



## Direct Monitor - System with Enclosure

### VisuNet FLX

#### DM-320S-\* -B-\*

- Designed for use in the extended temperature range of -20 °C ... 50 °C with rugged aluminum housing
- Suitable for outdoor use with various sunshield options
- Fully modular design allowing easy migration of individual components
- High application flexibility due to identical basic components that can be configured as required

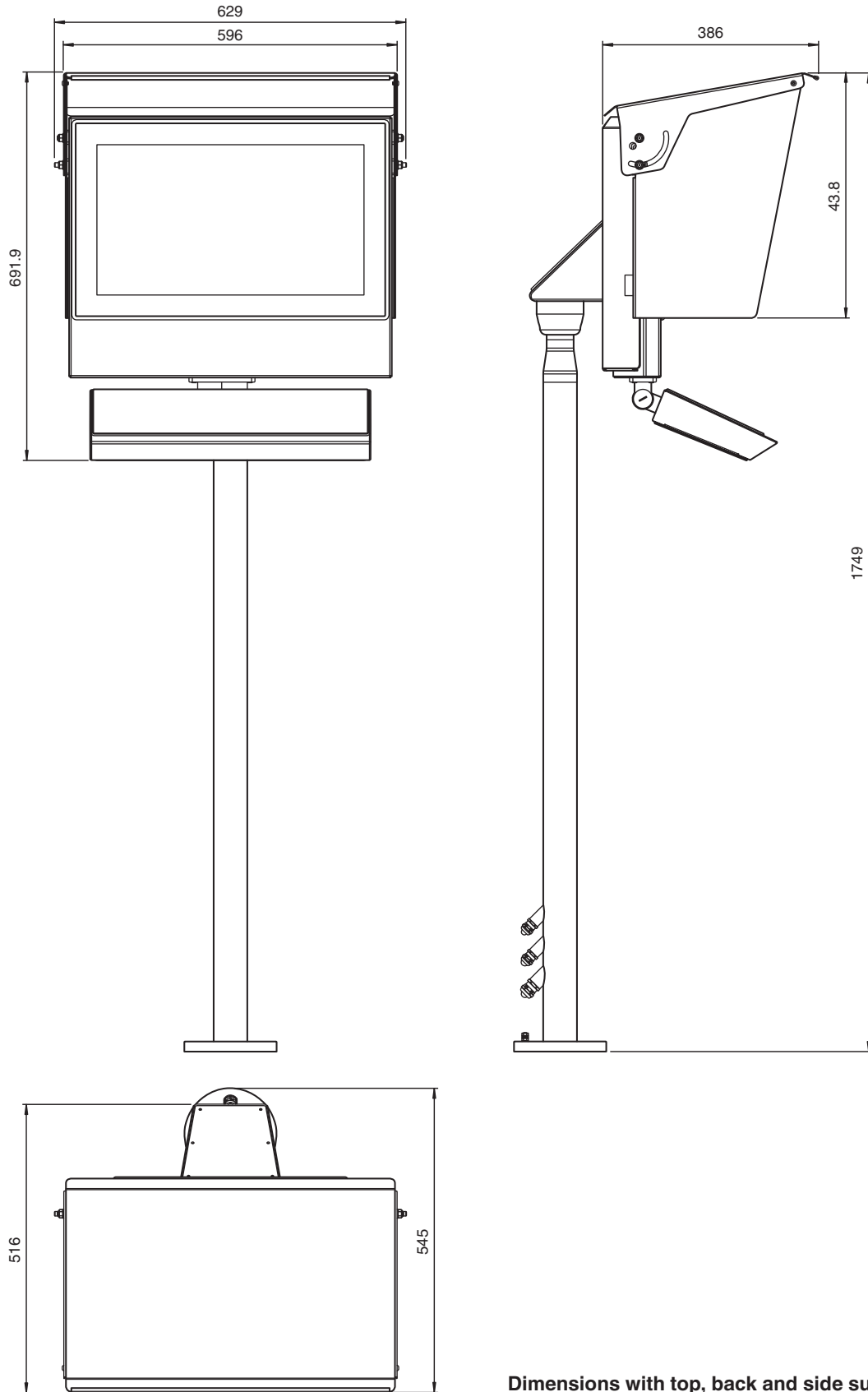
#### Direct Monitor - System with Enclosure



