



## Direct Monitor - System with Enclosure

### VisuNet FLX

#### DM-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
- Global certifications

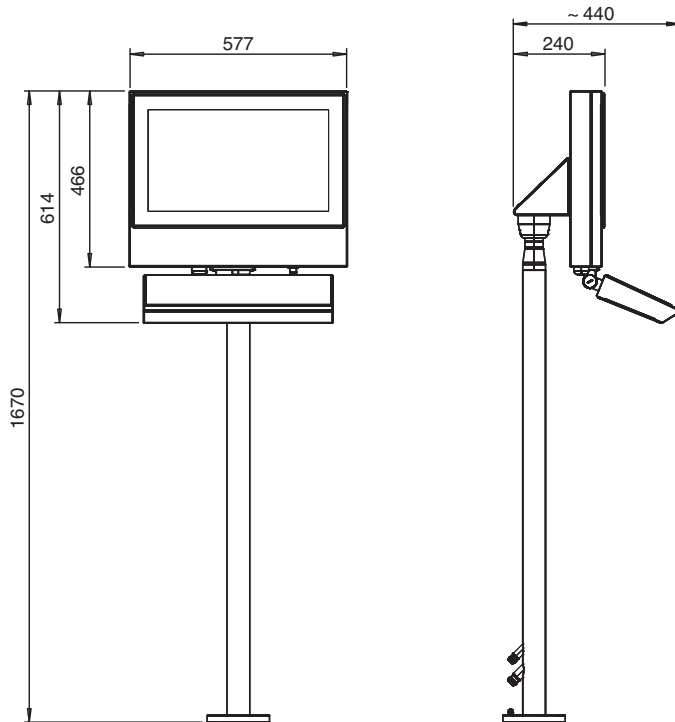
#### Direct Monitor - System with Enclosure



#### Function

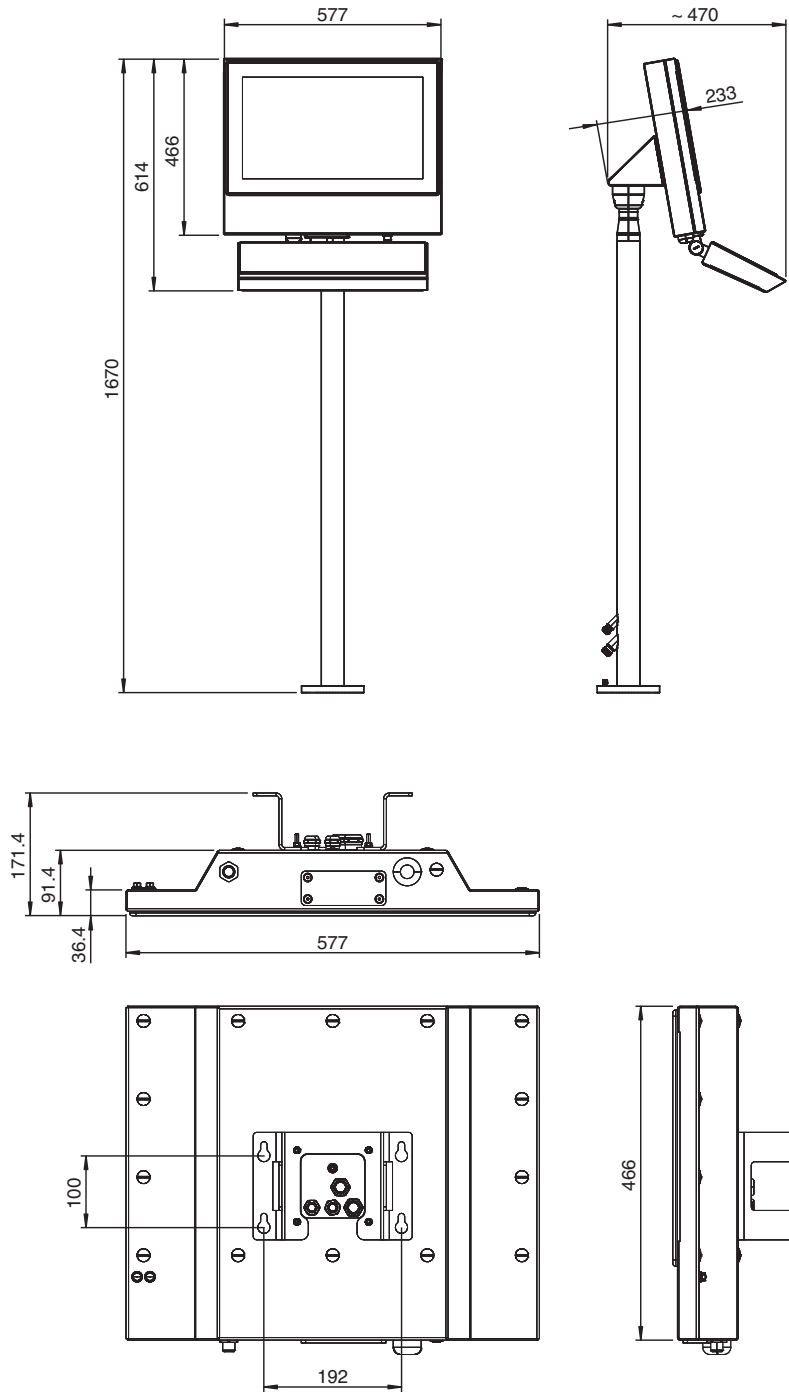
The VisuNet FLX Systems are designed for Zone 2/22 (Div.2) and non-Ex applications. The different mounting and configuring options lead to the highest application flexibility. Due to a fully modular design, the new platform, which is geared to the needs of the (petro-) chemical and pharmaceutical industries, 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: 2025-06-20 Date of issue: 2025-06-20 Filename: t193554\_eng.pdf

