



VisuNet GXP PC Zone 1/21 (2020 Generation)

PC-GXP1100-19S*

- 19 in (48 cm) display
- PC solution with pre-installed Windows® operating system
- Lightweight design
- Completely modular system for easy field maintainability
- Flush or bezel mounting options
- IP66 rating for each individual component and entire system with housing
- Certified for ATEX and IECEx Zone 1/21
- UL listed for USA and Canada

VisuNet GXP PC Zone 1/21 (2020 Generation, Intel (R) Atom Apollo Lake Processor)



Function

The VisuNet GXP PC (PC-GXP1100- 19S*/PC-GXP1200-19S*) is a lightweight modular operator workstation for use in hazardous locations according to ATEX and IECEx Zone 1/21 as well as Class I and II, Division 2, and Class III. Certification for Class I, Zone 2; Class II, Zone 22; and Class III, Zone 22 is also available.

The system assembly consists of three core components that are fieldreplaceable by the customer.

The display unit (DPU1100-*/DPU1200-*) is a hazardous-location rated display panel with an optional 10 finger multitouch sensor. The display and touchsensor are optically bonded with the hardened front glass.

The PC unit (PCU1100-*/PCU1200-*) is a hazardous-location rated computing unit that runs a pre-installed Microsoft Windows operating system. The PC unit allows users to install individual software packages such as SCADA applications to visualize and control their automation application.

The power supply units (PSU1100-*/ PSU1200-*) are hazardous-location rated power supplies that provide the PCU and DPU devices with 24 V DC power.

As a standard mounting option, a bezel is available that allows the panel to be mounted into the system housing or into a cabinet (requires mounting kit). The panel can also be flush-mounted into a cabinet from the back with additional mounting brackets.

Technical Data

General specifications

Type	Personal Computer
Hardware	
Processor	Intel® Atom Apollo Lake E3940
RAM	8 GB
Mass storage	240 GByte industrial grade SSD optional: 480 GByte SSD
Supply	
Power consumption	
AC	115/230 V AC, 0.4 ... 0.7 A, 50/60 Hz
DC	18 ... 36 V DC , 1.5 ... 3 A
Indicators/operating means	
Display	
Type	Liquid Crystal Display (LCD) with LED backlight
Screen diagonal	48.26 cm (19 inch)
Resolution	1280 x 1024 (SXGA) , Aspect ratio 5:4
Color depth	24 bit (16.7 M) color
Contrast	1000:1
Brightness	450 cd/m²
Reading angle	170° horizontal 160° vertical
Life span	back lamp life: 50.000 hrs typical half life , at 25 °C (77 °F)
Input devices	

