

ST6000 Series



ST-6700WA
Model: PFXST6700WAD



ST-6600WA
Model: PFXST6600WAD



ST-6500WA
Model: PFXST6500WAD



ST-6400WA
Model: PFXST6400WAD



ST-6200WA
Model: PFXST6200WAD

Model Number Configuration

Display Module

PFXST6 * * * * * D
(1) (2) (3) (4) (5)

| (1) Size | (2) Type | (3) Resolution | (4) Touch Panel | (5) Power Supply |
|----------|-------------|----------------|-----------------|------------------|
| 7 15" | 00 Reserved | W Wide TFT | A Analog | D DC |
| 6 12" | | | | |
| 5 10" | | | | |
| 4 7" | | | | |
| 2 4" | | | | |

Display Specifications

| | ST-6700WA | ST-6600WA | ST-6500WA | ST-6400WA | ST-6200WA |
|------------------------|---|--|--|---------------------------------------|--------------------------------------|
| Display Type | TFT Color LCD | | | | |
| Display Size | 15.6" wide | 12.1" wide | 10.1" wide | 7.0" wide | 4.3" wide |
| Resolution | 1,366 x 768 pixels (FWXGA) | 1,280 x 800 pixels (WXGA) | 1,024 x 600 pixels (WSVGA) | 800 x 480 pixels (WVGA) | 480 x 272 pixels |
| Effective Display Area | 344.23 x 193.54 mm (13.55 x 7.62 in) | 261.12 x 163.2 mm (10.28 x 6.43 in) | 222.72 x 125.28 mm (8.77 x 4.93 in) | 154.08 x 85.92 mm (6.07 x 3.38 in) | 95.04 x 53.86 mm (3.74 x 2.12 in) |
| Display Colors | 16 million colors For details about display colors, refer to the manual of your screen editing software. | | | | |
| Backlight | White LED (Not user replaceable. When replacement is required, contact customer support.) | | | | |
| Backlight Service Life | 50,000 hours or more (continuous operation at 25 °C [77 °F] before backlight brightness decreases to 25%) | | | | |
| Brightness Control | 16 levels (Adjusted with touch panel or software) | | | | |
| Touch Panel Type | Resistive film (analog, single touch) | | | | |
| Touch Panel Resolution | 1,024 x 1,024 | | | | |
| Touch Panel lifetime | 1,000,000 times or more | | | | |

Electrical Specifications

| | ST-6700WA | ST-6600WA | ST-6500WA | ST-6400WA | ST-6200WA |
|--|--|---------------|---------------|---------------|---------------|
| Rated Input Voltage | 24 Vdc | | | | |
| Input Voltage Limits | 19.2 to 28.8 Vdc | | | | |
| Voltage Drop | 10 ms or less | | | 5 ms or less | 2 ms or less |
| Max | 18.5 W | 18.4 W | 12.6 W | 9 W | 6.9 W |
| When power is not supplied to external devices | 15 W or less | | 9.6 W or less | 5.5 W or less | 3.6 W or less |
| When screen turns off the backlight (Standby Mode) | 5.4 W or less | 5.9 W or less | 4.6 W or less | 3.6 W or less | 2.8 W or less |
| In-Rush Current | 30 A or less | | | | |
| Noise immunity | Noise voltage: 1,000 Vp-p, pulse duration: 1 µs, rise time: 1 ns (via noise simulator) | | | | |
| Voltage Endurance | 1,000 Vac, 20 mA for 1 minute (between charging and FG terminals) | | | | |
| Insulation Resistance | 500 Vdc, 10 MΩ or more | | | | |

