

# WTX120

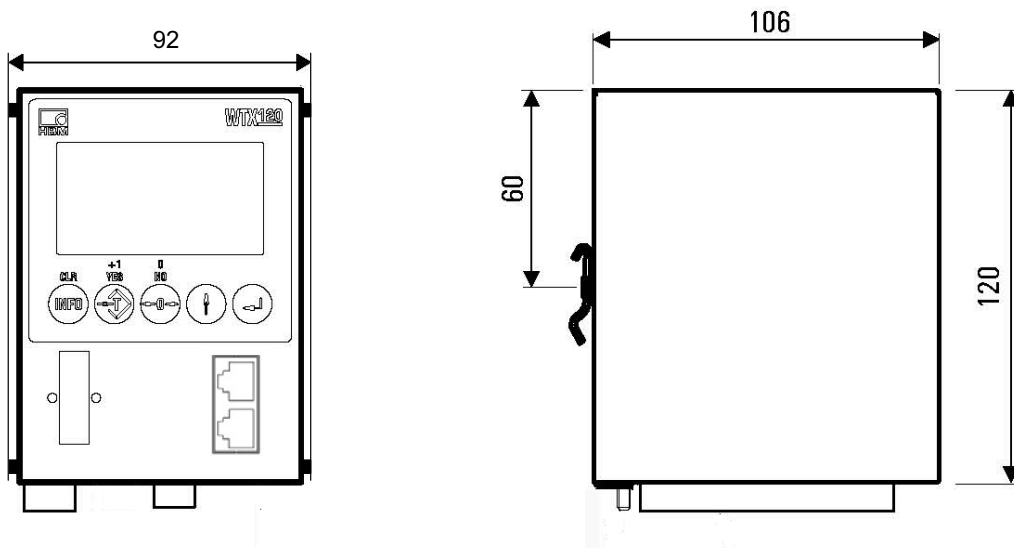
Legal-for-trade industrial weighing terminal

## Special features

- Connection of up to 8 SG load cells (350 ohm) via plug terminals
- Display resolution up to 30,000, legal for trade up to 10,000e
- Industrial interfaces such as PROFINET, EtherNet/IP with integrated Ethernet switch, or Profibus DP
- Ethernet TCP/IP, Modbus-TCP (standard)
- USB 2.0 interface (standard)
- Operator-friendly configuration on site
- Easy-to-read plain text display with backlight
- HBM PanelX software
- Rugged DIN rail mounting
- Optional indicator for control cabinet installation



Dimensions in mm (1 mm = 0.03937 inches)



