

Weight indicator Combics CAIXS2

Precise measurement results, even in potentially explosive atmospheres









This Combics 2 series weight indicator has been specifically designed for potentially explosive atmospheres and meets all international requirements. Durable and robust, the indicator supports weighing processes in a variety of industries, from manual formulation through to PC-controlled production control. Comprehensive interfaces enable complete integration into existing systems.

The right solution for all of these uses:











Technical specifications

Weight indicator Combics CAIXS2

Parameter	Description
Material	Stainless steel 1.4301
Data interfaces	RS232 Switchable to RS485 or RS422; 420 mA or ProfiBus DP via Ex power supply unit YPSC01
Power supply	Via external power supply unit Connection via 14-pin round connector (cable 20 cm)
	Inside the area with potentially explosive atmosphere: ATEX: YPSC01-X FM (US): YPS02-XUR CSA: YPS02-XKR
	Outside the area with potentially explosive atmosphere: ATEX: YPSC01-Z FM/CSA: YPS02-ZKR
	Battery mode via external battery YRB02-X ATEX/FM/CSA
Scale connection	Standard: A/D converter
	Optional: digital scale interface RS485 or RS232 for connecting xBPI scales, such as IS-Ex platforms or Signum-Ex scales Combics 2 supports two weighing points (scales)
Resolution (not calibrated)	Smallest usable signal: 0.02 μV/d
Resolution (verifiable, Class III)	6,000e or 3 × 3,000e (MR/MI) Smallest measurement signal 0.2 μV/e
Preload	Up to 100% of the weighing range
Load cell electrical supply	2.5 V
Load impedance	83 ohm up to 2,000 ohm
Measuring signal	0 mV to 7.5 mV
Measurement signal for dead load	0 mV to 2.5 mV
Ex-approvals	ATEX: II 2G Ex ia IIC T4 Gb II 2D Ex ia IIIC T80°C Db
	IECEx: Ex ia IIC T4 Gb Ex ia IIIC T80°C Db
	USA: IS/CL I,II,III/DIV 1/GP A,B,C,D,E,F,G T4 CL I/Zone 1/AEx ia IIC T4 Zone 21/AEx ia IIIC T80°C
	Canada: IS/CL I,II,III/DIV 1/GP A,B,C,D,E,F,G T4 CL I/Zone 1/Ex ia IIC T4
Humidity	85% relative (non-condensing) to 31°C; 50% relative to 40°C
Use at altitudes above sea level	Up to 2,000 m; in interior spaces
IP protection rating	IP69K
Ambient temperature	-10°C to +40°C
Emissions	In accordance with EN 61326-1, Class B (IEC 61326-1)
Electrical safety	In accordance with EN 61010-1 (IEC 61010-1)
Immunity to interference	In accordance with EN 61326-1, industrial areas (IEC 61326-1)

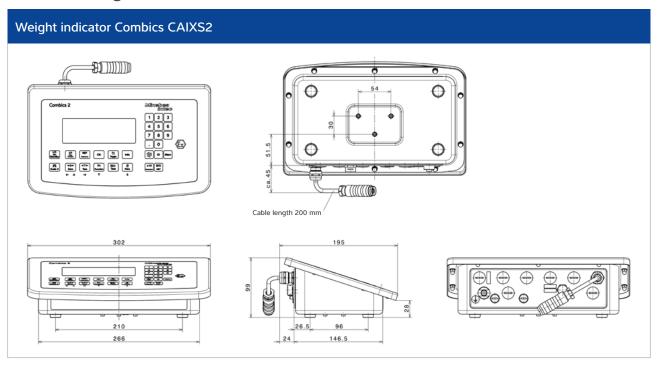
The technical specifications listed above are for product description purposes only; they are not legally binding.

Use – weight indicator Combics CAIXS2

Parameter	Description
Keyboard	28 keys
Display	14 segments 20 mm weight readout plus application symbols
Weighing	•
Data transfer to printer/PC	•
ISO test	•
Counting	•
Percentage weighing	•
Averaging	•
Checking	•
Totalising	•
Combination of 3 applications	•
Sample weight and counting to target value (from memory)	•
SQ Min (sample quantity minimum)	•
Identifier (4 × 40 characters)	
Product data memory	•
Date/Time	•
Reference scale connection	•



Technical diagrams



Options

Due to the many different options, the indicator can be adapted to the specific applications of the user. When the option code is submitted with the order, the indicator will be delivered with the requested characteristics. (Conversion is possible by ordering the corresponding accessories.)