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

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Technical Data

Touchscreen	optional: projective capacitive; 10 finger multi-touch, glove friendly
Keyboard	Foil keyboard with different pointing device options available (see EXTA2 datasheet)
Interface	
Interface type	Standard: 1 x Ethernet 100/1000BASE-TX (Ex e) or 1 x fiber optic 1000BASE-SX (Multimode) or 1 x fiber optic 1000BASE-LX (Singlemode), 1 x USB 2.0 (Ex e), 2 x USB 1.1 (Ex i; intended for Pepperl+Fuchs keyboard and mouse), 1 x DC or AC power in (via power supply unit) Optional: 1 x barcode reader interface Pepperl+Fuchs Pscan-D/B (Ex i) "interface 3": 1 x barcode reader interface for wired 1-D scanners IDM-160-D*, IDM-Z1-160-D* and base station IDMX61-B-* and IDM-Z1-x61-B-* (Ex i) "interface 4": 1 x barcode reader interface for wired 2-D Scanner IDM-Z1-260-D-* (Ex i) "interface 5": 1 x RS-232 interface with Power Supply for miscellaneous devices and peripherals (Ex i) 1 x RS-232 (Ex e) 1 x RS-485 (Ex e) 1 x Ethernet 100/1000Base-TX (Ex e) Bluetooth v4.0, communication distance up to 30 m in open terrain, transmission power +8 dBm, transmission frequency 2.402 ... 2.48 GHz
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013 (industrial locations) non-Bluetooth products only
Radio and telecommunication terminal equipment	
Directive 2014/53/EU	EN 301 328 V2.1.1 EN 301 489-1 V2.1.1 EN 301 489-17 V3.1.1 Bluetooth products only
RoHS	
Directive 2011/65/EU (RoHS)	EN 50581:2012-09
Software	
Operating system	Microsoft® Windows® 10 IoT Enterprise 2019 LTSC (x64)
Ambient conditions	
Operating temperature	-20 ... 50 °C (-4 ... 122 °F)
Storage temperature	-20 ... 60 °C (-4 ... 140 °F)
Relative humidity	93% at 40°C, non-condensating, according to EN60068-2-78
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	IP66 (individual components and entire system with housing)
Material	Internal: Panel: anodized aluminum (TCU, PSU), powder coated aluminum (DPU) External: Bezel: stainless steel AISI 304 (1.4301) System housing: stainless steel AISI 304 (1.4301), bead blasted, typical surface roughness Ra = 1.6 µm
Installation	Flush-mount installation (requires customized mounting kit) Panel-mount installation into system housing with bezel Panel-mount installation into cabinet with Bezel and standard mounting kit
Mass	panel with DC: 22 kg, panel with AC: 23 kg, system housing AG1: 19 kg
Dimensions	panel with DC: 524 mm x 453 mm x 120 mm panel with AC: 524 mm x 453 mm x 137 mm panel with AG1 housing: 582 mm x 490 mm x 224 mm
Data for application in connection with hazardous areas	
EU-type examination certificate	BVS 17 ATEX E 036 X
Marking	Ⓔ II 2G Ex eb q ib [ib] IIC T4 IP66 Gb Ⓔ II 2D Ex tb [ib] IIC T85°C IP66 Db

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Directive conformity	
Directive 2014/34/EU	EN 60079-0:2012+A11:2013, EN 60079-5:2015, EN 60079-7:2015, EN 60079-11:2012, EN 60079-31:2014
International approvals	
UL approval	E492874
Approved for	Class I, Division 2, Groups A, B, C, D T4; Zone 2, Group IIC T4 Class II, Division 2, Groups F, G T4; Zone 22, Group IIIB T85 Class III; Zone 22, Group IIIA T85
IECEx approval	IECEx BVS 17.0029X
Approved for	Ex eb q ib [ib] IIC T4 IP66 Gb Ex tb [ib] IIC T85°C IP66 Db
Standards	IEC 60079-0:2011, IEC 60079-5:2015, IEC 60079-7:2015, IEC 60079-11:2011, IEC 60079-31:2013

