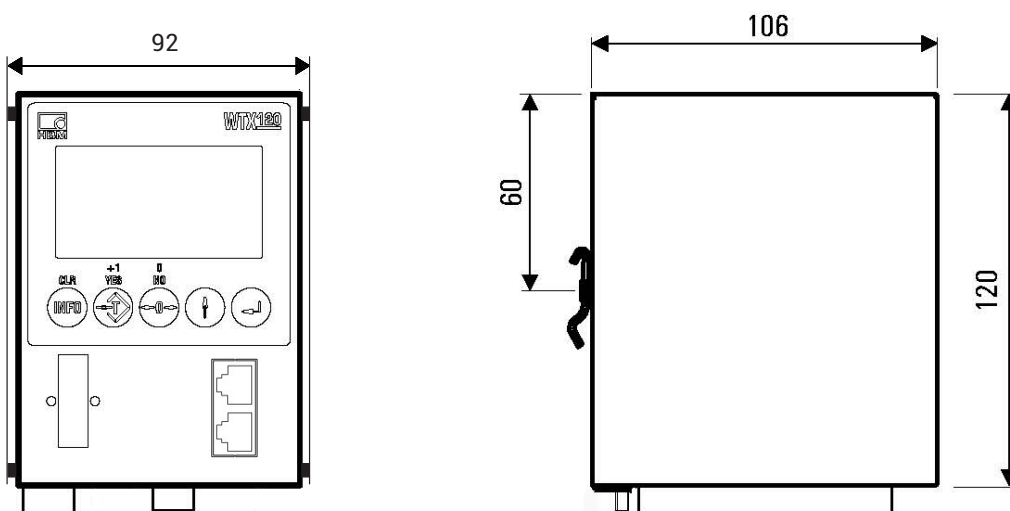# WTX120
Legal-for-trade industrial weighing terminal

SPECIAL FEATURES

- Connection of up to 8 SG load cells (350 ohm) via plug terminals
- Display resolution up to 30000e, legal for trade up to 10000e
- PROFINET, EtherNet/IP™ with integrated Ethernet switch or PROFIBUS DP
- Ethernet TCP/IP, Modbus TCP
- Options: Ethernet, USB 2.0, digital I/Os, analog output, printer port
- Operation via keyboard or PanelX software
- Easy-to-read plain text display with backlight
- Optional indicator for control cabinet installation
- Application for standard weighing, filling/emptying, tank weighing

DIMENSIONS

Dimensions in mm
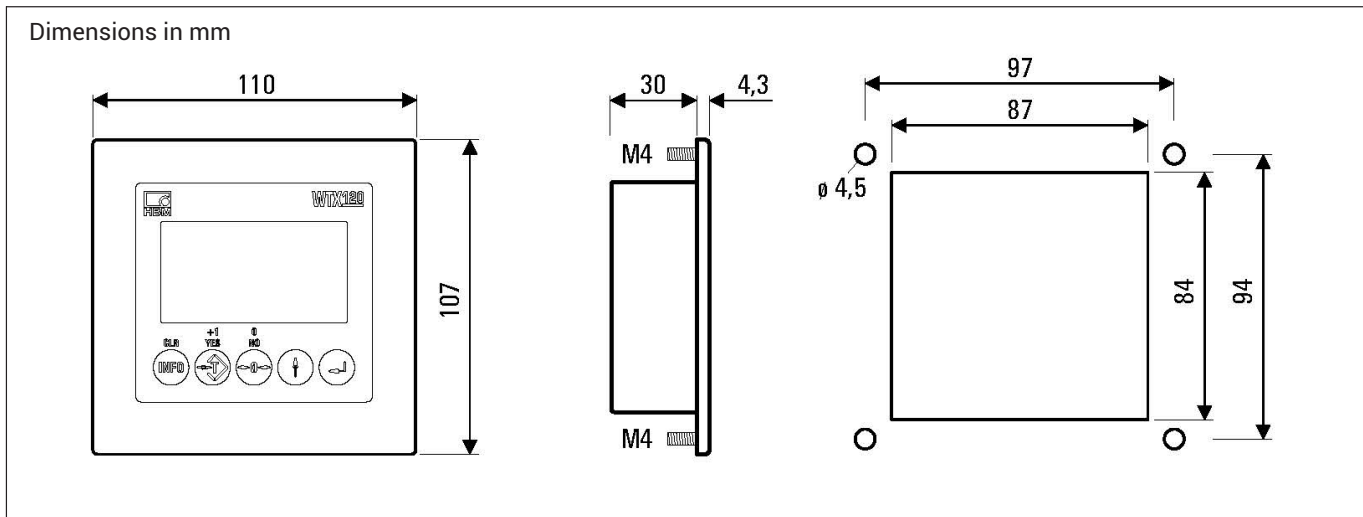
SPECIFICATIONS FOR WTX120