## Specifications - WTX120

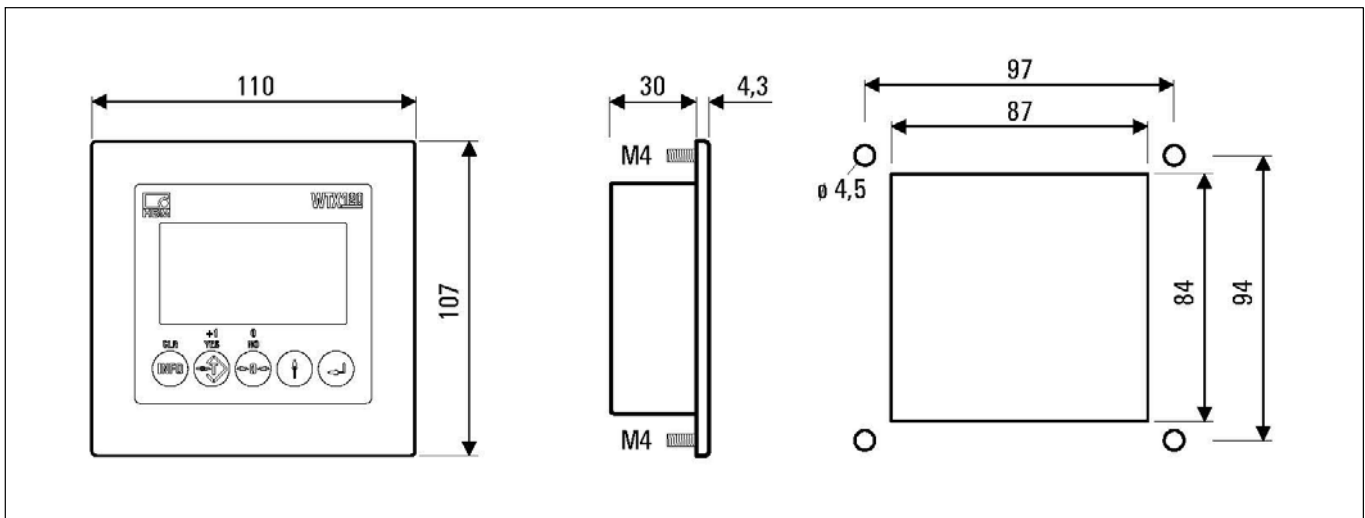
Type		WTX120
Industrial display resolution	d	30,000
Accuracy class as per OIML R76 (Class III and IIII)	d=e	10,000
Input sensitivity (legal for trade)	$\mu\text{V/e}$	0.33
Measurement range	mV/V	$\pm 3$
Load cell connection (short-circuit proof)		Six-wire and four-wire circuit
Max. number of load cells (short-circuit proof)	$\Omega$	8 x 350
Excitation voltage of load cells (short-circuit proof)	$V_{\text{DC}}$	5
Internal sampling 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	$\Omega$	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	$V_{\text{DC}}$	12 ... 30 (-15% +10%) protected against polarity reversal
Current consumption	A	1.3 ... 0.4
Maximum power consumption (when 8 x 350-ohm load cells connected)	W	14.5
Maximum power loss	W	11
Minimum core cross-section for potential equalization	$\text{mm}^2$	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 the outputs: up to max. 500mA at 12-24 VDC; switching threshold digital input LOW: $U_{\text{in}} < 3.00 \text{ VDC}$ , HIGH: $U_{\text{in}} > 6.00 \text{ VDC}$ ; current consumption of the inputs up to max. 7mA at 12-24 VDC
Other standard device connections		1 x Ethernet (RJ45) 1 x USB 2.0 1 x 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 back side of the device)

<b>Type</b>		<b>WTX120</b>
<b>Serial interfaces with plug in screw terminals (depending on device version) for connecting to PC, printer or remote indication</b>		RS232, RS485 (4-wire, non-isolated)
<b>Analog output with plug-in screw terminals (depending on device version)</b>	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
<b>Digital inputs and outputs with plug-in screw terminals (depending on device version)</b>	VDC	up to 4 digital inputs and outputs Load carrying capacity of the outputs: up to max. 500mA at 12-24 VDC; current consumption of the inputs up to max. 7mA at 12-24 VDC, short-circuit proof, optically isolated
<b>Mounting type</b>		DIN rail mounting acc. to EN50022 (35x7,5 mm)
<b>Degree of protection per EN 60529 (DIN rail mounting)</b>		IP20
<b>Material</b>		
<b>Material</b>		Stainless steel
<b>Weight, approx.</b>	kg	0.9
<b>Dimensions (WxHxD)</b>	mm	86 x 120 x 106
<b>With optional shield rail</b>		86 x 199 x 106
<b>Temperature ranges</b>		
Storage		-25°C to +70°C at 95% rel. humidity, non-condensing
Operation		-10°C to +50°C at 95% rel. humidity, non-condensing
Operation when subject to weights and measures legislation		-10°C to +40°C at 95% rel. humidity, non-condensing
<b>Standards</b>		
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
<b>Battery</b>		Type CR2032

