



Remote Monitor - System with enclosure

VisuNet FLX

RM-320S-* -A-*

- 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

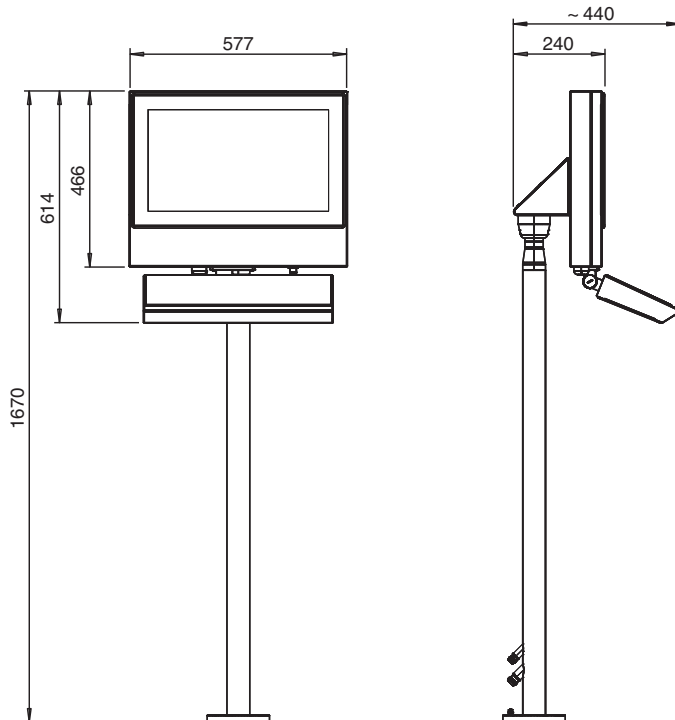
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Function

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: 2023-11-02 Date of issue: 2023-11-02 Filename: t193550_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

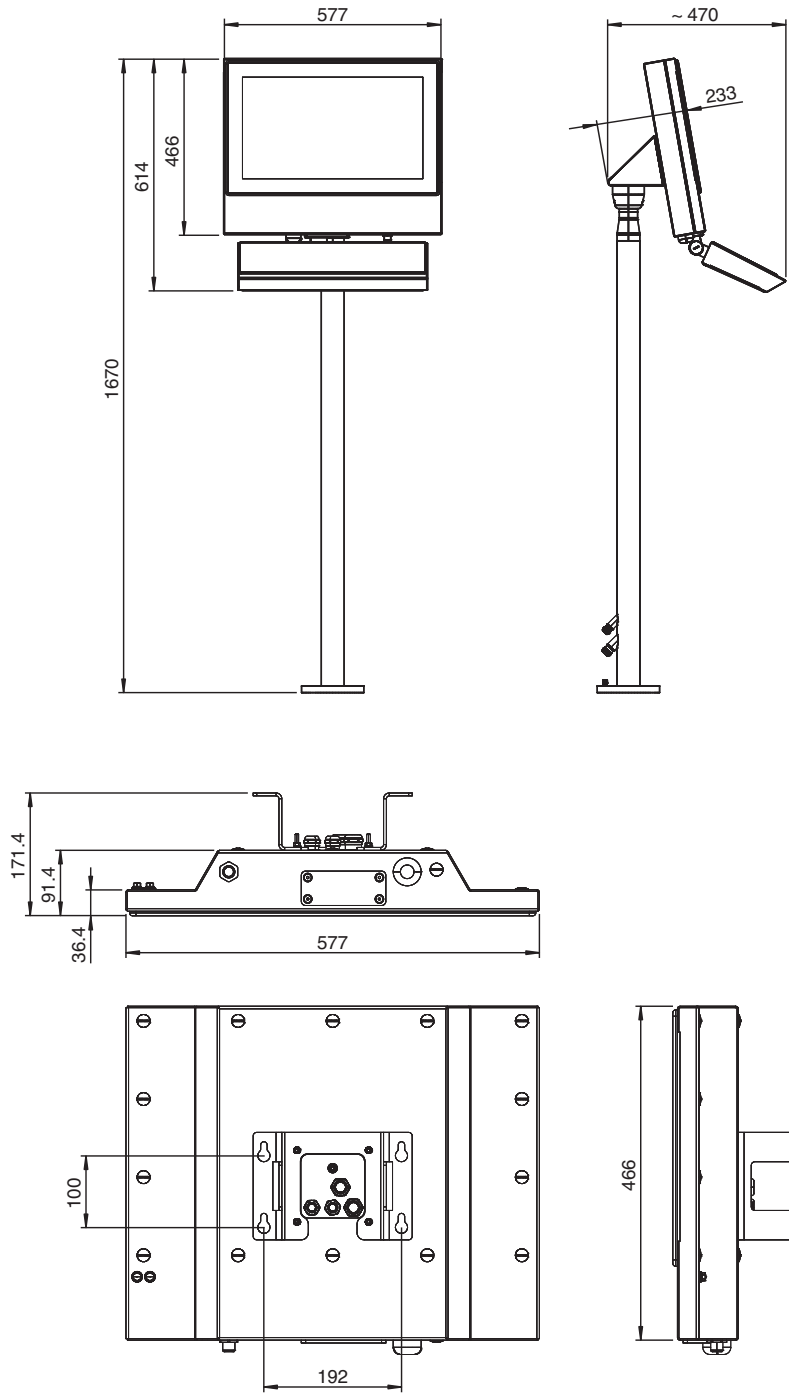
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Dimensions



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 6 (based on Microsoft® Windows® 10 IoT Enterprise 2021 LTSC (x64))
	Optional: T: ACP ThinManager Ready BIOS
Ambient conditions	
Operating temperature	0 ... 40 °C (32 ... 104 °F)
Storage temperature	-20 ... 65 °C (-4 ... 149 °F)

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Technical Data

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	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
International approvals	
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>UL HazLoc UL approval E492874</p> <p>Non-Incendive circuits for CL I, DIV 2, GP A-D CL II, DIV 2, GP F, G CL III Non-Incendive 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 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 2481X
ATEX marking	II 3 G Ex ec [ic Gc] IIC T4 Gc II 3 D Ex tc [ic Dc] IIIC T85°C Dc
IECEX approval	
IECEX certificate	IECEX ULD 22.0019X
IECEX marking	Ex ec [ic Gc] IIC T4 Gc Ex tc [ic Dc] IIIC T85°C 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

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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 (UL Ord Loc Listed for US & Canada)										
L	ATEX & IECEx Zone 2/22 and Class I, II, III Div 2										
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										
N	None (only in combination with ACP ThinManager Ready)										
OS & Software											
4	Pepperl+Fuchs VisuNet RM Shell 6.x (based on Win 10 IoT Enterprise 2021 LTSC)										
T	ACP ThinManager Ready BIOS										
Housing											
P1-	preinstalled into AG-3200-* enclosure, surface finish 0.8 µm brushed										
Options											
	NN0	Standard									

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