

Personal Computer - Panel Mount

VisuNet FLX

PC-320P-*



- Large application flexibility due to identical basic components that can be configured as required
- Industrial Panel PC: IP66 rating in front panel and IP20 rating in back
- Easy installation with available Mounting Kit
- Global certifications

Personal Computer - Panel Mount

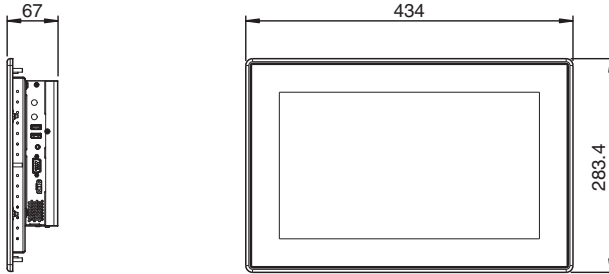


Function

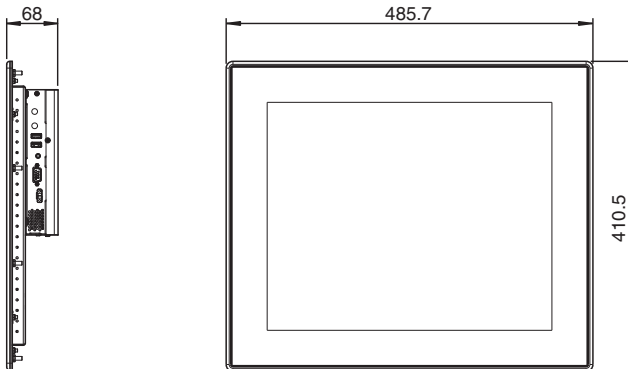
VisuNet FLX Panels consist of a display unit with touch screen in combination with a computing unit. Various display sizes (21.5", 19" and 15.6") and configurable computer units lead to highest application flexibility. The VisuNet FLX panels are designed for Zone 2/22 (Div. 2) and non-Ex applications. The gap free surface which is available with a typical surface roughness of 0.8 µm and rounded edges of the bezel prevent accumulation of liquids or bacteria. Display and seals are chemically resistant to typical cleaning agents.

Dimensions

15.6" Display



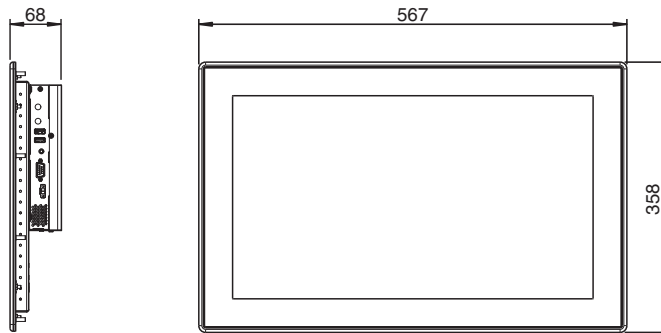
19" Display



Release date: 2025-06-20 Date of issue: 2025-06-20 Filename: t193553_eng.pdf

Dimensions

21.5" Display



Technical Data

General specifications	
Type	Personal Computer
Hardware	
Processor	Intel® Core™ i5-7300U Intel® Celeron™ 3965U
RAM	2x SO-DIMM slots, supports up to 32 GB DDR4-2133 (one SO-DIMM slot) Configurable RAM options: Industrial temperature grade (temperature option A): B: 1x 8GB DDR4-2133 C: 1x 16GB DDR4-2133 D: 2x 16GB DDR4-2133 [Industrial, general purpose (Non-Ex), i5] Wide temperature grade (temperature option B): L: 1x 8GB DDR4-2133 M: 1x 16GB DDR4-2133 P: 2x 16GB DDR4-2133 [Industrial, general purpose (Non-Ex), i5]
Mass storage	Storage interface: 1x M.2 2242/2280 M Key, PCIe + SATA 3 1x M.2 2242/2280 M Key, 2242/2280, SATA 3, supports Raid 0/1 [i5] Configurable storage options: Industrial temperature grade (temperature option A): D: 256 GB M.2 NVMe 1.3 (PCIe 4x) E: 512 GB M.2 NVMe 1.3 (PCIe 4x) Wide temperature grade (temperature option B): P: 256 GB M.2 NVMe 1.3 (PCIe 4x) Q: 512 GB M.2 NVMe 1.3 (PCIe 4x)
Supply	
Input current	max. 3 A, max. 60 W
Power consumption	
DC	20 ... 28 V d.c. / 4.0 A (SELV/PELV or class 2) For connections designation refer to the VisuNet FLX Panel Mount manual.
Indicators/operating means	
Display	
Type	Liquid Crystal Display (LCD) with LED backlight
Screen size	Configurable display options: 22GT: 54.61 cm (21.5") [temperature class A] 22FC: 54.61 cm (21.5") (Display might react sluggishly below 0 °C) 19SC: 48.26 cm (19") 15FC: 39.62 cm (15.6")
Resolution	22GT, 22FC, 15FC: 1920 x 1080 pixels (Full HD) Aspect Ratio (16:9) 19SC: 1280 x 1024 pixels (SXGA) Aspect Ratio (5:4)
Color depth	24 bit (16.7 M) color
Contrast ratio	Typically 22GT: 1000:1 22FC: 5000:1 19SC: 1000:1 15FC: 800:1

