



# Operator Workstation (RM)

## VisuNet GXP Remote Monitor (RM)

### Zone 2/22 (2024 Generation)

#### RM-GXP1200-22F-\* -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 2/22

VisuNet GXP Remote Monitor Zone 2/22 (2024 Generation, Intel® Atom Elkhart Lake Processor)



### Function

The VisuNet GXP Remote Monitor (RM-GXP1100- 22F\*/RM-GXP1200-22F\*) is a lightweight modular operator workstation for use in explosion-hazardous areas according to ATEX and IECEx Zone 1/21.

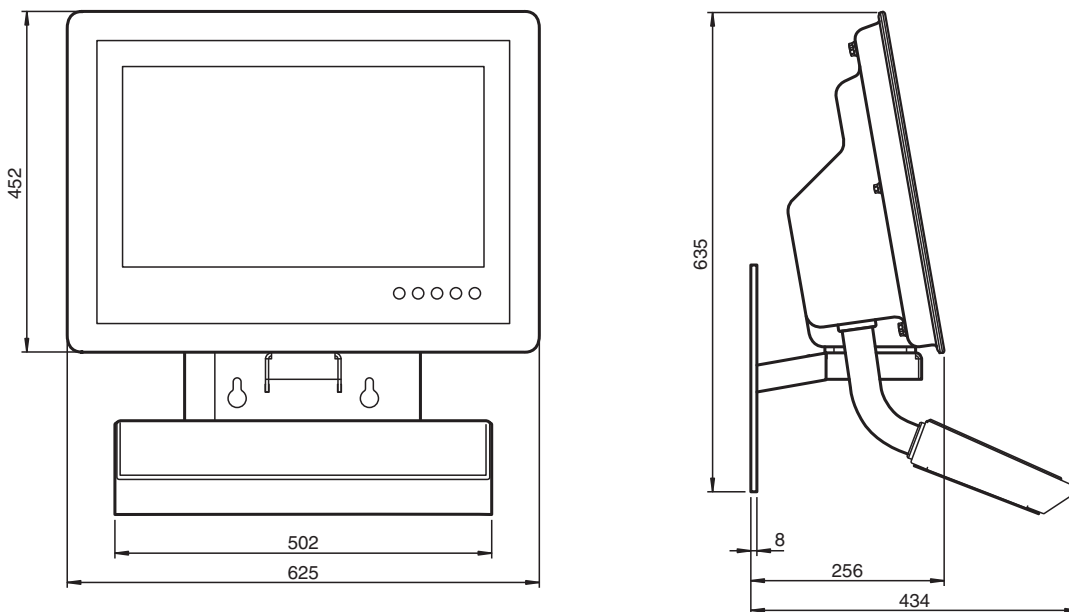
The system assembly consists of three core components that are fieldreplaceable by the customer.

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. Optionally, an integrated RFID reader can be configured within the display unit for identification and authentication purposes.

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.

