

DATA SHEET

WTX110

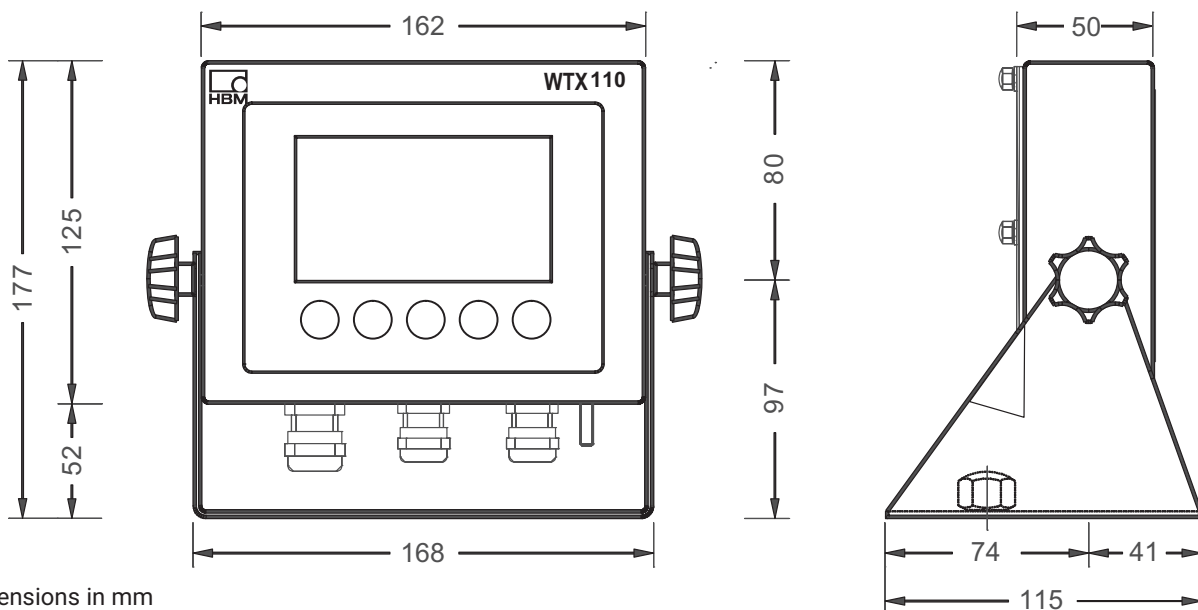
Legal-for-trade industrial weighing terminal

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



Dimensions in mm

SPECIFICATIONS FOR WTX110

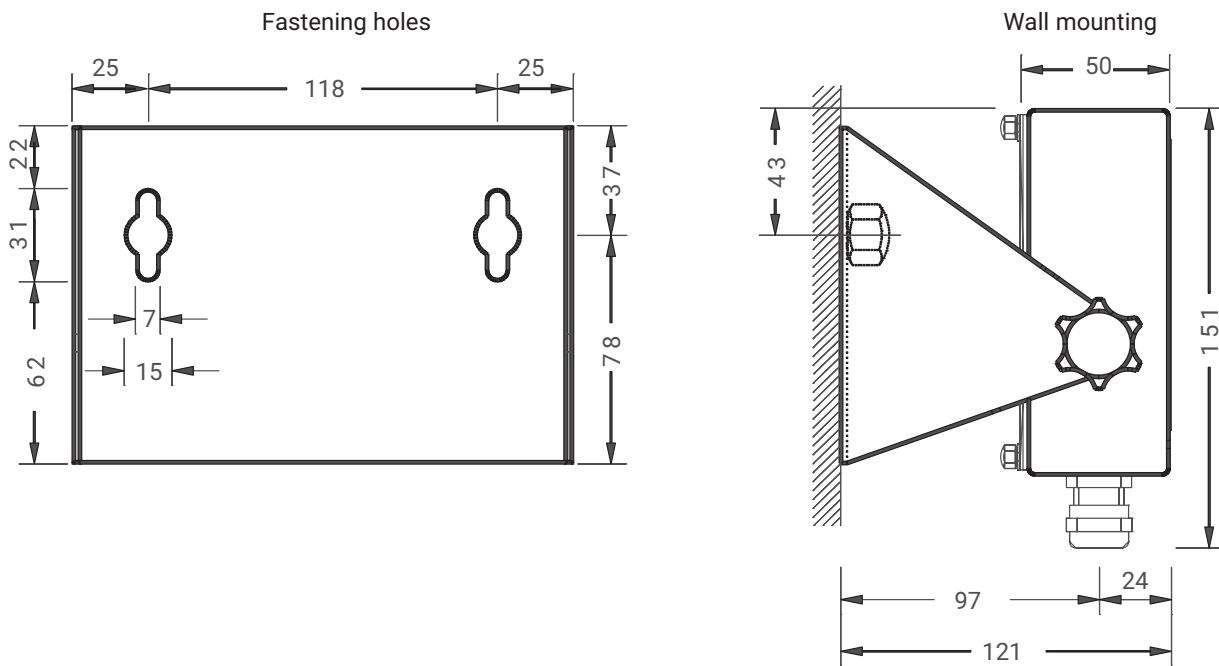
Type		WTX110
Version for analog load cells: K-WTX110-A		
Industrial display resolution	d	30,000
Accuracy class as per OIML R76 (Class III and IIII)	d=e	10,000
Input sensitivity legal for trade	$\mu\text{V}/e$	0.33
Measuring range	mV/V	± 3
Load cell connection (short-circuit proof)		6-wire and 4-wire configuration
Max. number of analog load cells	Ω	8 x 350
Excitation voltage of load cells (short-circuit proof)	V_{AC}	± 5 , clocked
Internal sample rate	1/sec.	50 ... 800, adjustable
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
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	A	0.4 ... 1.3
Connected loads with AC supply		
Supply voltage	V_{AC}	110 ... 240 (-15% +10%)
System frequency	Hz	50 ... 60
Current consumption	A	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
Housing shapes		Wall/desktop housing, panel mounting
Degree of protection as per EN 60529		Wall/desktop housing: IP69K Panel mounting: IP69K (front only)