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Brightness	Configurable display options: 22GT: 250 cd/m ² 22FC: 300 cd/m ² 19SC: 450 cd/m ² 15FC: 450 cd/m ²
Viewing angle	22GT: 178 ° in all directions 22FC, 19SC: horizontal: 170 °, vertical: 160 ° 15FC: 170 ° in all directions
Life span	22GT: back lamp life: 30.000 hrs typical half life, at 25 °C (77 °F) 22FC, 19SC, 15FC: back lamp life: 50.000 hrs typical half life, at 25 °C (77 °F)
Input devices	
Touch screen	Configurable Display Options: 10-finger multi-touch, glove-friendly 22GT: Capacitive touch, no optical bonding 22FC, 19SC, 15FC: Capacitive touch, optical bonding
Keyboard	Optional: Foil keyboard with different pointing device options available (see EXTA4 datasheet)
Interface	
Interface type	1 x DisplayPort 1.2 (DP++) 1 x mini DisplayPort 1.2 (DP++ w/ mono locking screw) 1 x Audio Line-out 2 x USB Ex i ports prepared for Pepperl+Fuchs intrinsically safe keyboard 2 x USB 3.1 Gen1 (5 Gbps) ports 1 x USB 2.0 port 2 x LAN ports (RJ45, 10/100/1000 Mbps) 2 x RS232/422/485 (BIOS configurable) with 5V/12V to power peripherals (1 x DB9 male + 1 x RJ45)
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013 (ind. Locations) EN 61000-6-4:2007+A1:2011 EN 55035:2017/A11:2020 EN 55011:2016+A1:2017
Explosion protection	
Directive 2014/34/EU	EN IEC 60079-0:2018 EN IEC 60079-7:2015/A1:2018 EN 60079-11:2012 EN IEC 60079-31:2014
RoHS	
Directive 2011/65/EU (RoHS)	EN IEC 63000:2018
Software	
Operating system	Windows® 10 IoT Enterprise LTSC 2021 x64
Ambient conditions	
Operating temperature	Temperature classes: A: 0 ... 45 °C (32 ... 113 °F) B: -20 ... 55 °C (-4 ... 131 °F) [with wide temperature grade RAM/storage and optically bonded display unit]
Storage temperature	-20 ... 65 °C (-4 ... 149 °F)
Relative humidity	max. relative humidity 93% at 40°C (non-condensing) according to EN60068-2-78
Climatic conditions	Passive cooling, no rotating parts.
Altitude	Operating altitude max. 2000 m
Shock resistance	18 shocks 15 g, 11 ms all axis, IEC 60068-2-27
Vibration resistance	10 ... 150 Hz, +/- 0.075 mm, 1g, 10 cycles per axis according to EN60068-2-6
Mechanical specifications	
Degree of protection	Front side: IP66/Type 4X Back side: IP20
Material	Front bezel: Stainless steel AISI304 (glass, silicone gasket) Backside: Painted aluminum sheet metal
Installation	Panel mount (additional mounting kits available)
Mass	22GT, 22FC and 19SC: approx. 8 kg 15FC: 5.4 kg
Dimensions	22 inch: 567 mm x 358 mm x 68 mm 19 inch: 485.7 mm x 410.5 mm x 68 mm 15 inch: 434 mm x 283.4 mm x 67 mm For cut out dimensions refer to the VisuNet FLX Panel mount manual.
International approvals	

