

# BX24 Ex2/22 Weighing Terminal

ATEX and IECEx certified for usage in Zones 2/22



## Main Features

- Multi-language operator prompts.
- Stainless steel, IP67 protected for wet, hygienic and harsh areas.
- Color changing display, SmartAPP 16 digit alphanumeric info line.
- ID1, ID2, PT, item limit values, APW memories; each 500 items record.
- Automatic memory linkage to IDs.



## High Technology & Performance

- High resolution scales up to 999 999 display resolution.
- Up to 1600 conversions per second.
- Application based SmartAPP.
- Changing color for prompting.
- High capacity scales are supported by eCAL - electronic calibration.



## Typical Applications

- Weighing and data collection.
- Customized labelling with barcode
- Counting by sample & APW memory.
- Livestock and dynamic weighing with strong filtering algorithm.
- SmartAPP Checkweighing, packing classifying & filling applications.
- Specific tare entry requirement.



## Integration & Connectivity

- Printing via key, digital input or via serial port.
- BSI command set for master slave communication.
- Galvanically isolated 2 x RS232, RS485, Ethernet TCP/IP, USB.
- Analogue output and digital I/O.



BX24 Ex2/22 is ATEX and IECEx certified weighing terminal, which offers high accuracy and performance in the hazardous areas with strong connectivity options.

This weighing terminal is programmable for basic weighing, labelling, packing, checkweighing, classifying, filling, piece counting and dynamic weighing applications. Three user programmable keys provide practical and error free operation. This instrument has article memories; ID1, ID2, preset tare, APW, item limit values; each have 500 records capacity.

BX24 Ex2/22 offers direct connection to PC and PLC via various communication interfaces. Additionally, Analogue output, and programmable Digital 4 inputs and 5 outputs are available, which can be used to control the peripheral equipment of the weighing system.

# Typical Applications in Hazardous Area

## 1. Industrial Process control and Weighing Applications

Its SmartAPP weighing applications and multi- language operator prompt minimizes the operator error.

## 2. Labelling & Data Collecting

BX24 Ex2/22 can print different type of standard tickets including totalizing and customized tickets with barcode.

## 3. Piece Counting

Counting can be done by sampling or average piece weight is saved from APW memory. 500 items memory capacity for piece weights.

## 4. Automatic / Manual Packing

Most common usage of this mode is manual packing of agricultural products. 500 items memory for sets of limits.

## 5. Automatic / Manual Checkweighing

The weight or the quantity of the items in the package on the scale is controlled. 500 items memory for sets of limits.

## 6. Automatic / Manual Classifying

Products can be classified according to the weight or quantity of item in the package. 500 items memory for sets of limits.

## 7. Automatic / Manual Gravimetric Filling


Automatic / manual filling can be executed in gross mode or in net mode. 500 items memory for sets of limits.

## 8. Accumulation

Batch total of sequential or additive product weighings and piece countings are available.



# Technical Specifications

Accuracy class & EU type approval	OIML class III, single range, up to three range multi range or multi interval.	
Display	Wide angle LCD display with multicolor backlight, 6 digits 22 mm in height weight display and 16 digits 8 mm in height alphanumeric information display.	
Resolution	Display resolution is up to 999 999 and internal resolution is up to 16 000 000 counts.	
A/D conversion	Up to 1600 conversion rate, 24 bit Delta-Sigma ADC, 0.4 µV/d (legal metrology), 0.05 µV/d (industrial).	
Analogue input range	-5 mV to +19 mV	
Calibration technics	Standard calibration test with test weights, multipoint calibration, eCAL, electronic calibration without test weight, span adjustment of non-empty tanks.	
Digital filter	5 step adjustable digital adaptive filter and 5 programmable digital dynamic filter.	
Functions	2 x ID data, ticket number, date & time, total indication, Header definitions for IDs as customer, material, quality, color...etc.	
Standard applications	Labelling, checkweighing, classifying, packing, filling, piece counting, totalization of the sequential weighing, totalization of the additive items, livestock weighing. SD card slot for data logging.	
Memory	ID1 and ID2 memories, specific tare memory, item limit values memory for basic weighing and applications, average piece weight memory for piece counting. Each memory record size is 500 items.	
Programmable keys	3 function keys.	
Digital inputs and outputs	Opto isolated and programmable 4 input and 5 outputs. Application specified In / Out functions at SmartAPP.	
Data output	Galvanically isolated, 2 pcs RS232C and RS485, Ethernet TCP/IP and USB.	
Number of load cells	Up to 8 load cells 350 Ω or up to 24 load cells 1200 Ω (min. 43 Ω).	
Hazardous Area	 ATEX Approval II 3G Ex ic ec [ic] IIC T6 (Gases) II 3D Ex ic tc [ic] IIIC T85 IP67 (Dust)	IECEx Approval Gases Ex ic ec [ic] IIC T6 Gc Dust Ex ic tc [ic] IIIC T85 Dc IP67
Operation temperature	-15°C ~ +55°C max. ( Operational ), -10°C ~ +40°C ( Legal metrology and Hazardous area )	
Humidity	Max. 90 % non condensing relative humidity. Legal metrology max. 80 % RH.	
Alibi memory	99 999 weighing record size.	
Housing and protection class	Desktop and wall type stainless steel, IP67 protected.	
Power source	100 - 240 VAC, 50/60 Hz or 12 - 28 VDC for power supply in Ex area or for external Battery.	
<b>Options</b>		
Scale options	Alibi memory.	
Interfaces	Opto isolated digital 4 inputs / 5 outputs, Analogue output.	
Accessories	Ex-proof Battery pack, Ex-proof Junction box, Ex-proof load cell cable, data cable, Column mount kit, Wall mount kit, 2D Wall mount kit.	