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■ Environmental Specification

| | ST-6700WA | ST-6600WA | ST-6500WA | ST-6400WA | ST-6200WA |
|----------------------------------|---|-----------|-----------|-----------|-----------|
| Ambient air temperature | 0 to 50 °C (32 to 122 °F) | | | | |
| Storage Temperature | -20 to 60 °C (-4 to 140 °F) | | | | |
| Ambient air and storage humidity | 10%...90% RH (Non condensing, wet bulb temperature 39 °C [102.2 °F] or less) | | | | |
| Dust | 0.1 mg/m3 (10-7 oz/ft3) or less (non-conductive levels) | | | | |
| Pollution Degree | For use in Pollution Degree 2 environment | | | | |
| Corrosive Gases | Free of corrosive gases | | | | |
| Air pressure (altitude range) | 800 to 1,114 hPa (2,000 m [6,561 ft.] above sea level or less) | | | | |
| Vibration Resistance | IEC/EN 61131-2 compliant 5 to 9 Hz single amplitude 3.5 mm [0.14 in.] 9 to 150 Hz fixed acceleration: 9.8 m/s ² X, Y, Z directions for 10 cycles (approx. 100 min.) | | | | |
| Shock Resistance | IEC/EN 61131-2 compliant 147 m/s ² , X, Y, Z directions for 3 times | | | | |
| Electrical fast transient/burst | IEC 61000-4-4 2 kV: Power port (display unit) 1 kV: Signal ports | | | | |
| Electrostatic Discharge Immunity | Contact Discharge Method: 6 kV Air Discharge Method: 8 kV (IEC/EN61000-4-2 Level 3) | | | | |

■ Interface Specification

| | ST-6700WA | ST-6600WA | ST-6500WA | ST-6400WA | ST-6200WA |
|---------------|---|-----------|-----------|-----------|--|
| Serial (COM1) | Asynchronous Transmission: RS-232C, Data Length: 7 or 8 bits, Stop Bit: 1 or 2 bits, Parity: None, Even or Odd, Data Transmission Speed: 2,400 to 115,200 bps, Connector: D-Sub 9 (plug) | | | | Asynchronous Transmission: RS-232C/422/485, Data Length: 7 or 8 bits, Stop Bit: 1 or 2 bits, Parity: None, Even or Odd, Data Transmission Speed: 2,400 to 115,200 bps, Connector: D-Sub 9 (plug) |
| Serial (COM2) | Asynchronous Transmission: RS-422/485, Data Length: 7 or 8 bits, Stop Bit: 1 or 2 bits, Parity: None, Even or Odd, Data Transmission Speed: 2,400 to 115,200 bps, Connector: D-Sub 9 (plug) | | | | - |
| USB (Type A) | Conforms to USB 2.0 (Type A) x 1 Power supply voltage: 5 Vdc ±5 % Output Current: 500 mA/port Maximum transmission distance : 5 m [16.4 ft.] | | | | |
| USB (micro-B) | Conforms to USB 2.0 (micro-B) x 1, Maximum transmission distance : 5 m [16.4 ft.] | | | | |
| Ethernet | IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX, Connector: Modular jack (RJ-45) x 2 | | | | IEEE802.3i/IEEE802.3u, 10BASE-T/100BASE-TX, Connector: Modular jack (RJ-45) x 1 |

■ Structural Specification

| | ST-6700WA | ST-6600WA | ST-6500WA | ST-6400WA | ST-6200WA |
|----------------------|---|--|---|---|---|
| Grounding | Functional grounding: Grounding resistance of 100 Ω, 2 mm ² (AWG 14) or thicker wire, or your country's applicable standard. | | | | |
| Cooling Method | Natural air circulation | | | | |
| Structure | IP65F, Type 1, Type 4X (indoor use only), Type 13 (on the front panel when properly installed in an enclosure) | | | | |
| External Dimensions | 412 x 268 x 50 mm (16.22 x 10.55 x 1.97 in) | 313 x 235 x 50 mm (12.32 x 9.25 x 1.97 in) | 273 x 203 x 47 mm (10.75 x 7.99 x 1.85 in) | 208 x 153 x 45 mm (8.19 x 6.02 x 1.77 in) | 134.5 x 108.5 x 43 mm (5.3 x 4.27 x 1.69 in) |
| Panel Cut Dimensions | 394 x 250 mm (15.51 x 9.84 in)*1 Panel thickness area: 1.6...5 mm (0.06...0.2 in)*2 | 295 x 217 mm (11.61 x 8.54 in)*1 Panel thickness area: 1.6...5 mm (0.06...0.2 in)*2 | 255 x 185 mm (10.04 x 7.28 in)*1 Panel thickness area: 1.6...5 mm (0.06...0.2 in)*2 | 190 x 135 mm (7.48 x 5.31 in)*1 Panel thickness area: 1.6 to 5 mm(0.06 to 0.2 in)*2 | 118.5 x 92.5 mm (4.67 x 3.64 in)*1 Panel thickness area*2: 1.6 to 5 mm (0.06 to 0.2 in) When using spring clips: Position 1: 1.5 to 4 mm (0.06 to 0.16 in) Position 2: 4 to 6 mm (0.16 to 0.24 in) |
| Weight | 2.7 kg (5.95 lb) or less | 1.8 kg (3.97 lb) or less | 1.3 kg (2.87 lb) or less | 0.8 kg (1.76 lb) or less | 0.4 kg (0.88 lb) or less |