Type		WTX120
Industrial display resolution	d	30,000
Accuracy class as per OIML R76 (Class III and IIII)	d=e	10,000
Input sensitivity, legal for trade	µV/e	0.33
Measuring range	mV/V	±3
Load cell connection (short-circuit proof)		6-wire and 4-wire configuration
Max. number of load cells (short-circuit proof)	Ω	8 x 350
Excitation voltage of load cells (short-circuit proof)	V_{DC}	±5 clocked
Internal sample rate	1/sec.	50 … 800
Internal resolution	Divisions	524,000
Non-linearity of measuring range	%	0.018
Temperature coefficient of the zero signal per 10 K	%	0.003
Temperature coefficient of sensitivity per 10 K	%	0.006
Filter		Adjustable digital filter (low-pass)
Minimum transducer resistance	Ω	43
Alibi memory		120,000 memory locations
Multi-range		Yes, adjustable up to 3 ranges
Multi-interval		Yes, adjustable up to 3 ranges
Supply voltage	V_{DC}	12 … 30 (-15% +10%) protected against polarity reversal
Current consumption	A	1.3 … 0.4
Maximum power consumption (with 8 x 350 ohm load cells connected)	W	14.5
Maximum power loss	W	11
Minimum wire cross-section for potential equalization	mm^2	2.5
Maximum number of weighing terminals that can be connected in parallel		8
Display		DOT matrix LCD display, with backlight, dot matrix realization, indication of weight, unit of weight, zero and moving cursor, error messages in plain text, English
Character height of weight value	mm	15
Keyboard		Membrane keypad, 5 short-stroke keys with dual assignment for adjustment and service settings
Standard device connections with plug-in screw terminals		1 x power supply, 1 x load cell connection, 2 x digital outputs, load-carrying capacity of outputs: max. 500 mA at 12 … 24 V_{DC}; Switching threshold of digital inputs Low: U_in < 3.00 V_{DC} High: U_in > 6.00 V_{DC}, Current consumption of inputs max. 7 mA at 12 … 24 V_{DC}
Other standard device connections		1 x Ethernet (RJ45) 1 x USB 2.0 1x external indicator connection (RJ11)
Ethernet and fieldbus interfaces (depending on device version)		PROFINET IO (RT), PROFIBUS DP, EtherNet/IP™, Ethernet TCP, Modbus TCP (via standard Ethernet interface on the underside of the device)