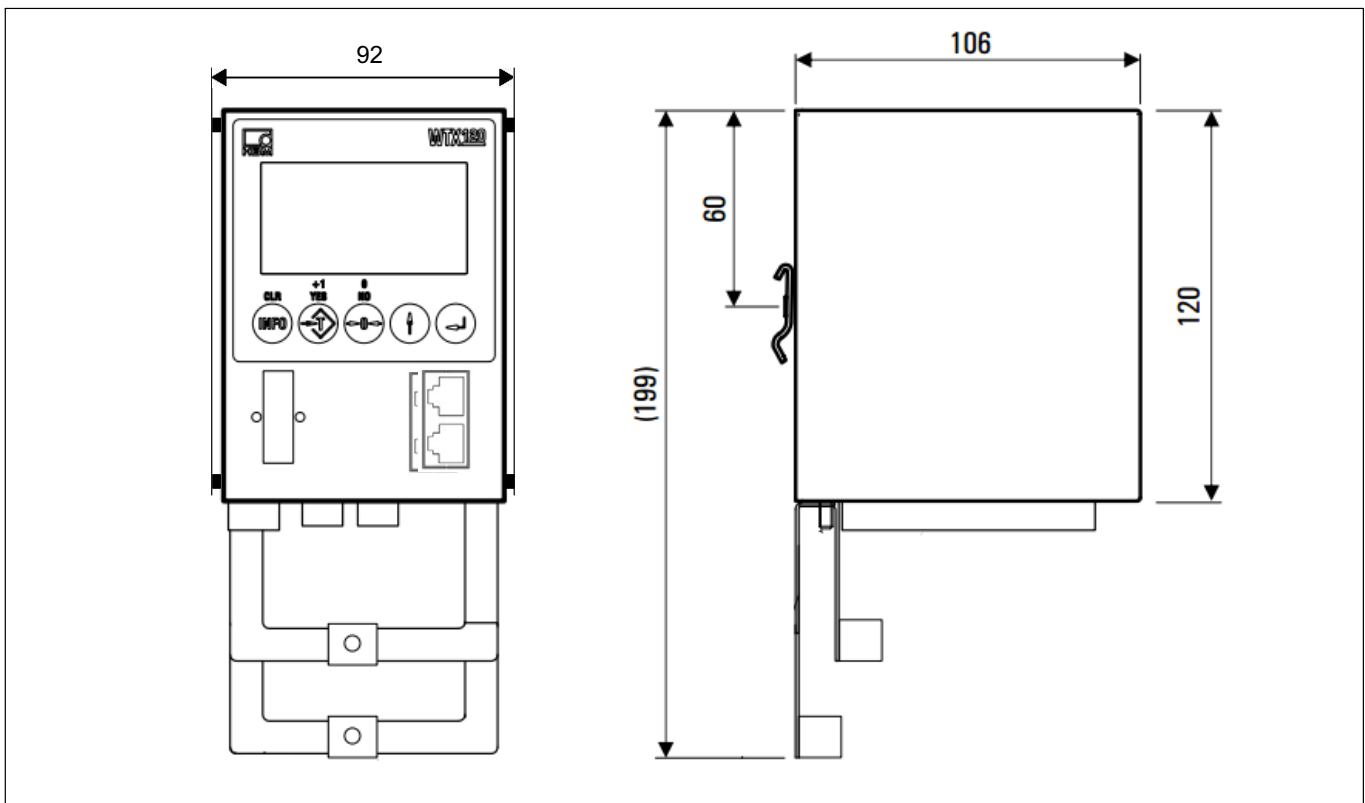
## Accessories

Description	Ordering number
<b>External indicator for panel mounting</b> with backlight for using WTX120 black box version; 27 black box units can be connected (1 black box subject to weights and measures legislation); 15 mm weight indicator and status information, 1 to max. 3 operator guidance rows, 5 keys for zero adjustment, tare balance and control; includes 3 m connection cable; material: stainless steel; dimensions (WxHxD): 110 x 107 x 35 mm; degree of protection: IP69K; weight: approx. 0.3 kg, maximum length of connection cable 10 m (using not included extension cable 1-KAB2131-10)	1-WTX120-D
<b>Extension connection cable</b> for external display 1-WTX120-D, 10 m, for replacement of standard 3 m connection cable	1-KAB2131-10
<b>Legal for trade set</b> comprising shield rail and 2 connection clamps; can be screwed to underside of housing, for attaching the cable shields of max. 10 cables for applications subject to weights and measures legislation	1-WTX120-LFTSET
<b>Zener Barrier</b> Set of 3 safety barriers for strain gauge transducers	1-SB02A

