

BX30Check Controller

For Checkweigher, Catchweigher and Sorters



Main Features

- Programmable for Checkweigher, Catch weigher or Sorting,
- Static or In-Motion weighing,
- Configurable article content,
- Multicolor LCD display guides and warns the operator.



Fast Operation with

- High speed real time operation,
- Powerful adaptive digital filter,
- Full control of weighing machine,
- Programmable digital I/O's with logic functions,



Integration & Connectivity

- On board Ethernet TCP/IP, RS232, RS485 and USB,
- Profinet, Profibus
- Modbus RTU, Modbus TCP,
- CANopen,
- EtherNet/IP, EtherCAT, Powerlink and CC-Link



BX30Check weighing controller is high tech, fast and economic instrument for weighing various pre-packaged products. Its configurable, specific article build feature and programmability offer significant advantages in usage.

Suitable for various applications, including in-motion and static checkweighing, catchweighing and sorting machines.

BX30Check has article and ID memories having 250 records size each, for product lines with different materials. Freely programmable digital inputs and outputs eliminates additional PLC in the control cabinet.

BAYKON
Industrial Weighing Systems

High accuracy at fast automatic weighing applications with BAYKON technology and know-how.

With its advanced and intelligent electronic technologies, BX30Check meets all your requirements from basic checkweigher machines to the most complex checkweigher machines. Integration of BX30Check to the factory automation system is very simple now!

SmartAPP

This special function helps the operator;

- The Smart start-up and the Smart adjustment technic at usage and,
- The operator can follow the operation by changing the display color and bar graph



Changing Display Colour



in progress



Under



Okay



Over



Error

Identification and Memory

Article and ID memories each has 250 records size.

Functional Keys

Seven user programmable function keys, change key and magnify key can be set to specified functions for your easy and informative usage.



Operation Types for weighing machines

- ✓ In-motion checkweigher with or without sensor,
- ✓ In-motion catch weigher with or without sensor,
- ✓ Static checkweigher with or without sensor,
- ✓ Static catchweigher with or without sensor,
- ✓ Sorting up to 10 articles,

Bar Graph

Operator may follow the filling on the bar graph



Acoustic warning

The acoustic alarm warns the operator in case of weighing related errors.

Digital Inputs and Outputs

Digital control I/O's are available in two variants as in-house or external DIN rail mount RIO16 unit.

Digital 12 Input / 14 Output



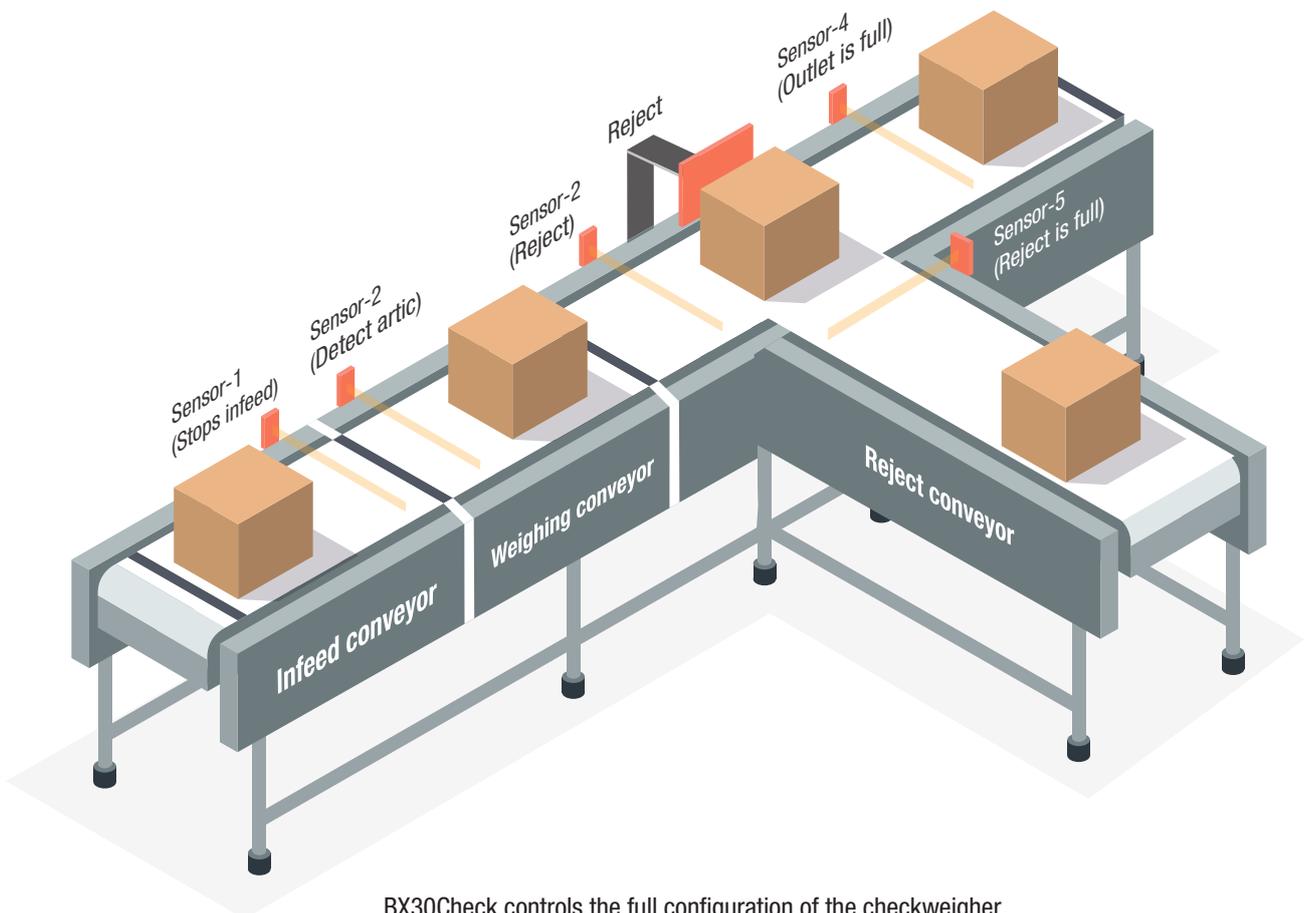
Standard Interfaces :