*1 For dimensional tolerance, everything +1/-0 mm (+0.04/-0 in) and R in angle are below R3 (R0.12 in)

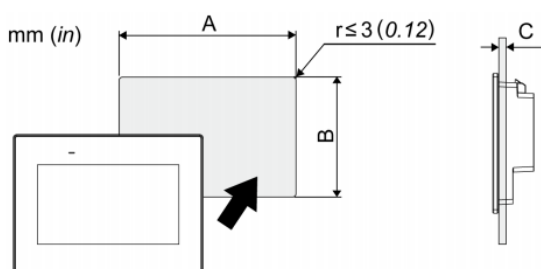
*2 Even if the installation wall thickness is within the recommended range for the "Panel Cut Dimensions", depending on wall's material, size, and installation location of this product and other...

■ Memory

| | | ST-6700WA | ST-6600WA | ST-6500WA | ST-6400WA | ST-6200WA |
|--------------------|------------------|---|-----------|-----------|-----------|-----------|
| Application Memory | Editor : BLUE | FLASH EPROM | | | | |
| | Removable system | 128MB | | | | |
| Backup Memory | Editor : BLUE | NVRAM 500KB | | | | |
| | Battery | Replaceable battery / Primary battery for clock data backup | | | | |

■ Panel Cut Dimensions

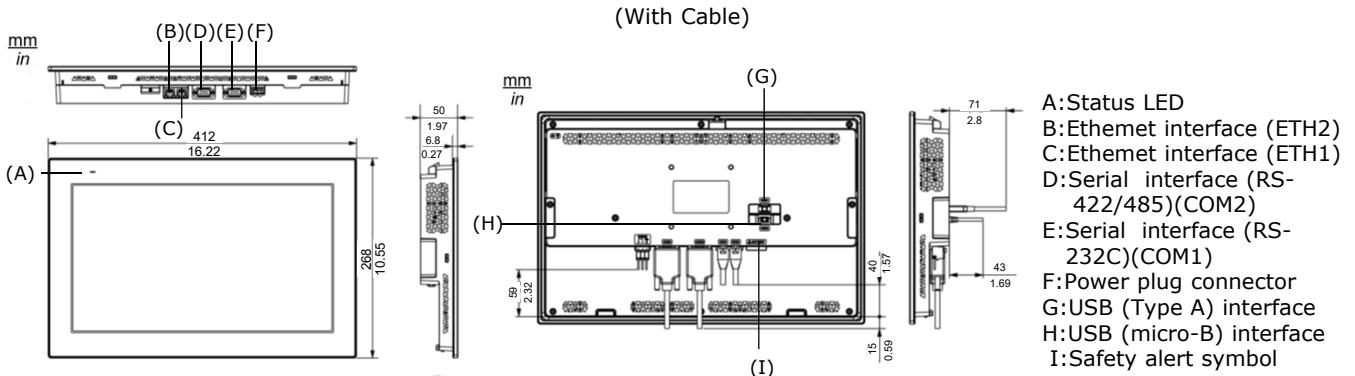
Based on the panel cut dimensions, open a mount hole on the panel.