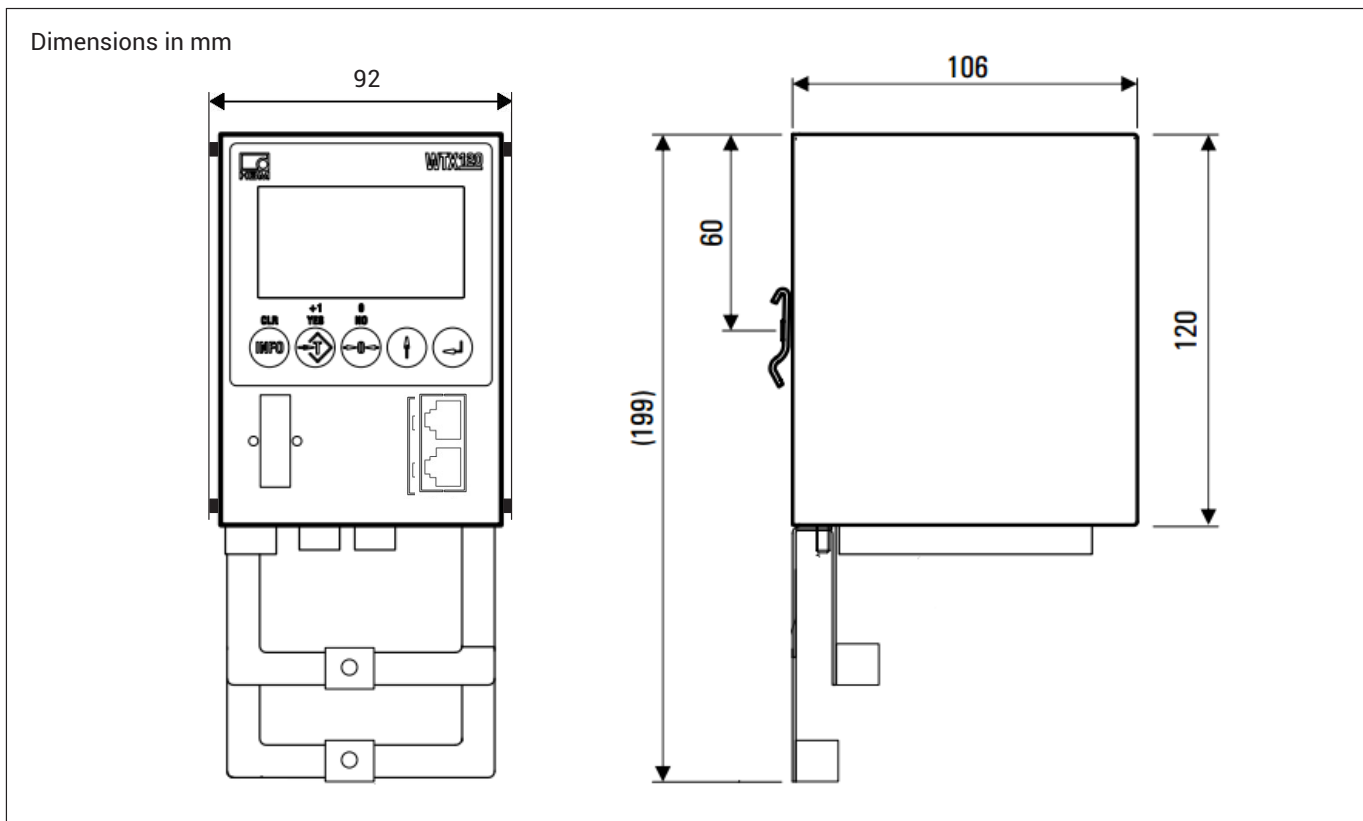| Type		WTX120
Serial interfaces with plug in screw terminals (depending on device version) for connecting to PC, printer or remote indication		RS232, RS485 (4-wire, electrically connected)
Analog output with plug-in screw terminals (depending on device version)	mA V	0-20 mA, 4-20 mA; 0-10 V, 2-10 V; for gross or net weight; 15-bit resolution 30,000 increments, with possibility of adjustment
Digital inputs and outputs with plug-in screw terminals (depending on device version)	VDC	Up to 4 digital inputs and outputs Load-carrying capacity of outputs max. 500 mA at 12 … 24 V_{DC}; Current consumption of inputs max. 7 mA at 12 … 24 V_{DC}, short-circuit proof, opto-isolated
Mounting type		DIN rail mounting as per EN 50022 (35 x 7.5 mm)
Degree of protection as per EN 60529 (DIN rail mounting)		IP20
Material		
Material		Stainless steel
Weight, approx.	kg	0.9
Dimensions (W x H x D) **With optional shield rail**	mm	86 x 120 x 106 86 x 199 x 106
Temperature range		
Storage		−25°C … +70°C at 95% rel. humidity, non-condensing
Operation		−10°C … +50°C at 95% rel. humidity, non-condensing
Operation when subject to weights and measures legislation		−10°C … +40°C at 95% rel. humidity, non-condensing
Standards		
Measurement accuracy		EN45501, OIML R76-1, R61-1, R51-1
Immunity to interference		EN 61326-1
Emission (EME)		EN 61326-1, EN55011, Class A, Group 1
Battery		Type CR2032

