

Display Unit

DPU1100-J1-22F*



- 10 point multi-touch sensor option allows design of modern user interfaces
- Highly resistant to cleaning agents with stainless steel bezel and seamless glass design
- Design optimized for easy cleanability
- Low-power consumption and heat dissipation due to LED backlight technology
- Optionally integrated RFID reader

Display Unit



Function

The DPU1100-J1-22F* display unit is an ATEX/IECEx certified device intended for use in Zone 1/21 hazardous areas. 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. Optionally, an integrated RFID reader can be configured within the display unit for identification and authentication purposes. 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

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| Supply | |
| Power consumption | average: 22 W at maximum brightness: max. 27 W |
| Indicators/operating means | |
| Display | |
| Type | LC display with LED backlight Optically bonded |
| Screen size | 54.61 cm (21.5 inch) |
| Resolution | 1920x1080 (Full HD) , Aspect ratio 16:9 |
| Color depth | 16.7 Mio. |
| Contrast ratio | 5000 (typical) |
| Brightness | 300 cd/m ² (nit) |
| Viewing angle | 175° in all directions |
| Life span | back lamp life: 50.000 hrs typical half life , at 20 °C (68 °F) |
| Input devices | |
| Touch screen | 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 / non-RFID products only |
| Radio and telecommunication terminal equipment | |

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Technical Data

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|--|---|
| Directive 2014/53/EU | EN 61326-1:2013 EN 300 328 V2.2.2:2019 EN 301 489-1 V2.2.0:2017 EN 301 489-17 V3.2.0:2017 Bluetooth products only |
| | EN 61326-1:2013 EN 301489-1 V2.2.3:2019 EN 301489-3 V2.3.2:2023 EN 300 330 V2.1.1:2017 EN 61010-1:2010 EN 62479 :2010 EN 62311:2008 RFID products only |
| RoHS | |
| Directive 2011/65/EU (RoHS) | EN IEC 63000:2018 |
| Ambient conditions | |
| Operating temperature | 0 ... 50 °C (32 ... 122 °F) (normal operation) -20 ... 50 °C (-4 ... 122 °F) (after 1 hour of operation) |
| 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 , 1g, 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. 15 kg |
| Dimensions | 624 mm x 458 mm x 35 mm |
| Cut out dimensions | 583 mm x 417 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 Gb Ⓜ II 2D Ex tb IIIC T80 °C Db |
| Directive conformity | |
| Directive 2014/34/EU | EN IEC 60079-0:2018 EN 60079-5:2015 EN IEC 60079-7:2015+A1:2018 EN 60079-11:2012 EN 60079-31:2014 |
| International approvals | |
| IECEx approval | IECEx BVS 16.0061X |
| Approved for | Ex eb q ib IIC T4 Gb Ex tb IIIC T80 °C Db |
| Standards | IEC 60079-0:2017, Ed. 7.0 IEC 60079-5:2015, Ed. 4 IEC 60079-7:2017, Ed. 5.1 IEC 60079-11:2011, Ed. 6.0 IEC 60079-31:2013, Ed. 2.0 |

Type Code

DPU1*00-*

| | | | | | | |
|----------------------------------|--|------------|-------------|-------------|-------------|------------|
| DPU1*00- | (1)- | (2) | (3)- | (4)- | (5)- | (6) |
| Model | | | | | | |
| DPU1100- | Display unit (platform: zone 1/21; GXP product group, version 0) | | | | | |
| DPU1200- | Display unit (platform: zone 2/22; GXP product group, version 0) | | | | | |
| (1)- Explosion protection | | | | | | |
| J1- | IECEx and ATEX II 2 GD; Zone 1/21 | | | | | |
| J2- | IECEx and ATEX II (2) 3 GD; Zone 2/22 | | | | | |
| (2) Display size | | | | | | |
| 22F | 21.5 inch, Full HD (1920 x 1080) | | | | | |

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Type Code

| (2) | Display size |
|-----|-----------------------------|
| 19S | 19 inch, SXGA (1280 x 1024) |

| (3)- | Screen type |
|------|---|
| EN- | Anti-glare security glass, no touch |
| EC- | Anti-glare security glass, projective capacitive 10 finger multitouch |

| (4)- | Interface |
|------|---|
| F1- | 5x capacitive system front keys |
| F2- | 5x capacitive system front keys & Bluetooth interface |
| F3- | 5x capacitive system front keys & Bluetooth interface & RFID Reader |