- Ethernet TCP/IP & Modbus TCP
- RS 232C (isolated)
- RS 485 & Modbus RTU
- Digital 12 In / 14 Out (in-house)
- USB

Additional Interfaces :

- Profibus
- Profinet
- EtherNet/IP
- EtherCAT
- CANopen
- CC-Link
- Powerlink
- Digital I/O

Load Cell Connector

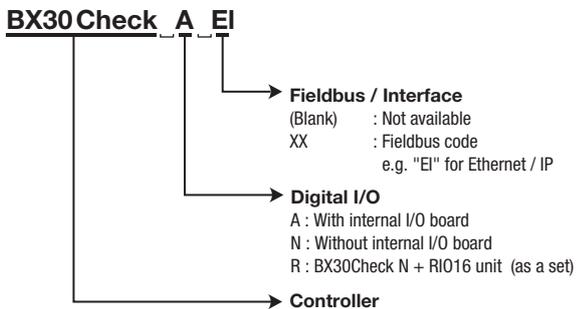


BX30Check controls the full configuration of the checkweigher.

Technical Specifications

Accuracy class & EU type approval	OIML class III, single range, multi range or multi interval up to 10000 divisions. MID : Accuracy class XIII (1), Y(a) XIII (1), Y(b)
Display	Wide angle and bright LCD display with multicolor backlight, 22 mm in height 6 digits weight display and 8 mm in height 16 digits alphanumeric information display.
Display resolution	Up to 300 000 divisions at industrial usage.
A/D conversion	24 bit Delta-Sigma ADC with up to 1600 conversions rate.
Minimum input sensitivity	0.4 µV/e (legal metrology), 0.05 µV/d (industrial)
Analogue input range	-5 mV to +19 mV
Internal resolution	Up to 16 000 000 counts.
Adjustment methods	Adjustment with test weights, In-motion (Dynamic) adjustment with the article,
Digital filter	7 steps programmable adaptive filter for static operation. 9 steps programmable filter for in-motion operation.
Scale functions	Taring, zeroing, auto zero tracking, motion detection, auto zero at power up, tare status save at power off, increased resolution, temporary gross indication, unit change.
Operation methods	Static checkweigher, Static catchweigher, In-motion checkweigher, In-motion catchweigher, Sorting up to 10 articles
Memory	Two memories for article and ID , each has 250 records size.
Programmable keys	7 programmable keys to assign specific functions.
Digital I/O	Internal: 12 digital inputs / 14 digital outputs External: 16 digital inputs / 16 digital outputs with DIN rail mounting RIO16 unit.
Digital inputs	Opto-isolated and reverse polarity connectable, 12 to 28 VDC, 10mA. Selectable input(s) can be programmed as logic and time functions or used as a Remote Input of your PLC over Fieldbus.
Digital outputs	Opto-isolated and short circuit protected transistor outputs, 12 to 28 VDC / 100 mA, Selectable output(s) can be programmed as logic and time functions or used as a Remote Output of your PLC over Fieldbus.
Data outputs	Galvanically isolated RS232C, RS485, USB and Ethernet TCP/IP
Fieldbus interface	Profibus, Profinet, CANopen, Modbus TCP, Modbus RTU, Ethernet TCP/IP, EtherNet/IP, EtherCAT, CC-Link, Powerlink
Number of load cells	Up to 8 load cells 350 Ω or up to 26 load cells 1200 Ω (min. 43 Ω)
Load cell connection	Connection with 4 or 6 wires. Cable with 6 wires length maximum 1000 m/mm ²
Load cell supply voltage	5 VDC @ max. 150 mA
Operation temperature	-15°C ~ +55°C max. (Operational), -10°C ~ +40°C (Legal metrology)
Humidity	Max. 90 % non-condensing relative humidity. For legal metrology max. 80 %
Alibi memory	99 999 weighing records.
Housing and protection class	IP67 protected stainless steel front panel, aluminum body and stainless steel rear panel.
Power supply	12 - 28 VDC, 100mA@24 VDC (Basic instrument)
Dimensions (H x W x D)	108 x 205 x 112,5 mm Panel mount cutout dimensions (H x W): 92 x 186 mm
Gross weight	1,75 kg

Ordering & Interface Selection Table



	BX30Check A	BX30Check A PB	BX30Check A CO	BX30Check A CC	BX30Check A PN	BX30Check A EI	BX30Check A EC	BX30Check A PL
RS232C	●	●	●	●	●	●	●	●
RS485	●	●	●	●	●	●	●	●
RS422	●	●	●	●	●	●	●	●
USB	●	●	●	●	●	●	●	●
Ethernet TCP/IP	●	●	●	●	●	●	●	●
Modbus RTU	●	●	●	●	●	●	●	●
Modbus TCP	●	●	●	●	●	●	●	●
Profibus DPV1		●						
CANopen			●					
CC-Link				●				
Profinet					●			
EtherNet/IP						●		
EtherCAT							●	
Powerlink								●
Alibi Memory	○	○	○	○	○	○	○	○

● Standard ○ Optional