### Function

The VisuNet FLX Systems are designed for Zone 2/22 (Div. 2) and non-Ex applications. The VisuNet FLX's rugged aluminum enclosure provides optimized thermal conductivity for improved heat transfer and temperature management. The high corrosion resistance of the housing makes the VisuNet FLX platform attractive for industries with high ambient temperatures, such as manufacturing, oil & gas, water & wastewater, and loading & filling. Industries such as life science, (petro)chemical and pharmaceutical also benefit from the advantages of the aluminum variant of the VisuNet FLX. The various mounting and configuration options provide maximum application flexibility. Thanks to its fully modular design, the new platform, which is tailored to the needs of the (petro)chemical and pharmaceutical industries, the HMIs can be configured to fit exactly and allow for easy and quick adjustments in the field. The modern, compact design requires less installation space. The low weight allows for cost-effective and easy installation.

Dimensions



Dimensions with top, back and side sunshields

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

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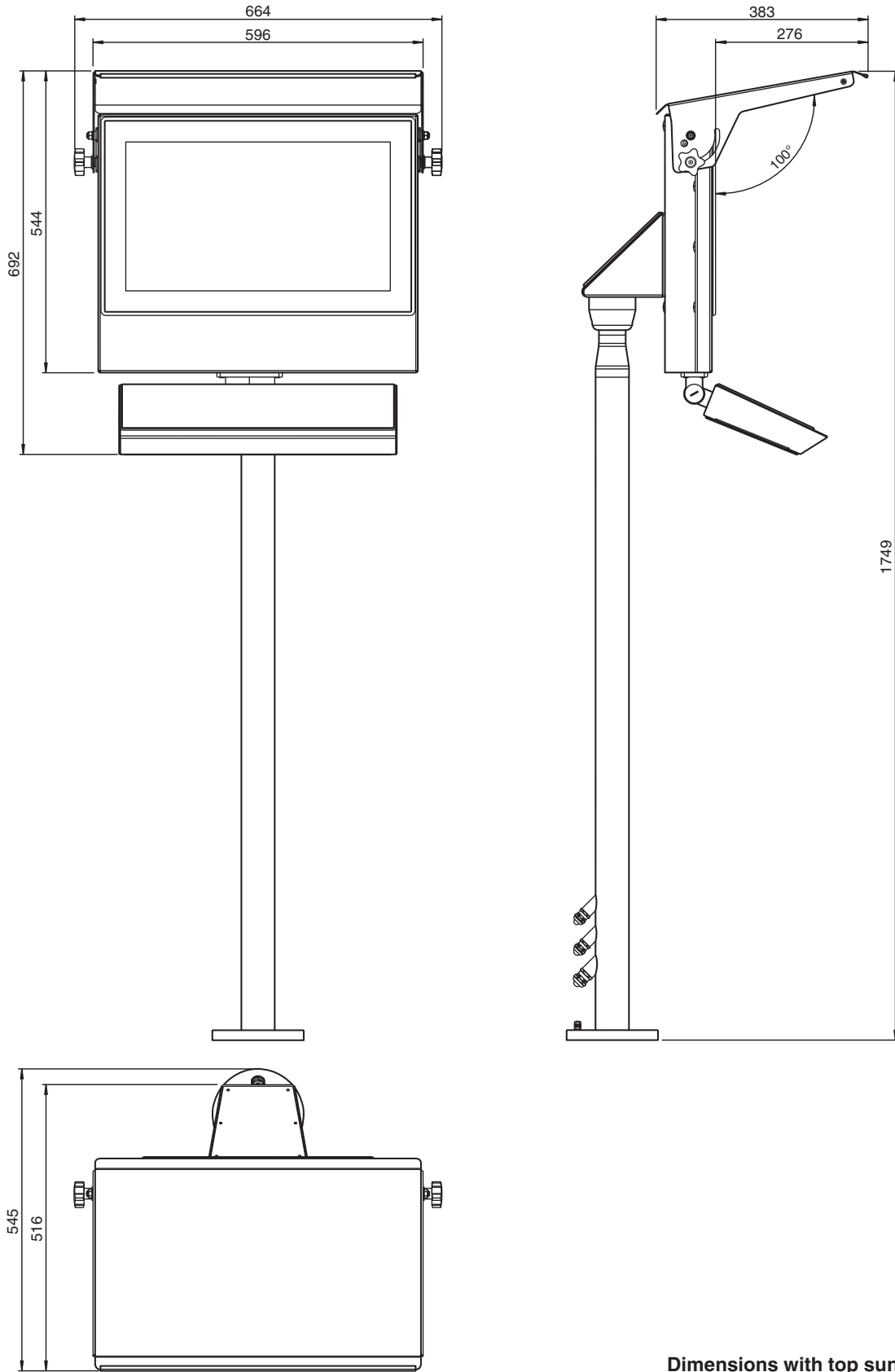
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Dimensions