Accessories

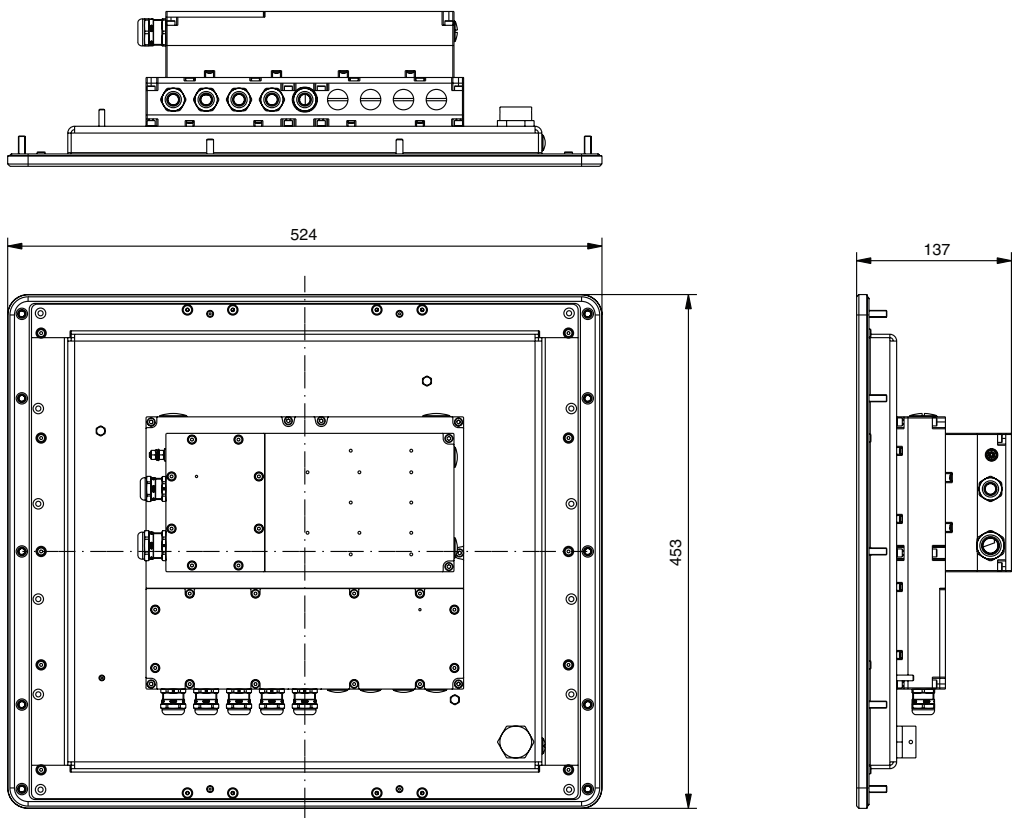
	PCU1100-*	Personal Computer Unit
	DPU1100-J1-19S*	Display Unit
	PSU1100-J1-DC-N0	DC Power Supply
	PSU1100-J1-AC-N0	AC Power Supply
	EXTA2-*-K3*	Ex i keyboard with trackball
	EXTA2-*-K4*	Ex i keyboard with touchpad
	EXTA2-*-K6*	Ex i keyboard with joystick
	VisuNet GXP*	Mounting Options "StandardLine" and "BasicLine"
	VISUNET-RM-SHELL5	Thin Client Firmware for VisuNet Remote Monitors and Box Thin Clients
	VISUNET-RM-SHELL5-CC	VisuNet Control Center License Key for RM Shell 5
	VISUNET-RM-SHELL5-DRDC	DRDC License Key for RM Shell 5
	VISUNET-RM-SHELL5-PRO	PRO License Key for RM Shell 5
	1002MC-SX	Gigabit Industrial Media Converter
	IDM-Z1-x61-M-*	Bluetooth 1-D and 2-D Handheld Reader for Zone 1/21
	IDM-Z1-x60-D-*	Corded 1-D and 2-D Handheld Reader for Zone 1/21

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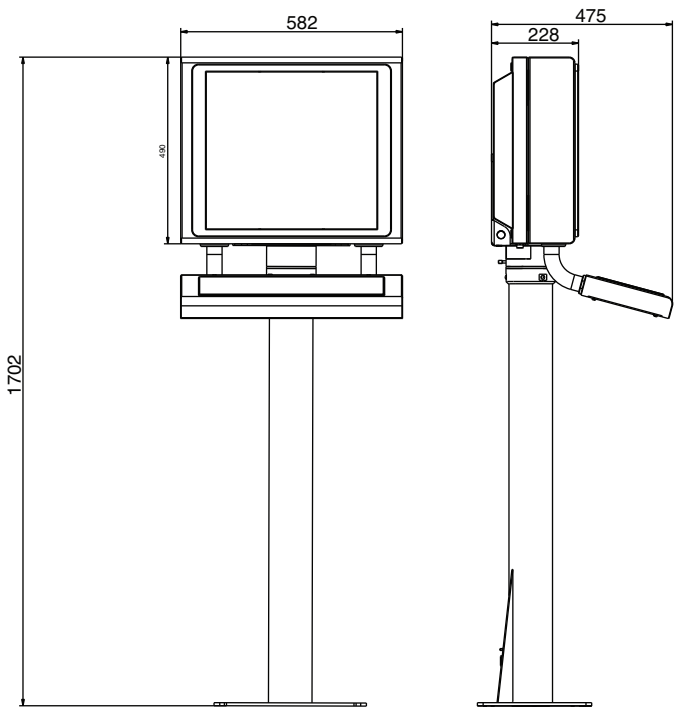
Accessories

