

# BX18 Weighing Indicator

DIN rail mounted weighing instrument



## Features

- 14mm LED display
- Up to 1600 conversion/sec
- Calibration via keys and by PC/PLC through interfaces
- Electronic calibration (eCAL) without test weights
- Span calibration (sCAL) of non-empty tanks.

## System Integration

- RS-232C serial port
- RS-485 serial port
- Modbus RTU
- Analog selectable as 0-20mA, 4-20mA, 0-5 VDC and 10 VDC
- Parallel I/O port as 4 x Inputs and 6 x Outputs

BAYKON BX18 is a DIN rail mounted indicator to install in a cabinet for intensive dusty environment. It offers RS-232C, RS-485, Analog output, Parallel port including 4 x Inputs and 6 x Outputs, Modbus RTU fieldbus interfaces as standard.

Powerful calibration options including electronic calibration without test weights, span calibration of non-empty tanks support easy and fast installation and service. BX18 is featuring 10 step adaptive filter for fast settling, up to 999.999 display resolution and 1600 conversion per second.

Programming and calibration can be executed via device keys and by PC/PLC through serial ports and fieldbus. BX18 is powered by from 12-28 volt DC supply.

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# Technical Specifications

## Accuracy

Linearity	% 0.0015 FS
Temperature coefficient	≤ 2 ppm/°C

## Display and Keyboard

Display	6 digits, 7 segments, red, 14 mm high
Status annunciators	Gross, net, motion, centre of zero, units (kg, g, t, lb, klb, N, kN)
Keyboard	5-key (function, GN, tare/clear, zero, print)
Key lock	Keys can be locked against unauthorized access

## A/D Converter

Type	24 bit Delta - Sigma ratiometric ADC
Conversion rate	Up to 1600 conversions per second
Minimum input sensitivity	0.1 µV per interval
Analogue input range	0 mV to + 18 mV (unipolar) ; -18mV to +18mV (bipolar)
Resolution	Internal up to 16.000.000; display up to 999.999 d

## D/A Converter

Type	16 bit D/A converter
Max. cable length	300 meter
Max. load resistance (current output)	500 Ω

## Scale Calibration and Functions

Calibration	Standard: By etalon weights via keys or serial port via IndFace1x software eCal: Electronic calibration without etalon weights sCal: Span calibration of non-emptied tanks.
Digital filter	10 step adjustable adaptive digital filter
Weighing functions	Tare, zero ing, auto zero tracking, motion detection, auto-zero at power-up.
Other functions	Label number, gross, tare indication
Digital outputs	6 set points with relay contact output.
Digital Inputs	4 opto-isolated inputs are programmable for zeroing, tare, clear, hold, peak, print etc.

## Interfaces

RS -232C	1200 to 115200 baud, programmable Continuous, Printer, BSI (Baykon Serial Interface) protocol
RS -485	1200 to 115200 baud, 8 none 1, 7 even 1, 7 odd 1, 8 even 1 or 8 odd 1, Up to 31 units on the bus
Modbus RTU	1200 to 115200 baud, 8 none 1, 8 even 1 or 8 odd 1, up to 31 units on the RS-485 bus
Analogue	Programmable to 4 – 20 mA, 0 – 20 mA, 0 – 5 VDC or 0 – 10 VDC

## Loadcell Connection

Excitation	5 V DC, max. 300 mA
Number of load cells	Up to 8 load cells 350 Ω or up to 24 load cells 1100 Ω (min. 43 Ω)
Connection	4 or 6 wire technique. Cable length 274 m/mm <sup>2</sup> for 6 wire connection

## Environment and Enclosure

Operation temperature	-15°C to +55°C; 85% RH max, non-condensing.
Enclosure	Polycarbonate, mounting in standard DIN rails, IP20 89,7 mm x 107,6 mm x 62,2 mm
Power requirement	12 – 28 VDC, Max. 300 mA