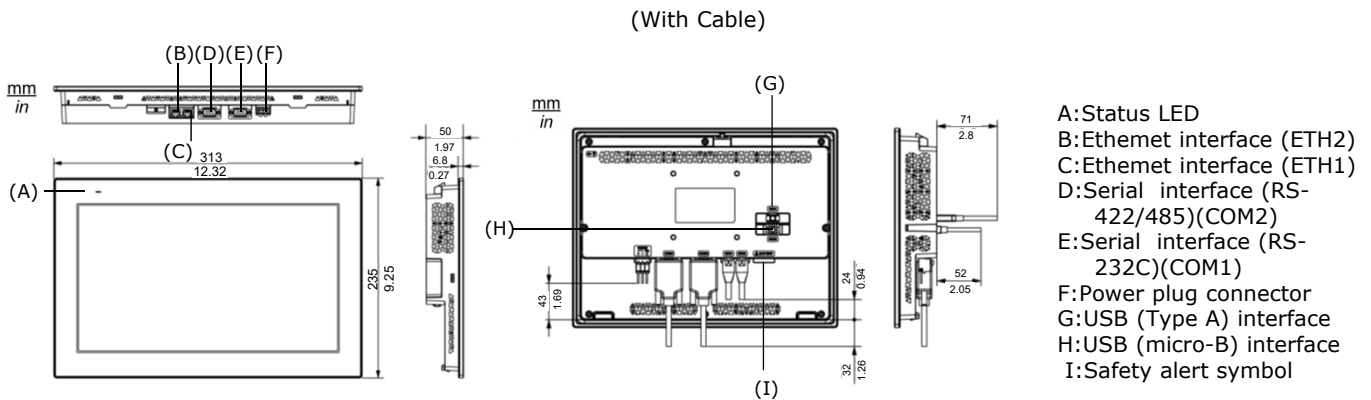
| Model name | A | B | C |
|------------|--|---|--|
| ST-6700WA | 394 mm (+1/-0 mm) (15.51 in [+0.04/-0 in]) | 250 mm (+1/-0 mm) (9.84 in [+0.04/-0 in]) | 1.6...5mm (0.06..0.2 in) |
| ST-6600WA | 295 mm (+1/-0 mm) (11.61 in [+0.04/-0 in]) | 217 mm (+1/-0 mm) (8.54 in [+0.04/-0 in]) | When installing ST-6200WA with spring clips: Position 1: 1.5...4 mm (0.06..0.16 in) Position 2: 4...6 mm (0.06..0.24 in) |
| ST-6500WA | 255 mm (+1/-0 mm) (10.04 in [+0.04/-0 in]) | 185 mm (+1/-0 mm) (7.28 in [+0.04/-0 in]) | |
| ST-6400WA | 190 mm (+1/-0 mm) (7.48 in [+0.04/-0 in]) | 135 mm (+1/-0 mm) (5.31 in [+0.04/-0 in]) | NOTE: For the position, refer to the installation Procedure (ST-6200WA) (see manual page 65) |
| ST-6200WA | 118.5 mm (+1/-0 mm) (4.67 in [+0.04/-0 in]) | 92.5 mm (+1/-0 mm) (3.64 in [+0.04/-0 in]) | |

