

# Industrial Box Thin Client

## BTC12N-\*



- Industrial-grade box thin client for 24/7 operation
- Long-term support with product availability for more than 5 years
- Supports modern Ultra HD (4K) setups with 60 Hz
- Compact footprint
- Option for Class I/Div 2 hazardous locations
- Option for ACP ThinManager "Ready"

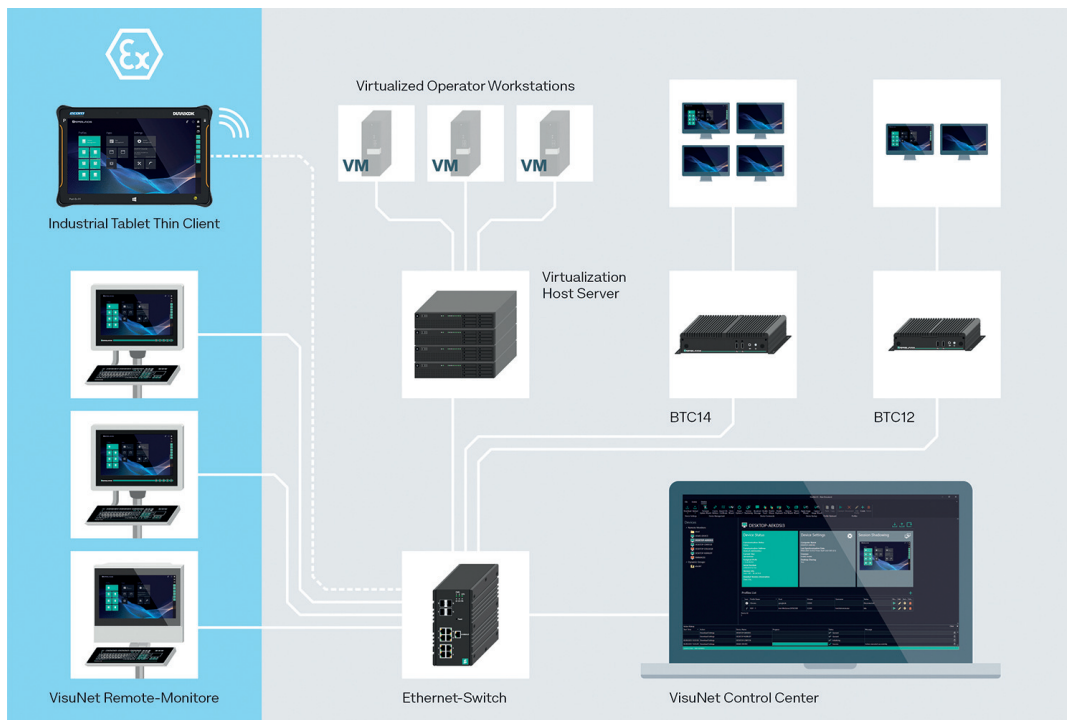
### Industrial Box Thin Client



### Function

The BTC12 is a compact industrial box thin client for use in harsh industrial environments. Its low profile and optional high operating temperature range (standard temperature grade) offer installation flexibility for automation cabinets, drawers in production, and in control rooms. An Apollo Lake processor supports modern operator workstation setups with up to two monitors. The DisplayPort interfaces support even sophisticated Ultra HD (4K) screens with 60 Hz. Like all other Pepperl+Fuchs remote monitors and box thin clients, the standard BTC12N-GP-TS4-DP-N0 is shipped with VisuNet RM Shell 6, the latest generation of thin client firmware for industrial-grade security and stability.