Dimensions with top sunshield

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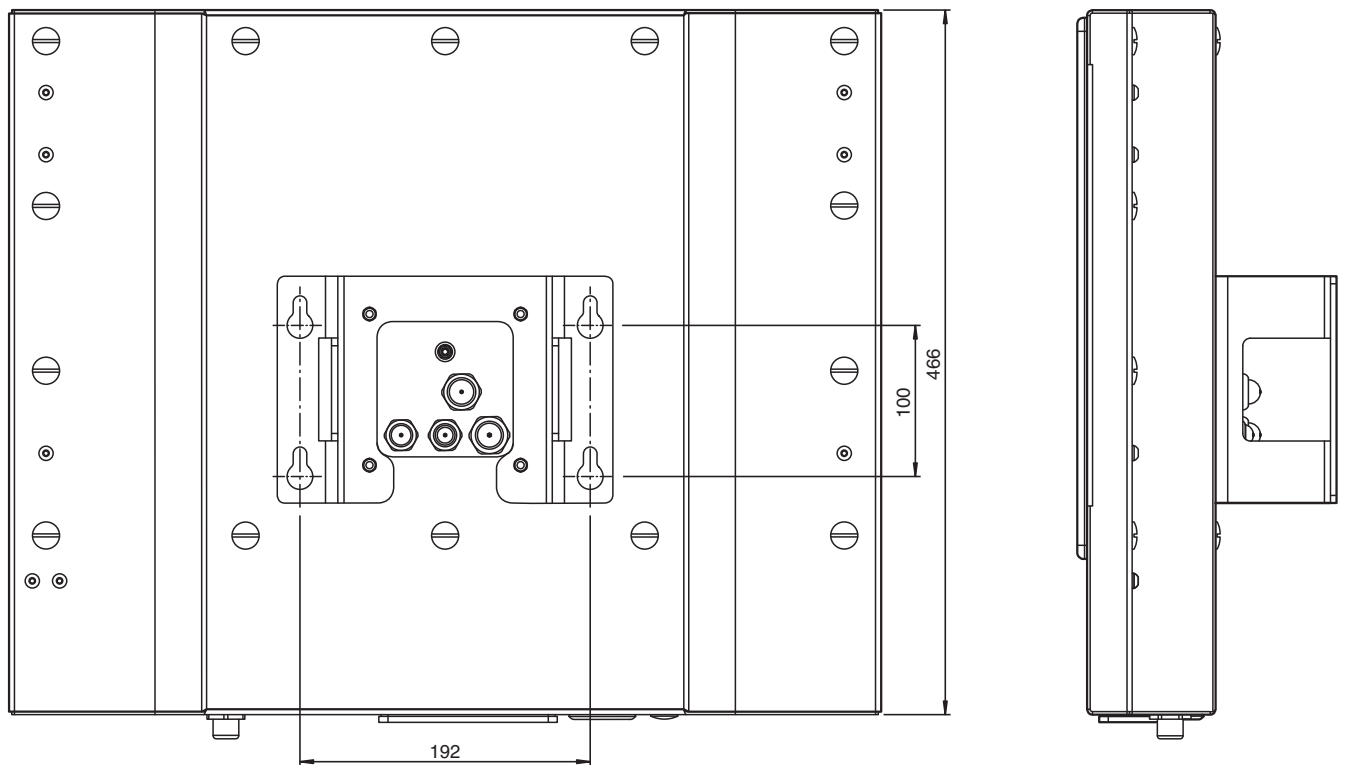
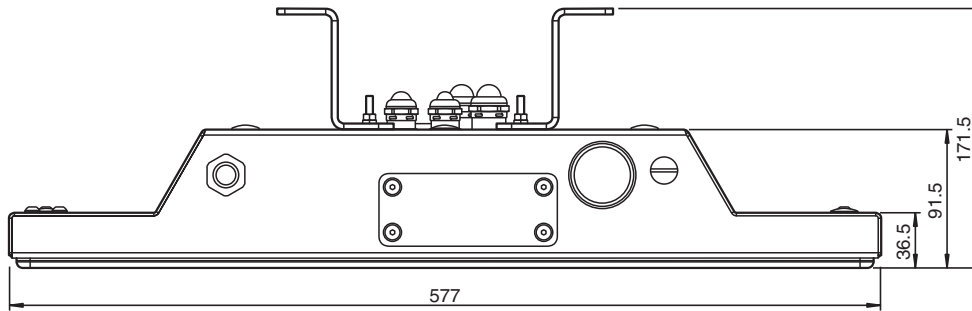
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## Dimensions

