

#### **DATA SHEET**

# WTX110 Legal-for-trade industrial weighing terminal

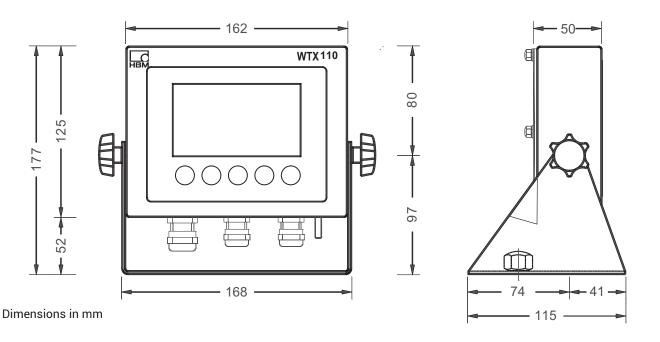
### **SPECIAL FEATURES**

- Up to 8 analog or 32 digital load cells with encrypted measured value transmission
- Display resolution up to 30000e, legal for trade up to 10000e
- Stainless steel housing shapes for desktop and wall mounting or control cabinet installation
- High-resolution 4.3" color screen
- Easy operation via softkey keypad or HBM PanelX software
- Degree of protection IP69K
- Options: Ethernet, USB 2.0, digital I/Os, analog output, printer port, alibi memory
- Application in standard weighing, filling/dosing, counting, hopper and truck scales





#### **DIMENSIONS**



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# **SPECIFICATIONS FOR WTX110**

Туре		WTX110
Version for analog load cells: K-WTX110-A		
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 analog load cells	Ω	8 x 350
Excitation voltage of load cells (short-circuit proof)	V <sub>DC</sub>	±5, clocked
Internal sample rate	1/sec.	50 800, adjustable
Internal resolution	Divisi- ons	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
Multi-range weighing machine		Adjustable up to 3 ranges
Multi-interval weighing machine		Adjustable up to 3 ranges
Version for digital load cells: K-WTX110-D		
Protocol for digital load cells		RS-485, as 4-wire (full duplex) or 2-wire (half duplex) connection
Max. number of digital load cells		32 (e.g. C16i), connected via digital terminal box VKD2R-8
Bridge excitation voltage of load cells		up to 8 via WTX110-D, 9 to 32 via ext. power supply unit
Connected loads with DC supply		
Supply voltage	$V_{DC}$	12 30 (-15% +10%) protected against polarity reversal
Current consumption	Α	0.4 1.3
Connected loads with AC supply		
Supply voltage	V <sub>AC</sub>	110 240 (-15 % +10 %)
System frequency	Hz	50 60
Current consumption	Α	0.1 0.25
Power consumption		
Maximum power consumption (with 8 x 350-ohm load cells connected)	W	9
Maximum power consumption (with 8 digital load cells connected)	W	14
Display		Active color TFT, 4.3" (11 cm), maximum resolution 480 x 272 display resolution of weight and weight unit (LFT) or force and force unit (NLFT), zero and movement cursor, error messages in plain text
Display languages		German, English, French, Polish, Chinese
Character height	mm	24
Processor		32-bit ARM processor, 266 MHz, Linux operating system
Keypad		Membrane keypad with softkeys for zeroing, taring, printing weights, addition and special functions, key lock possible

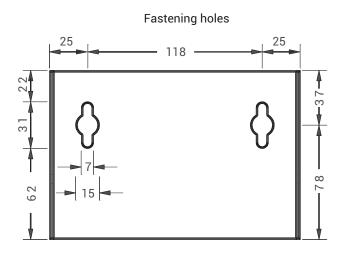
Туре		WTX110
Housing shapes		Wall/desktop housing, panel mounting
Degree of protection as per EN 60529		Wall/desktop housing: IP69K Panel mounting: IP69K (front only)
Material		
Material		Stainless steel
Weight, approx.	kg	1.5
Dimensions (WxHxD)	mm	Desktop housing: 168 x 177 x 115 Wall-mounted housing: 168 x 151 x 121 Panel mounting: 182 x 145 x 47 Panel frame cutout: 164 x 128
Temperature ranges	1	
Storage		-25 °C +70 °C at 95% rel. humidity, non-condensing
Operation		-20°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
Verification		CE and ELT (US)
Inputs and outputs, interfaces		
Digital inputs and outputs (optional)		Depending on device version:
		- Up to 3 digital inputs and 4 outputs
		- Load-carrying capacity of outputs: up to 500 mA at 12 24 V <sub>DC</sub>
		- Current consumption of inputs: up to 7 mA at 12 24 V <sub>DC</sub>
Ethernet interface (optional)		Ethernet TCP/IP, e.g. for PanelX program, WTX app (Android) or Scada connection
USB (optional)		USB 2.0
Analog output (optional)	mA	0 20, 4 20
	V	0 10, 2 10
		For gross or net weight; 15-bit resolution (30,000 increments), with possibility of adjustment
Serial interface e.g. for connecting to PC, printer, scanner or remote display (optional)		RS-232 RS-485 (4-wire, electrically connected)
Alibi memory (optional)		For recording the last 1,000,000 weighing results
Mains plug connection (AC), power supply with integrated power pack (depending on AC device version)		Europe, USA, UK, Australia, Switzerland, South Africa
Battery		Type CR2032, running time at least 3 years