### Function Principle



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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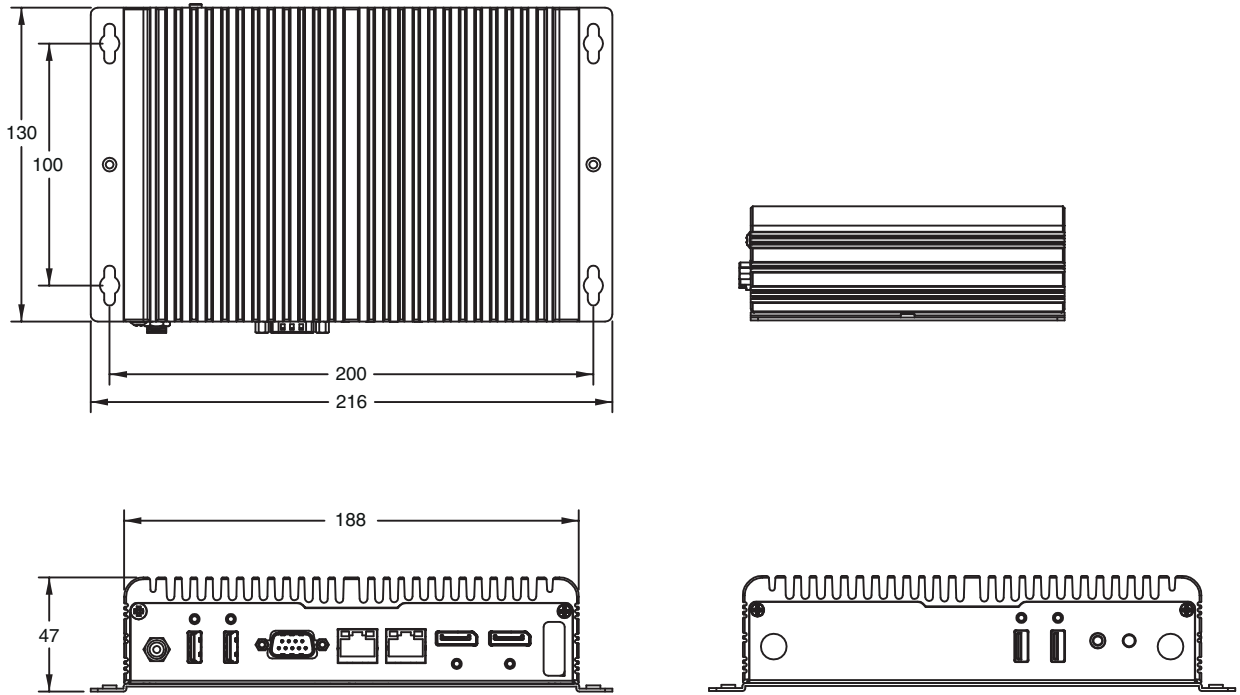
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Dimensions



Technical Data









<b>Hardware</b>	
Processor	Intel® Apollo Lake N4200 series
RAM	4 GB DDR3L Optional: PC3: 8 GB DDR3L PC4: 8 GB DDR3L
Mass storage	32 GB eMMC MLC Optional: PC2: additional 128 GB SSD PC3: additional 240 GB SSD PC4: additional 480 GB SSD
<b>Supply</b>	
Power supply	Input voltage: 16 ... 28 V DC Input current: max. 2 A - 1 A Input via 2.5 mm power socket (with double insulation from the power supply)
<b>Interface</b>	
Interface type	front: 2 x USB 2.0, power button, audio line out Back side: 2 x 1000Base-T Ethernet, 2 x DisplayPort™ 1.2 (supports Ultra HD with 4K at 60 Hz), 1 x DC (DC jack 5.5 x 2.5 mm with lock mechanism), 2 x USB 3.1 (Super Speed) , 1 x RS-232/RS-485 with DB-9 connector
<b>Directive conformity</b>	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013 EN 55032:2015, AC:2016 EN 55035:2017
RoHS	
Directive 2011/65/EU (RoHS)	EN 50581:2012-09