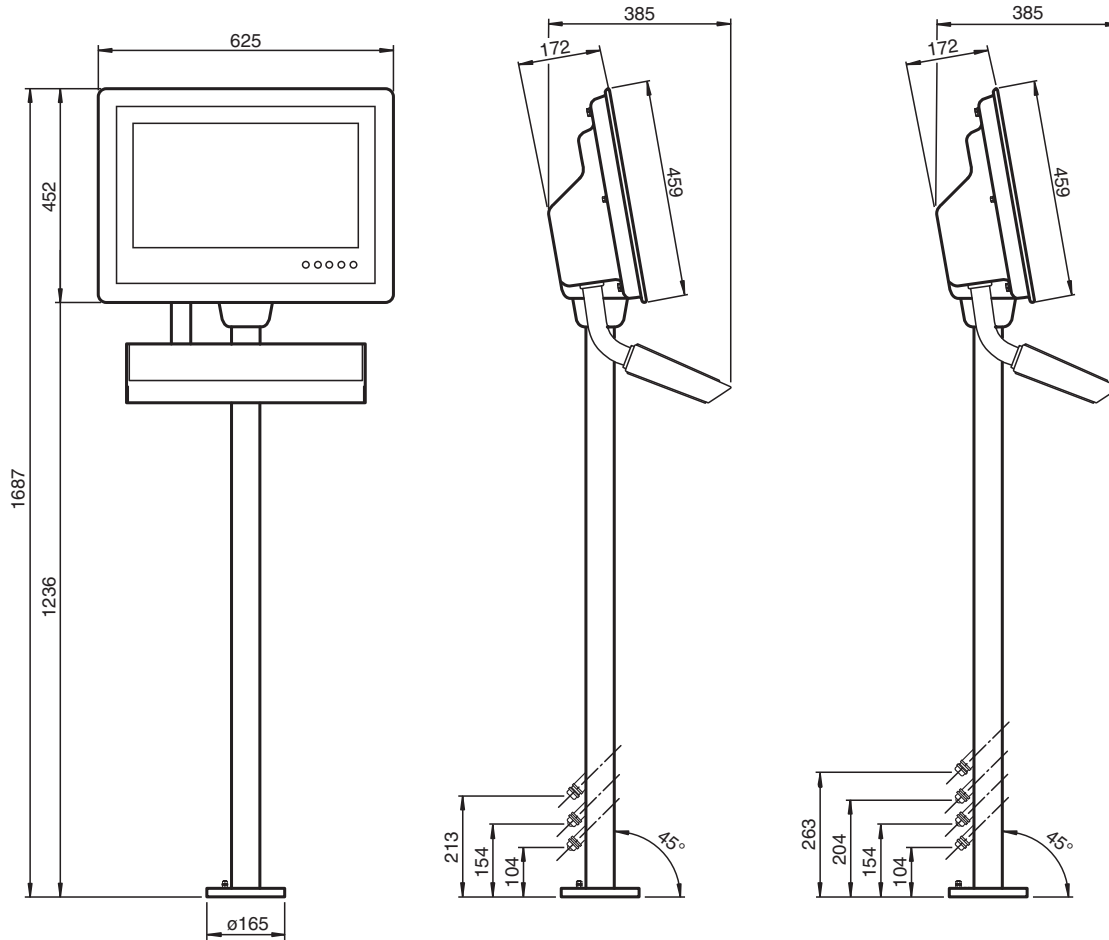
As a standard mounting option, a bezel is available that allows the panel to be mounted into the system housing or into a cabinet (requires mounting kit). The panel can also be flush-mounted into a cabinet from the back with additional mounting brackets.

### Dimensions



Release date: 2025-03-18 Date of issue: 2025-03-18 Filename: t217612\_eng.pdf

## Dimensions



## Technical Data

### General specifications

Type	Remote Monitor
------	----------------

### 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 size	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 ratio	5000:1 (typically)
Brightness	300 cd/m <sup>2</sup> (nit)
Viewing angle	175° in all directions
Life span	back lamp life: 50.000 hrs typical half life, at 25 °C (77 °F)
Input devices	
Touch screen	optional: projective capacitive; 10 finger multi-touch, glove friendly