### Dimensions for Wall Mounting Bracket



## Technical Data

### General specifications

Type Direct Monitor

### Supply

Power consumption

AC

115/230 V a.c. (100 ... 240 V a.c.), max. 0.4 A , max. 40 W  
For connections designation refer to the Power Supply PS1000-A6-24.5 manual.

DC

20 ... 28 V d.c. / 1.5 A (SELV/PELV or class 2)  
For connections designation refer to the VisuNet FLX Panel Mount manual.

### Indicators/operating means

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## Technical Data

<b>Display</b>	
Type	Liquid Crystal Display (LCD) with LED backlight
Screen diagonal	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	22FC: 5000:1
Brightness	22FC: 300 cd/m2
Reading angle	22FC: 170 ° horizontal, 160 ° vertical
Life span	22FC: back lamp life: 50.000 hrs typical half life, at 25 °C (77 °F)
<b>Input devices</b>	
Touchscreen	10-finger multi-touch, glove-friendly Configurable display options: 22FC: Capacitive touch, optical bonding
Keyboard	Optional: Foil keyboard with different pointing device options available (see EXTA4 datasheet)
<b>Interface</b>	
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
<b>Directive conformity</b>	
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 60079-31:2014
RoHS	
Directive 2011/65/EU (RoHS)	EN IEC 63000:2018
<b>Ambient conditions</b>	
Operating temperature	-20 ... 50 °C (-4 ... 122 °F)
Storage temperature	-20 ... 65 °C (-4 ... 149 °F)
Relative humidity	max. relative humidity 93% at 50°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
<b>Mechanical specifications</b>	
Degree of protection	IP66/Type 4X
Material	Housing: Powder-coated marine-grade aluminum alloy (EN AW-5754)
Installation	System with enclosure
Mass	Approx. 11.4 kg Approx. 13.4 kg with AC power supply with top sunshield: + Approx. 1.6 kg with top and side sunshield: + Approx. 3 kg
Dimensions	577 mm x 466 mm x 233 mm
<b>International approvals</b>	
UL approval	

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**Technical Data**

Approved for	<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
	<b>UL HazLoc</b> 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
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. 2

**Type Code**

**DM-320S-\***

<b>DM-320S-</b>	<b>(1)</b>	<b>(2)-</b>	<b>K(3)-</b>	<b>(4)-</b>	<b>(5)</b>	<b>(6)-</b>	<b>(7)</b>
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<b>Model</b>	
DM-320S-	Direct Monitor - "System with Enclosure"

<b>(1)</b>	<b>Ex Protection</b>
N	Industrial, general purpose (non-ex)
L	ATEX & IECEX Zone 2/22 and Class I, II, III Div 2

<b>(2)-</b>	<b>Temperature</b>
B-	-20 °C ... 50 °C

<b>(3)-</b>	<b>Display unit</b>
22FC-	21.5 " (16:9), Full HD (1920 x 1080), capacitive touch, optical bonding

<b>(4)-</b>	<b>Power supply unit</b>
D-	24 V DC
A-	115/230 V AC, 50-60 Hz

<b>(5)</b>	<b>Computing platform</b>
VNNNN	DMU - Video interfaces: DisplayPort, DVI, VGA - standard option

<b>(6)-</b>	<b>Housing</b>
A1-	Powder-coated aluminum alloy enclosure

<b>(7)</b>	<b>Options</b>
NN0	Standard

**Example:**

<b>DM-320S-</b>	<b>R</b>	<b>B-</b>	<b>22FC-</b>	<b>A-</b>	<b>VNNNN</b>	<b>A1-</b>	<b>NN0</b>
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