



Remote Monitor - System with enclosure

RM-320S-* (P+F Self-declaration)

- Fully modular design which enables easy migration of individual components
- Large application flexibility due to identical basic components that can be configured as required
- Thin Client solution (with VisuNet RM Shell firmware)
- Global certifications (partly in preparation)

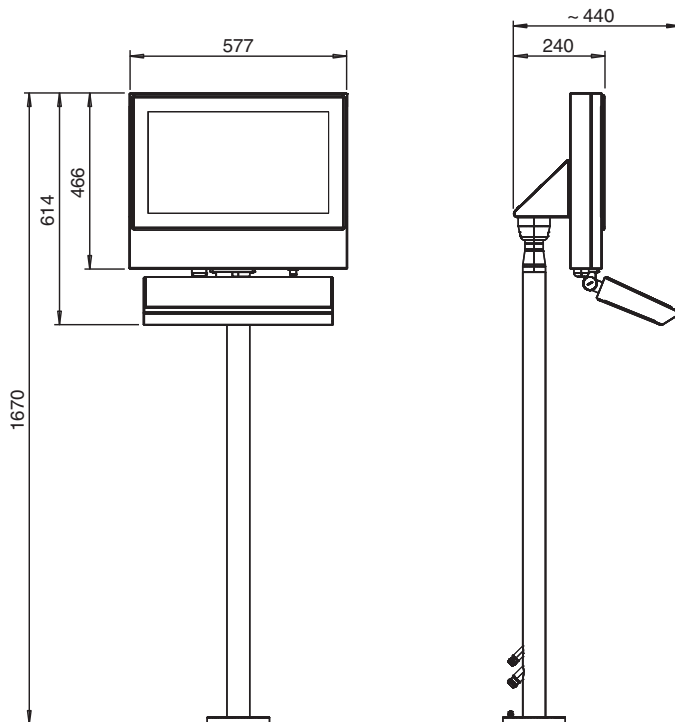
Remote Monitor - System with enclosure



Function

The VisuNet FLX Systems are designed for Zone 2/22 (Div.2) and non-Ex applications. The different mounting and configuring options lead to the highest application flexibility. Due to a fully modular design, the new platform, which is geared to the needs of the (petro-) chemical and pharmaceutical industries, the HMIs can be configured to fit exactly and enables simple and fast adjustments in the field. With the modern, compact design less installation space is required. The low weight allows a cost effective and easy installation.

