

Display Unit

DPU1100-J1-19S*

- 10 point multi-touch sensor option allows design of modern user interfaces
- Highly robust against cleaning agents and solvents due to seamless glass design
- Optimized design for an easy cleanability
- Low-power consumption and heat dissipation due to LED backlight technology

Display Unit



Function

The DPU1100-J2-19S* display unit is an ATEX/IECEx certified, UL listed device intended for use in potentially explosive atmospheres, such as Zones 1/21, Class I/II, Div. 2, and Class III.

Connected to a Pepperl+Fuchs thin client unit or PC unit, the DPU serves as a display with an optional touchscreen. It enables users to perceive the system outputs of the computing unit and to input user data.

Five system keys located on the front of the unit allow users to control system functions of the display unit (e. g., brightness control) and the computing unit (e. g., home key). Integrated signal lights on the front keys show selected failure modes in case of a defective component. The display unit is optimized for use with the modular HMI components of the VisuNet GXP product line: TCU1100-* thin client unit, PCU1100-* PC unit, and PSU1100-* power supply unit.

Technical Data

Supply

Power consumption	average: 22 W at maximum brightness: max. 25 W
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Indicators/operating means

Display	
Type	LC display with LED backlight Optically bonded
Screen diagonal	48.26 cm (19 inch)
Resolution	1280x1024 (SXGA) , Aspect ratio 5:4
Color depth	16.7 Mio.
Contrast	1000:1 (typical)
Brightness	450 cd/m ²
Reading angle	170° horizontal , 160° vertical
Life span	back lamp life: 50.000 hrs typical half life , at 25 °C (77 °F)
Input devices	
Touchscreen	optional: projective capacitive, 10 finger multi-touch, glove-friendly

Interface

Interface type	interface v1.0 from Pepperl+Fuchs for computing units from Pepperl+Fuchs Bluetooth v4.0 , communication distance up to 30 m in open terrain (optional) , transmission power : +8 dBm
Transmitter frequency	2.402 ... 2.48 GHz

Directive conformity

Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013 (industrial locations) non-Bluetooth products only
Radio and telecommunication terminal equipment	
Directive 2014/53/EU	EN 301 328 V2.1.1 EN 301 489-1 V2.1.1 EN 301 489-17 V3.1.1 Bluetooth products only
RoHS	
Directive 2011/65/EU (RoHS)	EN 50581:2012-09