COM1 for weight indicator Combics CAIXS2		
Description	Order number as option	Order number as accessory
RS232	A21	
RS422	A22	
RS485	A23	

UniCOM for weight indicator Combics CAIXS2		
Description	Order number as option	Order number as accessory
RS232	A35	
RS485	A36	
RS422	A37	
Driver board for 4–20 mA/0–5 V	A38	
Driver board for Profibus-DP	A39	

Scale connection (WP1) for weight indicator Combics CAIXS2		
Description	Order number as option	Order number as accessory
A/D converter	Standard (A15)	
RS232 interface for digital platform	A16	YDO07-X
RS485-interface for digital platform	A19	YDO07-X

Separable analogue scale connection for weight indicator Combics CAIXS2		
Description	Order number as option	Order number as accessory
Indicator WP1 and platform separable plug connection, socket on indicator (0.2 m) (connector for platform enclosed separately)	X2	

Cables for connection to the digital scale for weight indicator Combics CAIXS2		
Description	Order number as option	Order number as accessory
Connection cable for IS-X platform or Signum Ex via RS232 to WP1 – 14-pin round connector (6 m) (option A16 required)	M20	YCC02-XR14M6
Connection cable for IS-X platform or Signum Ex via RS485 to WP1 – 14-pin round connector (6 m) (option A17 required)	M26	YCC02-XR14M6

Cables for COM1 for weight indicator Combics CAIXS2 Description Order number as option Order number as option Order number as option Order number as accessory Connection cable for IS-X platform or Signum Ex via RS232 or RS485 - 14-pin round connector (6 m) (option A21 or A23 required) Connection cable for YDI05-Z via RS232 or RS485 - 14-pin round socket (0.2 m) (option A21 or A23) Connection cable for YDI05-Z via RS422 - 14-pin round socket (0.2 m) (option A22) (YDI05-Z – option M54 please order separately)

Cables for UniCOM for weight indicator Combics CAIXS2		
Description	Order number as option	Order number as accessory
Separable connection to YDI05-Z via RS485 – 14-pin round socket (0.2 m) (only in conjunction with A36)	N25	
Separable connection to YDI05-Z via RS232 - 14-pin round socket (0.2 m) (only in conjunction with A35)	N21	
Separable connection to YDI05-Z via RS422 – 14-pin round socket (0.2 m) (only in conjunction with A37)	N22	
Data cable for separable connection to YPSC01 4–20 mA – 14-pin round connector (0.2 m) (only in conjunction with A38)	N23	
Data cable for separable connection to YPSC01 Profibus DP – 14-pin round connector (0.2 m) (only in conjunction with A39)	N24	

Accessories

Zener barrier for weight indicator Combics CAIXS2	
Description	Order number
Ex-interface converter, for installation in the safe area	YDI05-Z

Printers for installation in the safe area (connection via YDI05-Z) for weight indicator Combics CAIXS2	
Description	Order number
Needle high-speed matrix printer	YDP21
Strip/label printer with thermal direct printing mechanism, 60 mm paper width	YDP05
Strip/label printer with thermal direct printing mechanism, 108 mm paper width	YDP14IS-0CEUV
Strip/label printer with thermal transfer printing mechanism, 108 mm paper width	YDP14IS-0CEUVTH

Power supply for weight indicator Combics CAIXS2 Description Via external power supply unit, connection via 14-pin round connector (20 cm cable) Power supply units for installation in the potentially explosive atmosphere ATEX (100–240 V) ATEX (24 V) FM (US) CSA Power supply units for installation in the safe area ATEX (100–240 V) ATEX (24 V) FM (US) CSA Power supply units for installation in the safe area ATEX (100–240 V) ATEX (24 V) FM/CSA External battery for installation in the potentially explosive atmosphere

Software for weight indicator Combics CAIXS2	
Description	Order number
SartoConnect	YSC03
Minebea Intec OPC Server	6289OPC

YRB02-X

ATEX, FM, CSA



Mechanical accessories for weight indicator Combics CAIXS2	
Description	Order number
Stainless steel wall bracket	YDH01CIS
Stainless steel wall bracket, tiltable	YDH02CIS

Other accessories for weight indicator Combics CAIXS2	
Description	Order number
Unassembled cable, LiY $6 \times (2x0,14C)$ Y, sheath colour blue, for own cable assembly, 1 m = one piece	YCC422-X
Unassembled cable, 2×0.22 LiCY, sheath colour blue, for own cable assembly, 1 m = one piece	YCC485-X
14-pin round connector for own cable assembly, IP65	69Y03166

Ordering information

Weight indicator Combics CAIXS2	
Description	Order number
Weight indicator Combics CAIXS2	CAIXS2

The products and solutions presented in this data sheet make major contributions in the following sectors:



The technical data given serves as a product description only and should not be understood as guaranteed properties in the legal sense.