Dimensions



Release date: 2022-08-09 Date of issue: 2022-08-09 Filename: t207501_eng.pdf

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

Pepperl+Fuchs Group
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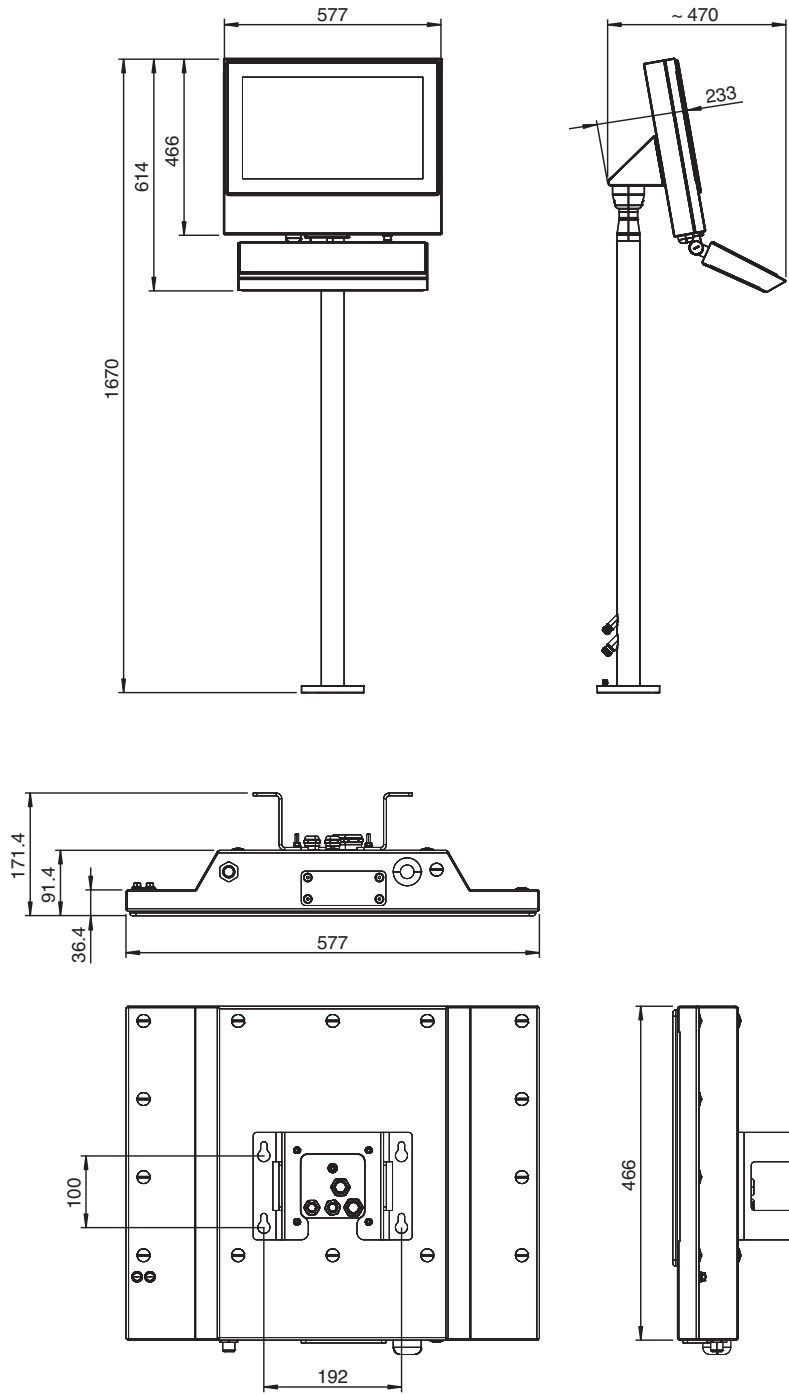
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PF PEPPERL+FUCHS

Dimensions



Technical Data

General specifications	
Type	Remote Monitor
Hardware	
Processor	Intel® Celeron™ 3965U
RAM	1 x 4 GB DDR4-2133, industrial temperature grade

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Technical Data

Mass storage	Storage interface: 1x M.2 2242/2280 M Key, PCIe + SATA 3
	Storage: 32 GB M.2 SATA 3, industrial temperature grade
Supply	
Power consumption	
AC	A: 115/230 V a.c. (100 ... 240 V a.c.), max. 0.7 A, max. 70 W For connections designation refer to the Power Supply PS1000-A6-24.5 manual.
DC	D: 20 ... 28 V d.c. / 2.8 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 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	Typically 22GT: 1000:1 22FC: 5000:1
Brightness	Configurable display options: 22GT: 250 cd/m ² 22FC: 300 cd/m ²
Reading angle	22GT: 178 ° in all directions 22FC: 170 ° horizontal, 160 ° vertical
Life span	22GT: back lamp life: 30.000 hrs typical half life, at 25 °C (77 °F) 22FC: back lamp life: 50.000 hrs typical half life, at 25 °C (77 °F)
Input devices	
Touchscreen	10-finger multi-touch, glove-friendly Configurable display options: 22GT: Capacitive touch, no optical bonding 22FC: 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
Explosion protection	
Directive 2014/34/EU	EN IEC 60079-0:2018 EN IEC 60079-7:2015/A1:2018 EN 60079-11:2012 EN 60079-31:2014
RoHS	
Directive 2011/65/EU (RoHS)	EN IEC 63000:2018
Software	
Operating system	Pepperl+Fuchs RM Shell 5 (based on Microsoft® Windows® 10 IoT Enterprise 2019 LTSC (x64))
Ambient conditions	
Operating temperature	0 ... 40 °C (32 ... 104 °F)
Storage temperature	-20 ... 65 °C (-4 ... 149 °F)
Relative humidity	max. relative humidity 93% at 40°C (non-condensing) according to EN60068-2-78