## Dimensions of external indicator



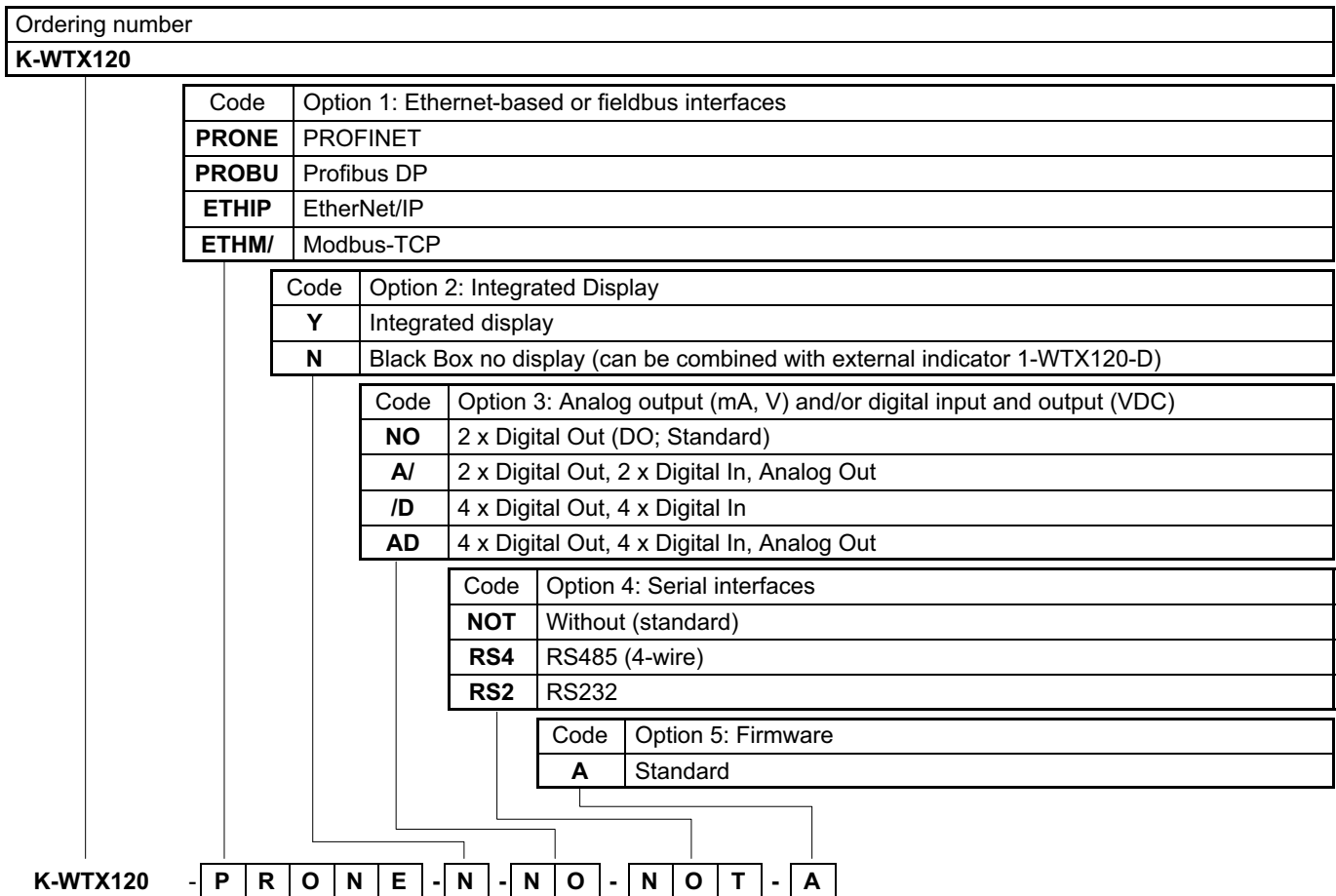
## Dimensions with shield rail



## Product numbers

PROFINET	
1-WTX120-PNY-NO-NA	PROFINET with integrated display and 2xDO
1-WTX120-PNY-A/-NA	PROFINET with integrated display and 2xDO, 2xDI and AO
1-WTX120-PNY-/D-NA	PROFINET with integrated display and 4xDO, 4xDI
1-WTX120-PNY-AD-NA	PROFINET with integrated display and 4xDO, 4xDI and AO
Profibus DP	
1-WTX120-PBY-NO-NA	Profibus DP with integrated display and 2xDO
1-WTX120-PBY-A/-NA	Profibus DP with integrated display and 2xDO, 2xDI and AO
1-WTX120-PBY-AD-NA	Profibus DP with integrated display and 4xDO, 4xDI and AO
EtherNet/IP	
1-WTX120-EIY-NO-NA	Ethernet/IP with integrated display and 2xDO
1-WTX120-EIY-A/-NA	Ethernet/IP with integrated display and 2xDO, 2xDI and AO
Modbus-TCP	
1-WTX120-EPY-NO-NA	Modbus-TCP with integrated display and 2xDO

## K-WTX120..., optional versions



Subject to modifications.  
All product descriptions are for general information  
only. They are not to be understood as a guarantee  
of quality or durability.

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