



Operator Workstation (RM)

VisuNet GXP Remote Monitor (RM) Zone 1/21 (2024 Generation)

RM-GXP1100-22F-* -T4*

- 21.5" (54.61 cm) display
- 16:9 aspect ratio widescreen formatting to match engineering stations
- Thin Client solution (with VisuNet RM Shell firmware)
- Lightweight design
- Full HD Resolution
- 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 Remote Monitor Zone 1/21 (2024 Generation, Intel® Atom Elkhart Lake Processor)



Function

The VisuNet GXP Remote Monitor (RMGXP1100- 22F*/RM-GXP1200-22F*) is a lightweight modular operator workstation for use in hazardous locations according to ATEX & 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.

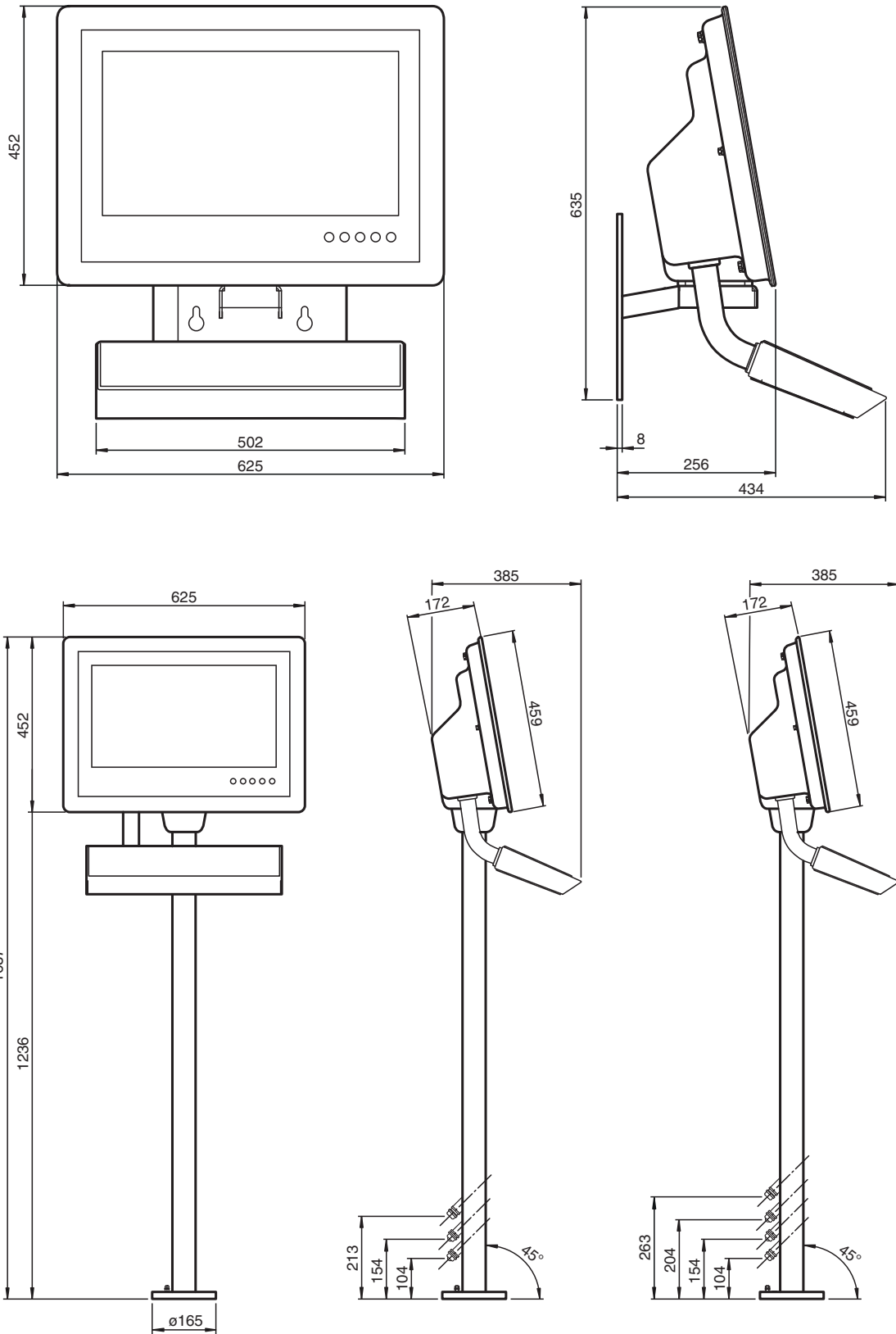
The display unit (DPU1100-*/DPU1200-*) is a hazardous-location rated display panel with an optional 10 finger multitouch sensor. The display and touchsensor are optically bonded with the hardened front glass.