## Technical Data

Keyboard	Foil keyboard with different pointing device options available (see EXTA4 datasheet)
<b>Interface</b>	
Interface type	<p>Standard:</p> <ul style="list-style-type: none"> <li>1 x Ethernet 100/1000BASE-TX (Ex e) or</li> <li>1 x fiber optic 1000BASE-SX (Multimode) or</li> <li>1 x fiber optic 1000BASE-LX (Singlemode),</li> <li>1 x USB 2.0 (Ex e; service port),</li> <li>2 x USB 1.1 (Ex i; intended for Pepperl+Fuchs keyboard and mouse),</li> <li>1 x DC or AC power in (via power supply unit)</li> </ul> <p>Optional:</p> <p>"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)</p> <p>"interface 4": 1 x barcode reader interface for wired 2-D scanner IDM-Z1-260-D* and IDM-Z1-264-D* (Ex i)</p> <p>"interface 5": 1 x RS-232 interface with Power Supply for miscellaneous devices and peripherals (Ex i)</p> <ul style="list-style-type: none"> <li>1 x RS-232 (Ex e)</li> <li>1 x RS-485 (Ex e)</li> <li>1 x Ethernet 100/1000Base-TX (Ex e)</li> </ul> <p>Bluetooth v4.0, communication distance up to 30 m in open terrain, transmission power +8 dBm, transmission frequency 2.402 ... 2.48 GHz</p>
<b>Directive conformity</b>	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013 (industrial locations) Non-Bluetooth / non-RFID products only
Radio and telecommunication terminal equipment	
Directive 2014/53/EU	<p>EN 61326-1:2013</p> <p>EN 300 328 V2.2.2:2019</p> <p>EN 301 489-1 V2.2.0:2017</p> <p>EN 301 489-17 V3.2.0:2017</p> <p>Bluetooth products only</p> <p>EN 61326-1:2013</p> <p>EN 301489-1 V2.2.3:2019</p> <p>EN 301489-3 V2.3.2:2023</p> <p>EN 300 330 V2.1.1:2017</p> <p>EN 61010-1:2010</p> <p>EN 62479 :2010</p> <p>EN 62311:2008</p> <p>RFID products only</p>
RoHS	
Directive 2011/65/EU (RoHS)	EN IEC 63000:2018
<b>Software</b>	
Operating system	<p>VisuNet RM Shell 6 (based on Windows® 10 IoT Enterprise LTSC 2021 x64)</p> <p><b>Optional:</b></p> <p>TJ-: IGEL OS 12 (based on Linux, pre-installed without licence)</p> <p>TI-: IGEL OS 11 (based on Linux, pre-installed without licence)</p>
<b>Ambient conditions</b>	
Operating temperature	-20 ... 50 °C (-4 ... 122 °F) Display might react sluggishly below 0 °C
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
<b>Mechanical specifications</b>	
Degree of protection	IP66 (individual components and entire system with housing)
Material	<p>Internal:</p> <p>Panel: anodized aluminum (TCU, PCU, PSU), powder coated aluminum (DPU)</p> <p>External:</p> <p>Bezel: stainless steel AISI 304 (1.4301)</p> <p>System housing H4: stainless steel AISI 304 (1.4301), bead blasted, typical surface roughness Ra = 1.6 µm</p>

## Technical Data

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. 17.5 kg Panel (DPU with bezel, TCU, PSU AC): approx. 18 kg System housing: 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
<b>Data for application in connection with hazardous areas</b>	
EU-type examination certificate	BVS 17 ATEX E 037 X
Marking	Ⓜ II 3G Ex ec [ib] q IIC T4 IP66 Gc Ⓜ II 3D Ex tc [ib] IIIC T85 °C IP66 Dc
<b>Directive conformity</b>	
Directive 2014/34/EU	EN IEC 60079-0:2018 EN 60079-5:2015 EN IEC 60079-7:2015+A1:2018 EN 60079-11:2012 EN 60079-31:2014
<b>International approvals</b>	
IECEx approval	IECEx BVS 17.0029X
Approved for	Ex ec [ib] q IIC T4 IP66 Gc Ex tc [ib] IIIC T85 °C IP66 Dc
Standards	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. 2.0

## Type Code

### RM-GXP 22 inches

RM-GXP	(1)	(2)	(3)	(4)-	(5)-	(6)	(7)	(8)	(9)-	(10)-	(11)
--------	-----	-----	-----	------	------	-----	-----	-----	------	-------	------

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-	5x capacitive system front keys
2-	5x capacitive system front keys and Bluetooth® interface
3-	5x capacitive system front keys and Bluetooth interface and RFID Reader (w/ LEGIC support) (AC Option only)

(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

## Type Code

(7)	Module A
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)
TJ-	Intel® Atom Elkhart Lake x6211E, 4-GB RAM, 64-GB SSD, IGEL OS 12 (based on Linux)
TI-	Intel® Atom Elkhart Lake x6211E, 4-GB RAM, 64-GB SSD, IGEL OS 11 (based on Linux)

(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
--------	-------	-----	---	----	----	---	---	---	-----	-----	----