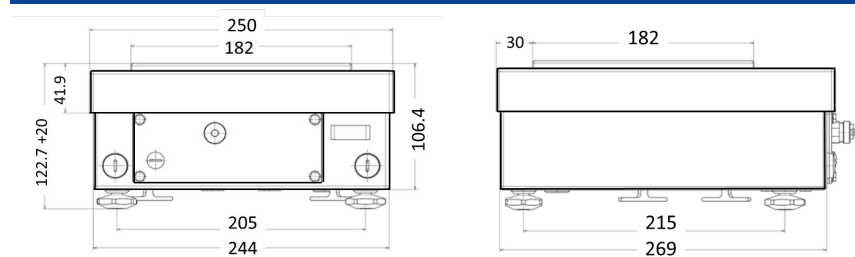
| Part Number | Description | Application |
|-------------|----------------------------------|-------------------------------------|
| YDO07-X | Indicator interface board | CAIXS2-U, RS232 or RS485 selectable |
| YDO58IS-X | Digital platform interface board | ISEDE-X, RS-232 |
| YDO52IS-X | Digital platform interface board | ISIGG-X, RS-232 |

Dimensional Drawings

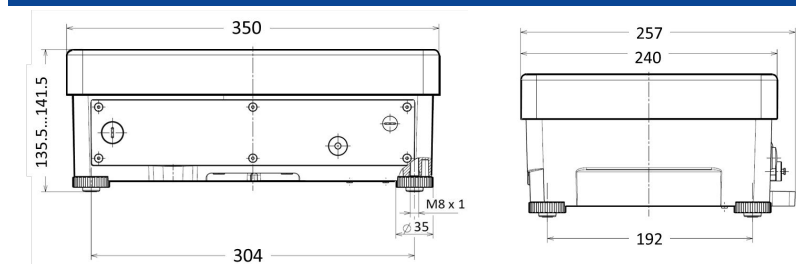
BBP Cast Aluminum Housing



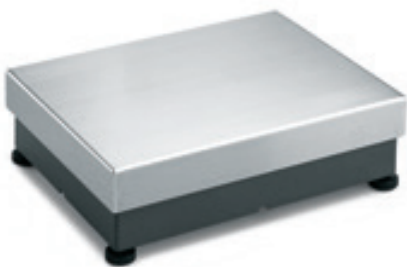
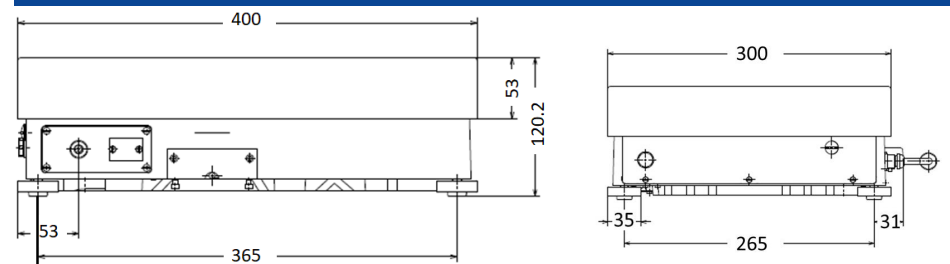
BBP Stainless Housing



DCP Cast Aluminum Housing



EDE Cast Aluminum Housing



IGG Galvanized Housing