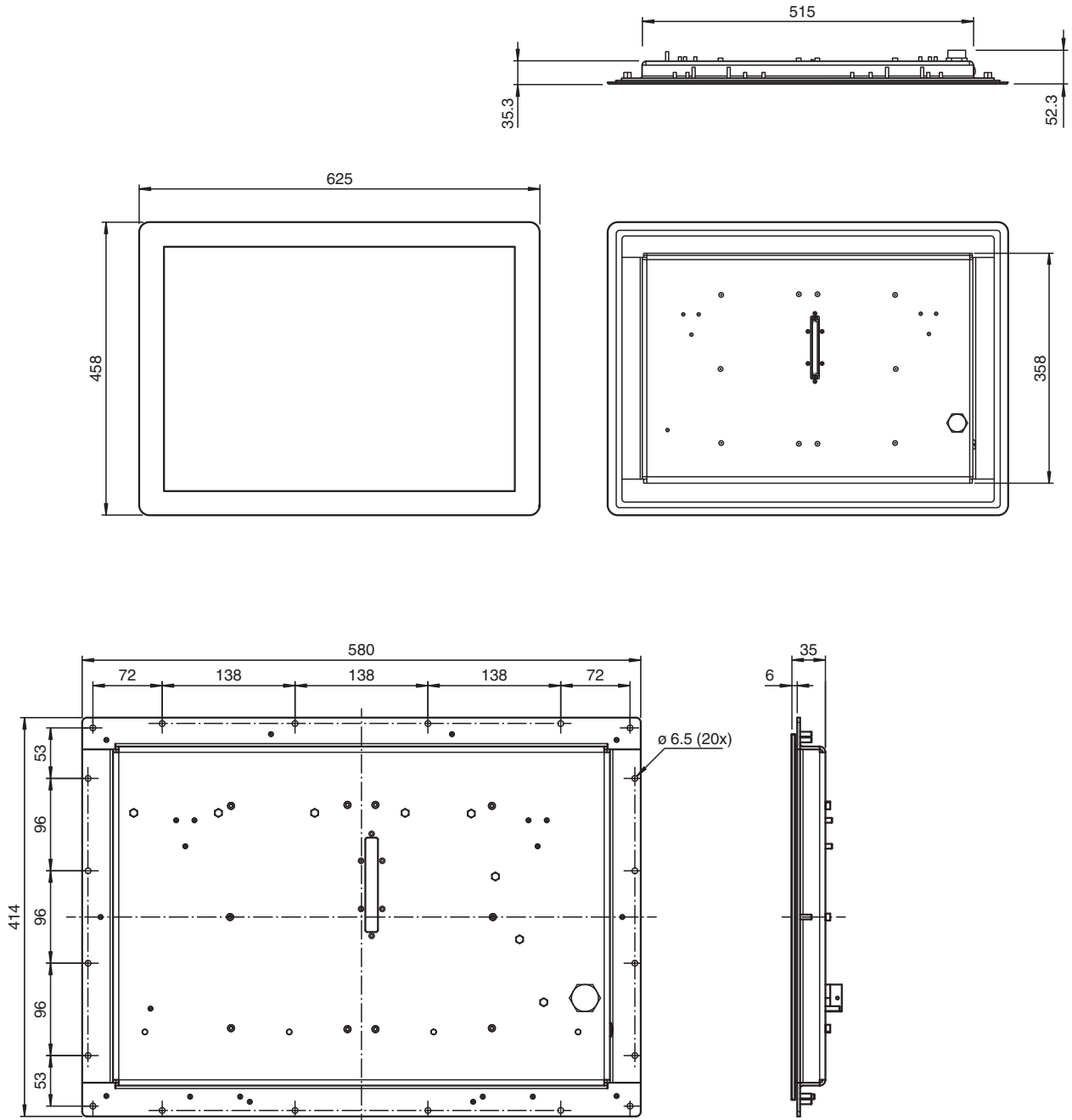
| (5)- | Mounting Option |
|------|---|
| NN- | No bezel, prepared for flush mounting |
| S1- | Bezel; prepared for panel mounting or into GXP Housing (AG-XX00); Stainless steel AISI 304 (1.4301) (21,5 inch display option only) |
| S2- | Bezel; prepared for panel mounting or into EX1 Housing (AG1); Stainless steel AISI 304 (1.4301); (19" Display only) |

| (6) | Options |
|-----|---------------------------|
| N0 | Standard V1.0, no options |
| N1 | Standard V1.1, no options |

Example:

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|----------|-----|-----|-----|-----|-----|----|
| DPU1100- | J2- | 22F | EN- | F1- | NN- | N0 |
|----------|-----|-----|-----|-----|-----|----|

Dimensions



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