The thin client unit (TCU1100-*/TCU1200-*) is a hazardous-location rated computing unit that runs the latest Pepperl+Fuchs RM Shell firmware. The TCU allows connection to various host systems in the safe area, using standard Ethernet technology.

The power supply units (PSU1100-*/PSU1200-*) are hazardous-location rated power supplies, providing the TCU 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.

Dimensions



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Technical Data

General specifications

Type

Remote Monitor

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

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Technical Data

Hardware	
Processor	Intel® Atom Elkhart Lake x6211E
RAM	4 GB
Mass storage	64 GByte eMMC
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	54.61 cm (21.5 inch)
Resolution	1920 x 1080 pixels (Full HD) Aspect ratio 16:9
Color depth	24 bit (16.7 M) color
Contrast	5000:1 (typically)
Brightness	300 cd/m ² (nit)
Reading angle	175° in all directions
Life span	back lamp life: 50.000 hrs typical half life, at 25 °C (77 °F)
Input devices	
Touchscreen	optional: projective capacitive; 10 finger multi-touch, glove friendly
Keyboard	Foil keyboard with different pointing device options available (see EXTA4 datasheet)
Interface	
Interface type	<p>Standard:</p> <ul style="list-style-type: none"> 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) <p>Optional:</p> <ul style="list-style-type: none"> "interface 3": 1 x barcode reader interface for wired 1-D scanners IDM-160-D*, IDM-Z1-160-D-* and IDM-164-D-* and base station IDMx61-B*, IDM-Z1-x61-B* and IDM-Z1-x64-B* (Ex i) "interface 4": 1 x barcode reader interface for wired 2-D scanner IDM-Z1-260-D-* and IDM-Z1-264-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	VisuNet RM Shell 6.x (based on Microsoft Windows 10 IoT Enterprise 2021 LTSC)
Ambient conditions	
Operating temperature	-20 ... 50 °C (-4 ... 122 °F) Display might react sluggishly below 0 °C

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Technical Data

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, PCU, PSU), powder coated aluminum (DPU) External: Bezel: stainless steel AISI 304 (1.4301) System housing H4: 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 (DPU with bezel, TCU, PSU DC): approx. 23 kg Panel (DPU with bezel, TCU, PSU AC): approx. 24 kg System housing (AG-XX00): approx. 11 kg
Dimensions	Panel (DPU with bezel, TCU, PSU DC): 625 mm x 459 mm x 120 mm Panel (DPU with bezel, TCU, PSU AC): 625 mm x 459 mm x 137 mm Panel with system housing: 625 mm x 459 mm x 173 mm Panel cut-out dimensions: 583 mm x 417 mm (installation surface)
Note	* see nameplate: 2021 alternative, processor cannot be selected
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] IIIC T85°C IP66 Db
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] IIIC 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

Type Code

RM-GXP 22 inches

RM-GXP	(1)	(2)	(3)	(4)-	(5)-	(6)	(7)	(8)	(9)-	(10)-	(11)
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Model	
RM-GXP	VisuNet GXP Remote Monitor System

(1)	Zone
1100-	Zone 1/21
1200-	Zone 2/22

(2)	Display Unit
22F	21.5 inches (16:9), Full HD (1920 x 1080 pixel)

(3)	Front Glass & Touch
N	Anti-glare security glass, no touch
C	Anti-glare security glass, projective capacitive 10-finger multitouch

(4)-	Interfaces
1-	5 x capacitive system front keys
2-	5 x capacitive system front keys and Bluetooth® interface

Type Code

(5)- Power Supply Unit	
D-	18 ... 36 V DC
A-	115/230 V AC, 50/60 Hz

(6) 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 (Single mode), 1x USB Ex e, 2x USB Ex i

(7) Module A	
N	No additional interface module
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*, IDM-Z1-164-D* and base station IDMx61-B*, IDM-Z1-x61-B* and IDM-Z1-x64-B*
4	1 x Ex i interface for 2-D barcode readers IDM-Z1-260-D* and IDM-Z1-264-D*
5	1 x RS-232 Ex i interface for miscellaneous devices and peripherals
E	1 x 1000BASE-T LAN Ex e

(8) Module B	
N	No additional interface module
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*, IDM-Z1-164-D* and base station IDMx61-B*, IDM-Z1-x61-B* and IDM-Z1-x64-B*
4	1 x Ex i interface for 2-D barcode readers IDM-Z1-260-D* and IDM-Z1-264-D*
5	1 x RS-232 Ex i interface for miscellaneous devices and peripherals
E	1 x 1000BASE-T LAN Ex e