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## Technical Data

Software	
Operating system	VisuNet RM Shell 6.x (based on Microsoft Windows 10 IoT Enterprise 2021 LTSC) Option TTR: ACP ThinManager Ready BIOS Option PC2: Windows 10 IoT LTSB Option: PC3 and PC4: Windows 10 IoT 2019 LTSC
Ambient conditions	
Operating temperature	Temperature classes: N1: Industrial temperature grade 0°... 55° C (32 ... 131 °F) N0: Standard temperature grade -20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-20 ... 60 °C (-4 ... 140 °F)
Relative humidity	≤ 95 % at 40 °C (non-condensing acc. to EN 60068-2-78)
Shock resistance	40 g (11 ms) when operating
Vibration resistance	3 g <sub>rms</sub> 5 ... 500 Hz
Mechanical specifications	
Degree of protection	IP40
Mass	1.32 kg
Dimensions	216 mm x 130 mm x 47 mm
Mounting	Desktop or wall mounting, VESA mount (100 x 100 mm and 75 x 75 mm) and DIN-rail mounting via optional adapter
Note	passive cooling , no moving parts <b>Power supply not included.</b>
International approvals	
UL approval	Standard (GP): UL Listed for Canada and USA, E223772 (NRAQ, NRAQ7) (Ordinary Locations) Option D2: UL Listed for Canada and USA, E492874 (NRAG, NRAG7) (Hazardous Locations)

## Accessories

	<b>FSP065-RBBN3</b>	Power supply for BTC12 and BTC14 Industrial thin clients
	<b>BTC12-CBL-DC-JACK-2100</b>	Connecting cable for BTC12 and BTC14
	<b>ATEN-LockPro</b>	Latch that allows to lock cables to BTC1*
	<b>VISUNET CONTROL CENTER 6</b>	Additional Management tool for VisuNet Remote Monitors and Box Thin Clients
	<b>VISUNET-RM-SHELL6</b>	Thin Client Firmware for VisuNet Remote Monitors, Box Thin Clients and Tablet Thin Clients (mobile)
	<b>VISUNET-RM-SHELL6-CC</b>	VisuNet Control Center License Key for RM Shell 6
	<b>VISUNET-RM-SHELL6-DRDC</b>	DRDC License Key for RM Shell 6
	<b>VISUNET-RM-SHELL6-PRO</b>	PRO License Key for RM Shell 6

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**Type Code**

Type	Enclosure	Certification	Computing Platform	Interfaces	Options
<b>BTC12</b>	Box Thin Client				
	<b>-N</b>	Standard enclosure			
		<b>-GP</b>	General-purpose Non-Ex - CE, FCC Part 15 Class B, UL Ord Loc Listed for US & Canada		
		<b>-GN</b>	General-purpose Non-Ex - CE, FCC Part 15 Class B		
		<b>-D2</b>	Ex/Hazloc version - CE, FCC Part 15 Class B, UL Haz Loc Listed for US & Canada Class I, Div 2		
			<b>-TS3</b>	Intel Pentium N4200, 4-GB RAM, 32 GB Flash, VisuNet RM Shell 5.x based on Windows® 10 IoT LTSC	
			<b>-TS4</b>	Intel Pentium N4200, 4-GB RAM, 32 GB Flash, VisuNet RM Shell 6.x based on Windows® 10 IoT LTSC	
			<b>-PC2</b>	Intel Pentium N4200, 4-GB RAM, 128 GB SSD, Windows® 10 IoT LTSC installed	
			<b>-PC3</b>	Intel Pentium N4200, 8-GB RAM, 240 GB SSD, Windows® 10 IoT LTSC installed	
			<b>-PC4</b>	Intel Pentium N4200, 8-GB RAM, 480 GB SSD, Windows® 10 IoT LTSC installed	
			<b>-TTR</b>	Intel Pentium N4200, 4-GB RAM, ACP ThinManager Ready BIOS installed	
				<b>-DP</b>	2x DisplayPort, 4x USB, 1x RS-232, 2x Gigabit Ethernet
				<b>-N0</b>	Standard temperature grade -20 ... 60 °C
				<b>-N1</b>	Industrial temperature grade 0 ... 55 °C

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