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UL approval	
Approved for	<p>UL OrdLoc UL approval E223772 UL61010-1 Ed.3 UL 61010-2-201 Ed2 CAN/CSA C22.2 No 61010-1-12 CAN/CSA C22.2 No 61010-2-201</p> <p>IS circuits for CL I, DIV 2, GP A-D CL II, DIV 2, GP E, F, G CL III IS circuits for CL I, ZN 2, IIC CL II, ZN 22, IIIB CL III, ZN 22, IIIA Install per drawing 116-0478</p> <p>Mounting in CL I, DIV 2, GP A-D, T4 CL II, DIV 2, GP E, F, G CL III Mounting in CL I, ZN 2, IIC, T4 CL II, ZN 22, IIIB CL III, ZN 22, IIIA</p>
ATEX approval	
ATEX certificate	UL 22 ATEX 2479X
ATEX marking	II 3 G Ex ec [ic Gc] IIC T4 Gc
ATEX certificate	UL 22 ATEX 2480U
ATEX marking	II 3D Ex tc [ic Dc] IIIC Dc
IECEX approval	
IECEX certificate	IECEX ULD 22.0017X
IECEX marking	Ex ec [ic Gc] IIC T4 Gc
IECEX certificate	IECEX ULD 22.0018U
IECEX marking	Ex tc [ic Dc] IIIC Dc
IECEX standard	IEC 60079-0:2017 Ed 7.0 IEC 60079-7:2017 Ed 5.1 IEC 60079-11:2011 Ed 6.0 IEC 60079-31:2013 Ed. 2
CCC approval	
CCC certificate	2023322309005728
CCC marking	Ex ec [ic Gc] IIC T4 Gc Ex tc [ic Dc] IIIC T85°C Dc
CCC standard	GB 3836.1-2021 GB/T 3836.3-2021 GB/T 3836.4-2021 GB/T 3836.31-2021

Type Code

PC-320P-*

PC-320P-	(1)	(2)-	K(3)-	(4)-	(5)	(6)	(7)	(8)	(9)-	(10)
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Model	
PC-320P-	Personal Computer - Panel Mount

(1)	Explosion protection
N	Industrial, general purpose (UL Ord Loc Listed for US & Canada)
L	ATEX & IECEX Zone 2/22 and Class I, II, III Div 2

(2)-	Temperature
A-	0 ... 45 °C
B-	-20 °C ... 55 °C

(3)-	Display unit
22GT-	21.5 " (16:9), Full HD (1920 x 1080 pixels), capacitive touch, no optical bonding
22FC-	21.5 " (16:9), Full HD (1920 x 1080 pixels), capacitive touch, optical bonding
19SC-	19.0" (5:4) SXGA (1280 x 1024 pixel), capacitive touch, optical bonding

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Type Code

(3)-	Display unit
15FC-	15.6" (16:9), Full HD (1920 x 1080 pixel), capacitive touch, optical bonding

(4)-	Power supply unit
D-	24 V DC

(5)	Computing platform
1N	Intel® Celeron 3965U
2N	Intel® Core™ i5-7300U

(6)	RAM
B	1x 8 GB, industrial temperature grade
C	1x 16 GB, industrial temperature grade
D	2x 16 GB, industrial temperature grade [only general purpose (Non-Ex), i5-7300U]
L	1x 8 GB, wide temperature grade
M	1x 16 GB, wide temperature grade
P	2x 16 GB, wide temperature grade [only general purpose (Non-Ex), i5-7300U]

(7)	Storage
D	256 GB, industrial temperature grade, M.2 NVMe
E	512 GB, industrial temperature grade, M.2 NVMe
P	256 GB, wide temperature grade, M.2 NVMe 1.3 (PCIe 4x)
Q	512 GB, wide temperature grade, M.2 NVMe 1.3 (PCIe 4x)

(8)	Operating system & Software
3	Windows® 10 Enterprise LTSC 2021

(9)-	Housing
S1-	Stainless steel bezel SS304, prepared for panel mounting

(10)	Options
NN0	Standard

Example:

PC320P-	N	A-	22GT-	D-	1N	B	D	3	S1-	NN0
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