(9) Computing Platform	
T4-	Intel® Atom Elkhart Lake x6211E, 4-GB RAM, 64-GB SSD, VisuNet RM Shell 6.x (based on Windows® IoT LTSC 2021)








(10)- Housing	
NN-	No bezel, prepared for flush mounting
S1-	Bezel; prepared for panel mounting or into AG-XX00 housing
H4-	Installed into GXP Housing AG-XX00 (SS304), front opening, surface finish 1.6-µm bead blasted

(11) Options	
N0	Standard, no options





















Example:

RM-GXP	1100-	22F	N	1-	D-	E	N	N	T4-	S1-	N0
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Accessories

	IDM-Z1-x64-B-J1-BT-N0	Base station for IDM-Z1-* (Zone 1/21)
	IDM-Z1-x64-B-N0-BT-N0	Base station for IDM-Z1-* (Non-hazardous areas)
	IDM-Z1-x64-D-*	Corded 1-D and 2-D Handheld Reader for Zone 1/21
	IDM-Z1-x64-M-*	Bluetooth® 1-D and 2-D Handheld Reader for Zone 1/21
	IDM-Z2-x64-B-J2-BT-N0	Base station for IDM-Z2-* (Zone 2/22)
	IDM-Z2-x64-B-N0-BT-N0	Base station for IDM-Z2-* (Non-hazardous areas)
	IDM-Z2-x64-D-*	Corded 1-D and 2-D Handheld Reader for Zone 2/22

Accessories








	IDM-Z2-x64-M-*	Bluetooth® 1-D and 2-D Handheld Reader for Zone 2/22
	EXTA4-*-K4*	Ex i keyboard with touchpad
	EXTA4-*-K6*	Ex i keyboard with joystick
	EXTA4-*-K8*	Ex i keyboard with optical trackball
	VisuNet RM Shell 6	Thin Client Firmware for VisuNet Remote Monitors, Box Thin Clients and Tablet Thin Clients (mobile)
	VISUNET-RM-SHELL6-CC	VisuNet Control Center License Key for RM Shell 6
	VISUNET-RM-SHELL6-DRDC	DRDC License Key for RM Shell 6
	VISUNET-RM-SHELL6-PRO	PRO License Key for RM Shell 6
	VisuNet Control Center 6	Additional Management tool for VisuNet Remote Monitors and Box Thin Clients
	PSU1100-J1-AC-N0	AC Power Supply
	PSU1100-J1-DC-N0	DC Power Supply
	PSU1200-J2-AC-N0	AC Power Supply
	PSU1200-J2-DC-N0	DC Power Supply
	Mounting Options	Accessories for VisuNet GXP
	DATL-FO-SM-LC-LC-15	Fiber Optic Single-Mode Breakout Cable
	DATL-FO-SM-LC-SC-15	Fiber Optic Single-Mode Breakout Cable
	DATL-FO-MM-*	Fiber Optic Multi-Mode Breakout Cable
	DATL-IDM-DB-S-XX00-N0	1 m connector cable for corded handheld reader with M12 connector to open cable end
	HOLDER-BRACKET-AG1-IDMx61-B-N0	Stainless steel bracket to mount IDM-Zx-x6x-B-Jx-BT-N0 base station to AG1 housing
	HOLDER-BRACKET-SK-IDM-Z2-N0	Bracket for wall mounting of the SK-IDM-Z2-J2-* supply cable

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Pepperl+Fuchs Group
www.pepperl-fuchs.comUSA: +1 330 486 0002
pa-info@us.pepperl-fuchs.comGermany: +49 621 776 2222
pa-info@de.pepperl-fuchs.comSingapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com **PEPPERL+FUCHS**

Accessories

	HOLDER-BRACKET-XX00-IDMx61-B-N	Stainless steel bracket to mount IDM-Zx-x6x-B-Jx-BT-N0 base station to AG-XX00 housing
	HOLDER-BRACKET-3200-IDMx61-B-N	Stainless steel bracket to mount IDM-Zx-x6x-B-Jx-BT-N0 base station to AG-3200 housing
	SCANNER-HOLDER-U1-AG1-N0	Stainless steel holder for for IDM-Z1- handheld readers, compatible with AG1 housing
	SCANNER-HOLDER-U1-XX00-N0	Stainless steel holder for for IDM-Z1- handheld readers, compatible with AG-XX00 housing
	SCANNER-HOLDER-U1-3200-N0	Stainless steel holder for IDMx6x handheld readers and Ident-Ex® 01, compatible with AG-3200 housing
	1002MC-LX-10	Gigabit Industrial Media Converter
	1002MC-SX	Gigabit Industrial Media Converter