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Technical Data

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	IP66/Type 4X
Material	Housing: Stainless steel AISI304 (1.4301) Surface finish: Bead blasted, typical surface roughness 1,6 µm
Installation	System with enclosure
Mass	approx. 16 kg approx. 18 kg with AC Power Supply
Dimensions	577 mm x 466 mm x 233 mm
Data for application in connection with hazardous areas	
Certificate	PF 21 CERT 6290X
Marking	Ⓜ II 3 G Ex ec [ic] IIC T4 Gc Ⓜ II 3 D Ex tc [ic] IIIC T85°C Dc
International approvals	
UL approval	Certificate in preparation.
Approved for	Ordinary location acc. UL 61010-1 and UL 61010-2-201 Hazardous location Class I, DIV 2, GPS A-D Class II, DIV 2, GPS F-G Class III Class I, ZN 2, IIC T4 Class II, ZN 2, IIIC T85°C Class III
IECEx approval	
IECEx certificate	Certificate in preparation.
IECEx marking	Ex ec [ic] IIC T4 Gc Ex tc [ic] IIIC Dc
Standards	IEC 60079-0:2017 IEC 60079-7:2017 IEC 60079-11:2011 IEC 60079-31:2013

Accessories

	VISUNET-RM-SHELL5 (2019 LTSC)	Thin Client Firmware for VisuNet Remote Monitors, Box Thin Clients and Tablet Thin Clients (mobile)
	DPU3200-22GT-304A-V1-N0	Display Unit
	BPC3200-N*	Industrial Box PC
	DPU3200-22FC-304A-V1-N0	Display Unit
	Mounting Options	Mounting options for the VisuNet FLX System
	KIT-BT-V1-N0	Bluetooth®-Kit for VisuNet FLX Systems
	VISUNET-RM-SHELL5 (2016 LTSB)	Thin Client Firmware for VisuNet Remote Monitors and Box Thin Clients

Type Code

RM-320S-*

Model	Explosion protection	Temperature	Display unit	Power supply unit	Computing platform	RAM	Storage	OS & software	Housing	Options	Options
Model											
RM-320S-	Remote monitor - "System with enclosure"										
Explosion protection											
	N	Industrial, general purpose									
	R	ATEX Zone 2/22 (Pepperl+Fuchs self-declaration)									
Temperature											
	A-	0 ... 40 °C									
Display unit											
	22GT-	21.5" (16:9), Full HD (1920 x 1080), capacitive touch, no optical bonding									
	22FC-	21.5" (16:9), Full HD (1920 x 1080), capacitive touch, optical bonding									
Power supply unit											
	D-	24 V DC									
	A-	115/230 V AC, 50-60 Hz									
Computing platform											
	1N	Intel Celeron									
RAM											
	A	1x 4 GB, industrial temperature grade									
Storage											
	A	32 GB, industrial temperature grade, M.2 SATA									
OS & Software											
	2	Pepperl+Fuchs VisuNet RM Shell 5.x (based on Win 10 IoT Enterprise 2019 LTSC)									
Housing											
	H1-	preinstalled into AG-3200-* enclosure, surface finish 1.6-µm bead blasted									
	P1-	preinstalled into AG-3200-* enclosure, surface finish 0.8 µm brushed									
Options											
	NN0	Standard									

Example: RM-320S-NA-22GT-D-1NAA2H1-NN0

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