Dimensions



Technical Data

<b>General specifications</b>	
Type	Direct Monitor
<b>Supply</b>	
Power consumption	
AC	A: 115/230 V a.c. (100 ... 240 V a.c.), max. 0.4 A For connections designation refer to the Power Supply PS1000-A6-24.5 manual.
DC	D: 20 ... 28 V d.c. / 1.5 A (SELV/PELV or class 2) For connections designation refer to the VisuNet FLX Panel Mount manual.

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## Technical Data

Indicators/operating means		
Display		
Type		Liquid Crystal Display (LCD) with LED backlight
Screen size		54.61 cm (21,5 ")
Resolution		1920 x 1080 pixels (Full HD) Aspect ratio 16:9
Color depth		24 bit (16.7 M) color
Contrast ratio		Typically 22GT: 1000:1 22FC: 5000:1
Brightness		Configurable display options: 22GT: 250 cd/m <sup>2</sup> 22FC: 300 cd/m <sup>2</sup>
Viewing 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		
Touch screen		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		1x Power input w/ 3 pin terminal block 1x HDMI 1x DVI-I 1x VGA 1x USB 1x 3,5mm audio jack (Line-out) 1x OSD Menu w/ power button
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 IEC 60079-31:2024
RoHS		
Directive 2011/65/EU (RoHS)		EN IEC 63000:2018
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
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 0.8 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		

**Technical Data**

Approved for	<p><b>UL OrdLoc</b>                  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 approval E492874                  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, T4                  CL III                  Mounting in                  CL I, ZN 2, IIC, T4                  CL II, ZN 22, IIIB, T85°C                  CL III, ZN 22, IIIA, T85°C</p>
ATEX approval	
ATEX certificate	UL 22 ATEX 2481X
ATEX marking	II 3 G Ex ec [ic] IIC T4 Gc II 3 D Ex tc IIIC T85°C Dc
IECEX approval	
IECEX certificate	IECEX ULD 22.0019X
IECEX marking	Ex ec IIC T4 Gc Ex tc IIIC T85°C Dc
IECEX standard	IEC 60079-0:2017 Ed 7.0 IEC 60079-7:2017 Ed 5.1 IEC 60079-31:2013 Ed. 3
CCC approval	
CCC certificate	2023322309005595
CCC marking	Ex ec IIC T4 Gc Ex tc IIIC T85°C Dc
CCC standard	GB 3836.1-2021 GB/T 3836.3-2021 GB/T 3836.31-2021

**Type Code**

DM-320S-\*A-\*

DM-320S-	(1)	(2)-	(3)-	(4)-	(5)	(6)-	(7)
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Model	
DM-320S-	Direct Monitor - "System with Enclosure"
(1)	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
(2)-	Temperature
A-	0 °C ... 40 °C
(3)-	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
(4)-	Power supply unit
D-	24 V DC
A-	115/230 V AC, 50-60 Hz
(5)	Computing platform
VNNNN	DMU - Video interfaces: DisplayPort, DVI, VGA - standard option

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(6)-	Housing
P1-	Preinstalled into SS304 enclosure, surface finish 0.8-µm brushed

(7)	Options
NN0	Standard

**Example:**

DM-320S-	R	A-	22FC-	A-	VNNNN	P1-	NN0
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