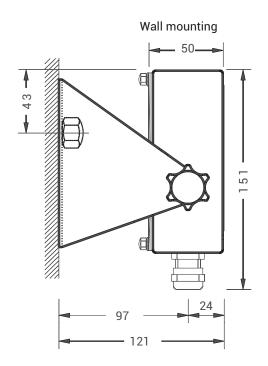
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# **ACCESSORIES**

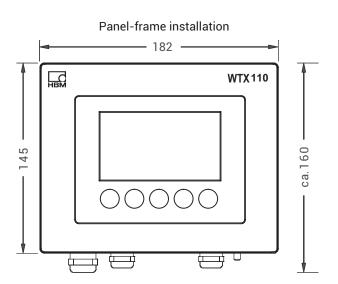
Description	Ordering number
Connection cable for Ethernet connection	
Ethernet connection cable M12 plug (D-coding, straight) to RJ45 plug, 5 m, gray	1-KAB2129-5
Ethernet connection cable M12 plug (D-coding, straight) to RJ45 plug, 10 m, gray	1-KAB2129-10
Ethernet connection cable M12 plug (D-coding, 90°) to RJ45 plug, 5 m, gray	1-KAB2130-5
Ethernet connection cable M12 plug (D-coding, 90°) to RJ45 plug, 10 m, gray	1-KAB2130-10

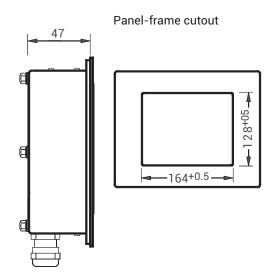
# **DIMENSIONS FOR WALL MOUNTING**



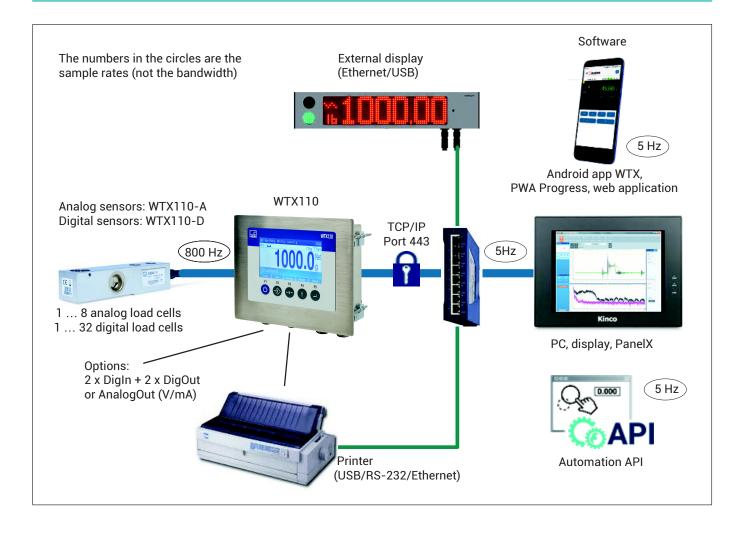


# **CONTROL CABINET DIMENSIONS**





## **CONNECTION OPTIONS**



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## K-WTX110..., optional versions

K-WTX11	0			
	Code Option 1: Load cell connection			
1	Α	Analog strain gage load cells and strain gage sensors according to technical specification		
	D	Digital load cells according to technical specification		
	Code Option 2: Power supply			
	DC/	24 V <sub>DC</sub>		
	AC1	110-240 V <sub>AC</sub> , Europe plug		
2	AC2	110-240 V <sub>AC</sub> , US plug		
	AC3	110-240 V <sub>AC</sub> , UK plug		
	AC4	110-240 V <sub>AC</sub> , Switzerland plug		
	AC5	110-240 V <sub>AC</sub> , South Africa plug		
	AC6	110-240 V <sub>AC</sub> , Australia plug		
	BA/	External battery 12-30 V <sub>DC</sub> (battery not included)		
	Code	Option 3: Housing variant		
3	CA	Control cabinet installation		
	TA Desktop housing or wall-mounting			
	Code	Option 4: Communications interface		
	ETH	Ethernet TCP/IP, e.g. for PanelX or firmware update		
	DIO	2 x Digital Out, 1 x Digital In		
4	RS4	RS-485 (4-wire)		
	RS2	RS-232		
	USB	USB 2.0		
	Code	Option 5: Analog or digital IOs		
_	NO	No		
5	10	2 x Digital Out, 2 x Digital In		
	AO	1 x analog output		
6	Code	Option 6: Legal-for-trade data storage		
	NO/	No		
	ALI	Legal-for-trade data storage DSD		
	Code	Option 7: Firmware		
7	AA	Standard HBM		