Type		WTX110
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		
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 _{DC} - Current consumption of inputs: up to 7 mA at 12 ... 24 V _{DC}
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 V	0 ... 20, 4 ... 20 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

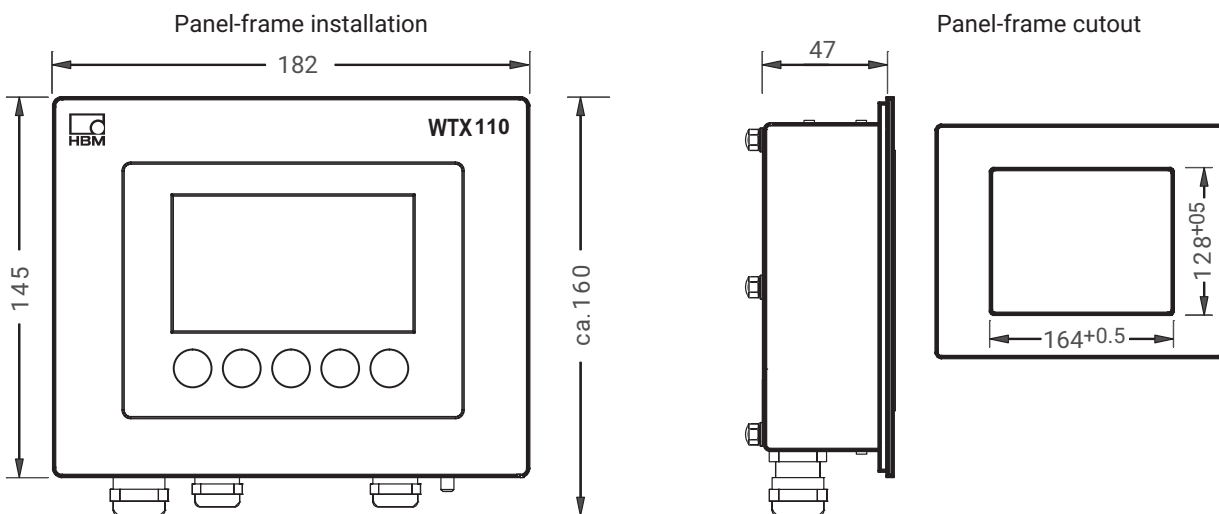
ACCESSORIES

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

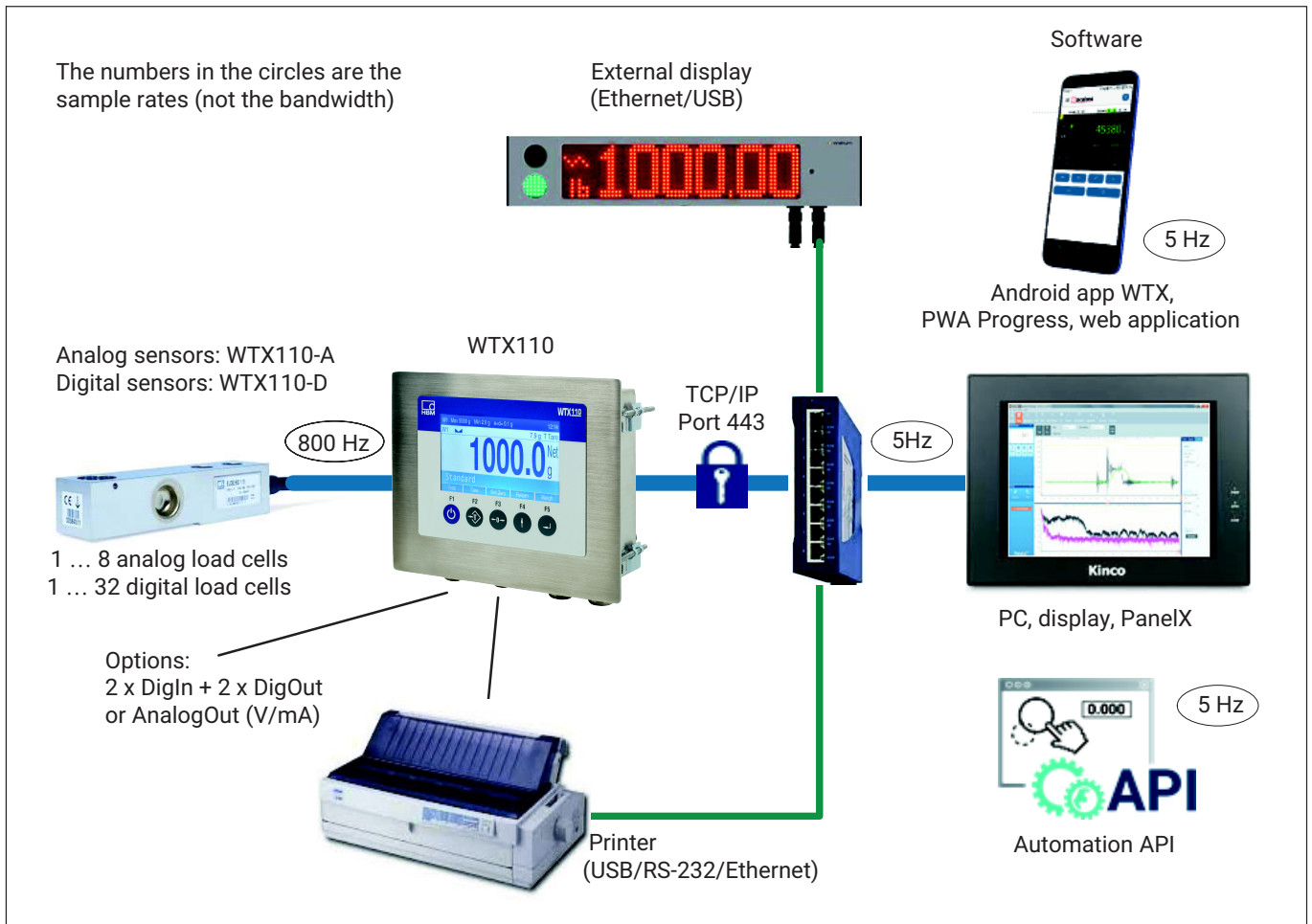
DIMENSIONS FOR WALL MOUNTING



CONTROL CABINET DIMENSIONS



CONNECTION OPTIONS



PRODUCT NUMBERS

K-WTX110..., optional versions

K-WTX110		
1	Code	Option 1: Load cell connection
	A	Analog strain gage load cells and strain gage sensors according to technical specification
	D	Digital load cells according to technical specification
2	Code	Option 2: Power supply
	DC/	24 V _{DC}
	AC1	110-240 V _{AC} , Europe plug
	AC2	110-240 V _{AC} , US plug
	AC3	110-240 V _{AC} , UK plug
	AC4	110-240 V _{AC} , Switzerland plug
	AC5	110-240 V _{AC} , South Africa plug
	AC6	110-240 V _{AC} , Australia plug
BA/	External battery 12-30 V _{DC} (battery not included)	
3	Code	Option 3: Housing variant
	CA	Control cabinet installation
	TA	Desktop housing or wall-mounting
4	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
	RS4	RS-485 (4-wire)
	RS2	RS-232
	USB	USB 2.0
5	Code	Option 5: Analog or digital IOs
	NO	No
	IO	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
7	Code	Option 7: Firmware
	AA	Standard HBM

K-WTX110 - A - D C / - C A - E T H - N O - N O / - A A

1 2 3 4 5 6 7

Hottinger Brüel & Kjaer GmbH

Im Tiefen See 45 · 64293 Darmstadt · Germany
 Tel. +49 6151 803-0 · Fax +49 6151 803-9100
 www.hbkworld.com · info@hbkworl.com

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