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

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PEPPERL+FUCHS

Technical Data

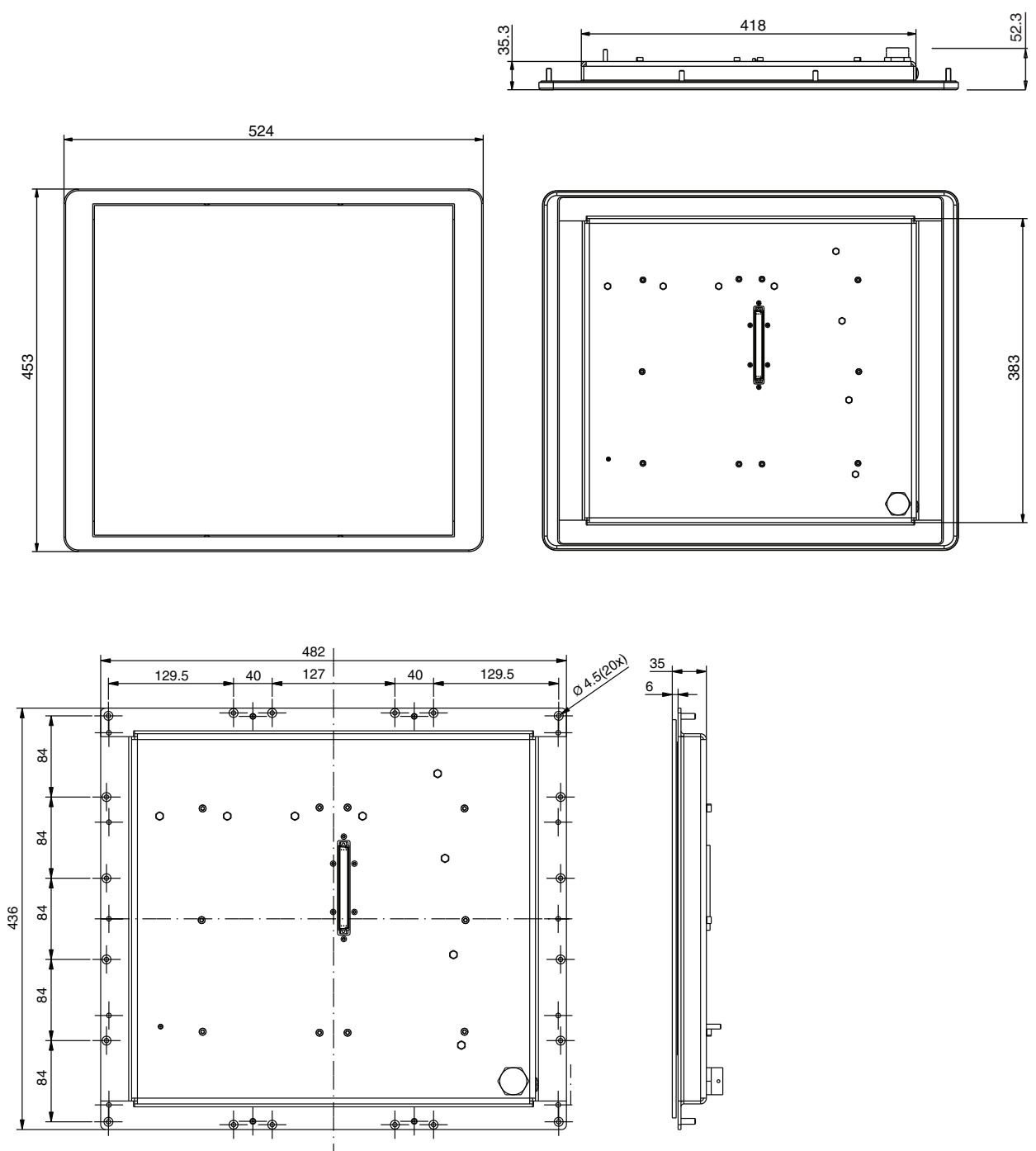
Ambient conditions	
Operating temperature	-20 ... 50 °C (-4 ... 122 °F)
Storage temperature	-20 ... 60 °C (-4 ... 140 °F)
Relative humidity	93% at 40°C, non-condensating, according to EN 60068-2-78
Shock resistance	18 shocks 15 g , 11 ms all axis, IEC 60068-2-27
Vibration resistance	10 ... 150 Hz, ± 0.075 mm, 1 G, 10 cycles per axis according to EN60068-2-6
Mechanical specifications	
Degree of protection	IP66 (when mounted on the TCU or PCU from Pepperl+Fuchs)
Material	
Surface	front: glass (optional with stainless steel bezel) Back side: powder coated aluminum
Mass	approx. 14.5 kg
Dimensions	524 mm x 453 mm x 35 mm
Data for application in connection with hazardous areas	
EU-type examination certificate	BVS 16 ATEX E 084 X
Marking	⊕ II 2G Ex eb q ib IIC T4 IP66 Gb ⊕ II 2D Ex tb IIIC T80 °C Db
Directive conformity	
Directive 2014/34/EU	EN 60079-0:2012+A11:2013, EN 60079-5:2015, EN 60079-7:2015, EN 60079-11:2012, EN 60079-31:2014
International approvals	
UL approval	E492874
Approved for	Class I, Division 2, Groups A, B, C, D T4; Zone 2, Group IIC T4 Class II, Division 2, Groups F, G T4; Zone 22, Group IIIB T85 Class III; Zone 22, Group IIIA T85
IECEx approval	IECEx BVS 16.0061X
Approved for	Ex eb q ib IIC T4 IP66 Gb Ex tb IIIC T80 °C Db
Standards	IEC 60079-0:2011, IEC 60079-5:2015, IEC 60079-7:2015, IEC 60079-11:2011, IEC 60079-31:2013

Accessories

	PSU1100-J1-AC-N0	AC Power Supply
	PSU1100-J1-DC-N0	DC Power Supply
	TCU1100-* (Intel (R) Atom Apollo Lake Processor)	Thin Client Unit
	PCU1100-* (Intel (R) Atom Apollo Lake Processor)	Personal Computer Unit

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Dimensions



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Type Code

Product designation	Protection	Display Size	Screen Type	Interface	Mounting Option	Options & Customization
GXP display unit						
DPU1100-	Display unit (platform: zone 1/21; GXP product group, version 0)					
DPU1200-	Display unit (platform: zone 2/22; GXP product group, version 0)					
Protection						
J1-	IECEX and ATEX II 2 GD; Zone 1/21					
J2-	IECEX & ATEX II (2) 3 GD; Zone 2/22					
Display size						
22F	21.5 inch, Full HD (1920 x 1080 pixel)					
19S	19 inch, SXGA (1280 x 1024 pixel)					
Screen type						
EN-	Anti-glare security glass, no touch					
EC-	Anti-glare security glass, projective capacitive 10 finger multitouch					
Interface						
F1-	5x capacitive system front keys					
F2-	5x capacitive system front keys & Bluetooth interface					
Mounting Option						
NN-	No bezel, prepared for flush mounting					
S1-	Bezel; prepared for panel mounting or into GXP Housing (AG-XX00); Stainless steel AISI 304 (1.4301) (21,5 inch display option only)					
S2-	Bezel; prepared for panel mounting or into EX1 Housing (AG1); Stainless steel AISI 304 (1.4301); (19" Display only)					
Options and customization						
N0	Standard V1.0, no options					
N1	Standard V1.1, no options					

Example: DPU1100-J1-22FEC-F1-S1-N0

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