ACCESSORIES

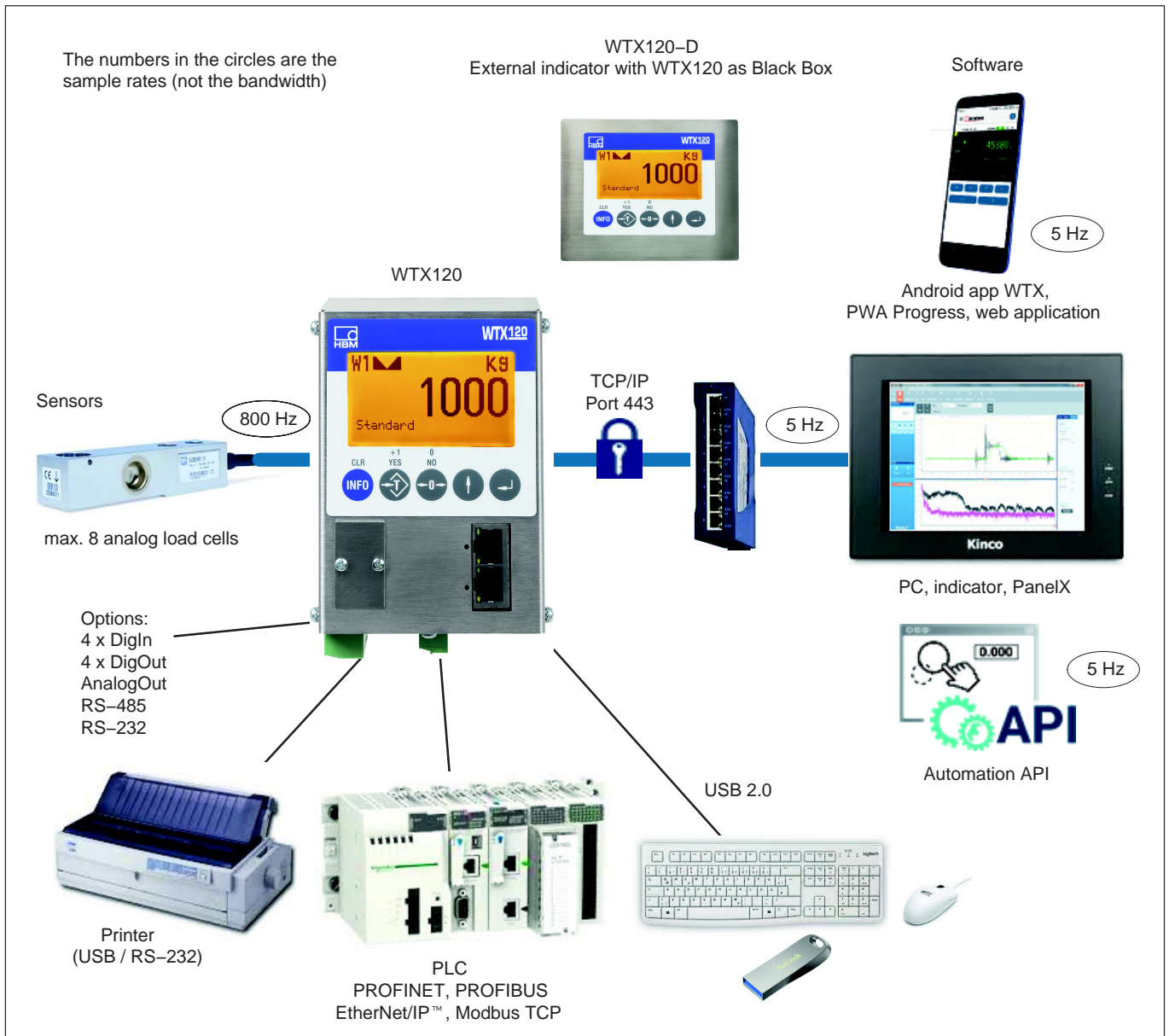| Description	Ordering number
External indicator for panel mounting with backlight for use of WTX120 Black Box version; 27 Black Box units can be connected (1 Black Box legal for trade); 15 mm weight indicator and status information, 1 to max. 3 operator guidance lines, 5 keys for zeroing, taring and operation; incl. 3 m connection cable; material: Stainless steel; dimensions (W x H x D): 110 x 107 x 35 mm, degree of protection: IP69K; weight: approx. 0.3 kg, maximum length of connection cable 10 m.	1-WTX120-D
Legal for trade set consisting of shielding rail and 2 connection clamps; can be screwed to the underside of the housing, for laying the cable shields of max. 10 cables for legal-for-trade applications.	1-WTX120-LFTSET
Zener barrier combination SB02A The Zener barrier combination comprises 3 barriers.	1-SB02A

DIMENSIONS OF EXTERNAL INDICATOR

Dimensions in mm

DIMENSIONS WITH SHIELD RAIL

Dimensions in mm

CONNECTION OPTIONS

The numbers in the circles are the sample rates (not the bandwidth)

WTX120–D
External indicator with WTX120 as Black Box

Software

5 Hz

Android app WTX,
PWA Progress, web application

WTX120

Sensors

800 Hz

max. 8 analog load cells

TCP/IP
Port 443

5 Hz

5 Hz

PC, indicator, PanelX

Options:
4 x DigIn
4 x DigOut
AnalogOut
RS–485
RS–232

0.000

5 Hz

Automation API

USB 2.0

Printer
(USB / RS–232)

PLC
PROFINET, PROFIBUS
EtherNet/IP™, Modbus TCP

PRODUCT NUMBERS

K-WTX120…, optional versions

K-WTX120			
1	**Code**	**Option 1: Ethernet-based or fieldbus interfaces**	
	PRONE	PROFINET	
	PROBU	PROFIBUS DP	
	ETHIP	EtherNet/IP™	
	ETHM/	Modbus TCP	
2	**Code**	**Option 2: Integrated indicator**	
	Y	Integrated indicator	
	N	Black Box, no indicator (can be combined with external indicator 1-WTX120-D)	
3	**Code**	**Option 3: Analog output (mA, V) and/or digital input and output (VDC)**	
	NO	2 x Digital Out (DO; Standard)	
	A/	2 x Digital Out, 2 x Digital In, Analog Out	
	/D	4 x Digital Out, 4 x Digital In	
	AD	4 x Digital Out, 4 x Digital In, Analog Out	
4	**Code**	**Option 4: Serial interfaces**	
	NOT	Without (standard)	
	RS4	RS485 (4-wire)	
	RS2	RS232	
5	**Code**	**Option 5: Firmware**	
	A	Standard	

K-WTX120 - P R O N E - N - N O - N O T - A

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