	IDM-Z1-x61-B-J1-BT-N0	Base station for Zone 1/21
	HOLDER-BRACKET-XX00-IDMx61-B-N	Stainless steel bracket to mount IDMX61-B-J1-BT-N0 base station to AG-XX00 housing
	DATL-IDM-DB-S-XX00-N0	1 m connector cable for corded handheld reader with M12 connector to open cable end
	SCANNER-HOLDER-U1-XX00-N0	Stainless steel holder for for IDM-Z1- handheld readers, compatible with AG-XX00 housing
	1002MC-LX-10	Gigabit Industrial Media Converter
	PCU1100-* (Intel (R) Atom Apollo Lake Processor)	Personal Computer Unit

Dimensions



Mounting Example: Enclosure, Pedestal, External Keyboard



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Type Code VisuNet PC-GXP1100-19S*/PC-GXP1200-19S*

Model	Display Unit	Front Glass & Touch	Interfaces	Power Supply Unit	Interfaces	Module A	Module B	Computing Platform	Housing	Options	
Model											
PC-GXP1100-	VisuNet GXP Personal Computer System; Zone 1/21										
PC-GXP1200-	VisuNet GXP Personal Computer System; Zone 2/22										
	Display Unit										
	19S	19 inch, SXGA (1280 x 1024)									
	Front Glass & Touch										
	N	Anti-glare security glass, no touch									
	C	Anti-glare security glass, projective capacitive 10-finger multitouch									
	Interfaces										
	1-	5 x capacitive system front keys									
	2-	5 x capacitive system front keys and Bluetooth interface									
	Power Supply Unit										
	D-	18 ... 36 V DC									
	A-	115/230 V AC, 50/60 Hz									
	Interfaces										
	E	1 x 1000BASE-T LAN Ex e, 1x USB Ex e, 2x USB Ex i									
	S	1 x 1000BASE-SX fiber optic (Multimode), 1x USB Ex e, 2x USB Ex i									
	L	1 x 1000BASE-LX fiber optic (Singlemode), 1x USB Ex e, 2x USB Ex i									
	Module A										
	N	No additional interface module									
	B	1 x TTY Ex i for barcode reader PSCAN-D/EX-Dragon and base station PSCAN-B									
	1	1 x RS-232 Ex e									
	2	1 x RS-485 Ex e									
	3	1 x Ex i interface for wired 1-D barcode readers IDM-160-D*, IDM-Z1-160-D* and base station IDMX61-B-* and IDM-Z1-x61-B-*									
	4	1 x Ex i interface for 2-D barcode readers IDM-Z1-260-D*									
	5	1 x RS-232 Ex i interface for miscellaneous devices and peripherals									
	E	1 x 1000BASE-T LAN Ex e									
	Module B										
	N	No additional interface module									
	B	1 x TTY Ex i for barcode reader PSCAN-D/EX-Dragon and base station PSCAN-B									
	1	1 x RS-232 Ex e									
	2	1 x RS-485 Ex e									
	3	1 x Ex i interface for wired 1-D barcode readers IDM-160-D*, IDM-Z1-160-D* and base station IDMX61-B-* and IDM-Z1-x61-B-*									
	4	1 x Ex i interface for 2-D barcode readers IDM-Z1-260-D*									
	5	1 x RS-232 Ex i interface for miscellaneous devices and peripherals									
	E	1 x 1000BASE-T LAN Ex e									
	Computing Platform										
	P3-	Intel® Atom Apollo Lake E3940, 8 GB RAM, 240 GB SSD, Windows 10 IoT Enterprise LTSC x64									
	P4-	Intel® Atom Apollo Lake E3940, 8 GB RAM, 480 GB SSD, Windows 10 IoT Enterprise LTSC x64									
	Housing										
	NN-	No bezel, prepared for flush mounting									
	S2-	Bezel; prepared for panel mounting or into AG1 housing									
	H2-	Installed into EX1 AG1 housing (SS304), front opening, for pedestal/ceiling/wall-arm									
	H3-	Installed into EX1 AG1 housing (SS304), rear opening, for basic line pedestal only									
	Options										
	N0-	Standard, no options									

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Example: PC-GXP1100-19SN1-D-ENNP1-S2-N0

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