External Dimensions / Parts Identification

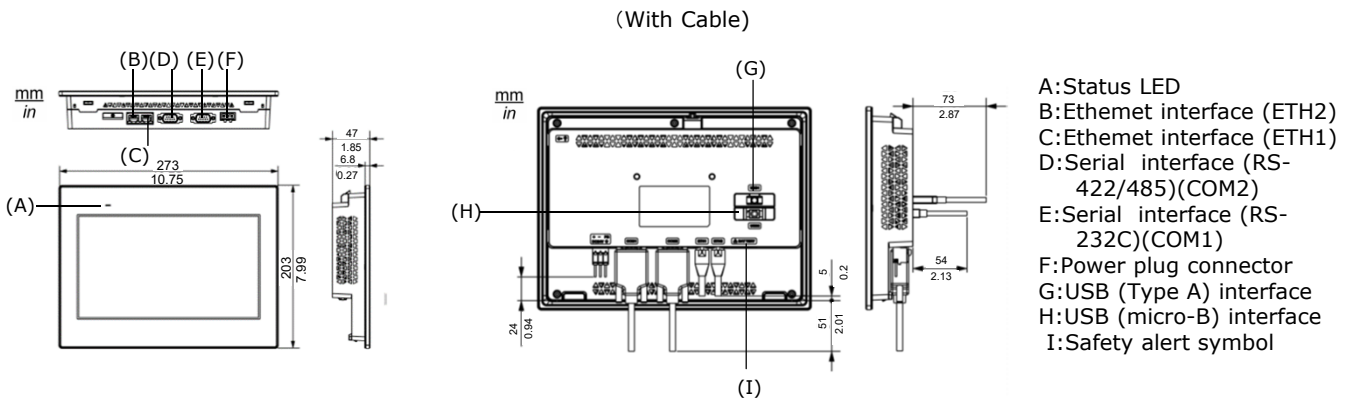
ST-6700WA



ST-6600WA



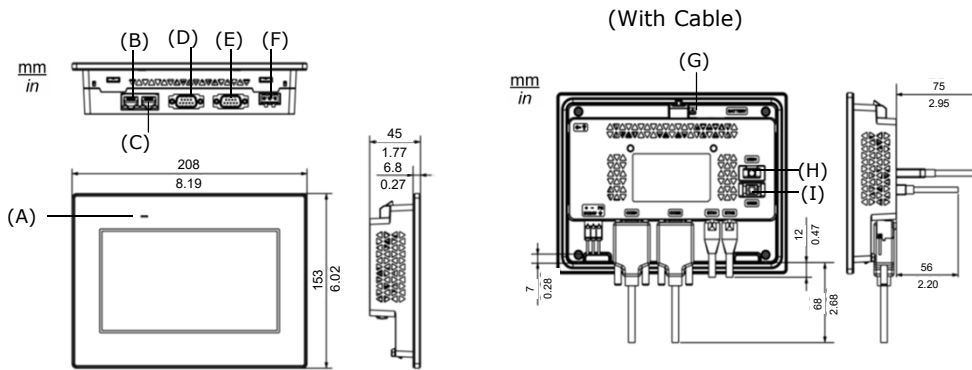
ST-6500WA



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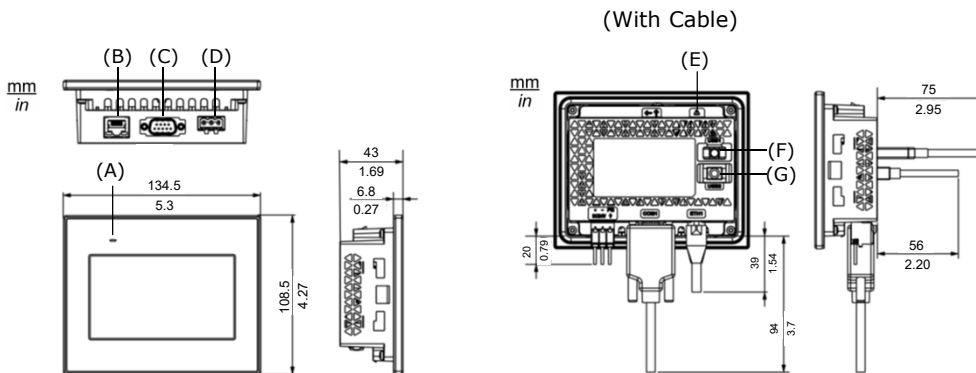
External Dimensions / Parts Identification

ST-6400WA



- A: Status LED
- B: Ethernet interface (ETH2)
- C: Ethernet interface (ETH1)
- D: Serial interface (RS-422/485)(COM2)
- E: Serial interface (RS-232C)(COM1)
- F: Power plug connector
- G: Safety alert symbol
- H: USB (Type A) interface
- I: USB (micro-B) interface

ST-6200WA



- A: Status LED
- B: Ethernet interface (ETH1)
- C: Serial interface (RS-232C/422/485)(COM1)
- D: Power plug connector
- E: Safety alert symbol
- F: USB (Type A) interface
- G: USB (micro-B) interface