

IPC...118T Industrial PC with touch screen – operator panel



Summary **A PC-based unit with aluminum front panel, touch screen. Serial ports, 2x USB, 2x Ethernet. Construction with passive cooling, with no moving parts.**

Application **▪ User interface (HMI) in building control systems**

Function PC with touch screen serves as a control panel in an industrial environment. It can be used for running custom applications. For this hardware can be ordered separately from any Windows Embedded operating systems (see table below). On a PC with Windows Embedded can be installed RcWare SoftPLC Runtime application management. Runtime license to be ordered separately.

To control the touch screen is used, the data are accessed over an Ethernet network. Thanks to the silent operation (passive cooling) and convenient operation of the unit is also suitable for residential buildings. Solid metal body from extruded aluminum guarantees robustness and transfer heat dissipation.

The unit is mounted into distribution board door, so front panel is only part visible. Ensure that sufficient air circulation.

See *domat - Design and application guide*. for connection and application examples.

Technical data

| Type | IPC18 118T | IPC21 118T |
|---------------|--|------------|
| System | | |
| Processor | Intel Celeron N2930 (1.83GHz) CPU built-in/Atom E3845(1.91 GHz) for option | |
| Chipset | SoC | |

| | | |
|------------------------------|---|-------------------------|
| RAM | 4 GB DDR3 1600 MHz (onboard) | 2 GB DDR3 RAM (onboard) |
| I/O ports | 2x USB 3.0 type A 1x RS-232 DB-(COM2) 1x DB-9 RS-232/422/485 (Default RS-232) (COM1) 1x Audio Line Out 2x GbE LAN RJ-45 1x 3-pin DC Power input terminal 1x 2-pin connector for power on/off button | |
| I/O ports for option | 2 x RS-232 DB-9 + 1 x Mini-PCIe slot via TB-528C2ME1 2 x CAN bus via TB-528CAN2 2 x USB 2.0 type A Via TB-528U2 2 x USB 2.0 type A + 1 x Mini-PCIe slot + 1xRS-232 DB-9 + 1 x Power button via TB-528C1U2P1 UPS Battery 21 W/10.8 W/1.95 Ah(3S1P) | |
| Disk drive | 1x SD card slot, up to 32 GB (SD card not included in the basic supply) 1x 2.5" SATA HDD bay for SATA HDD (Easily accessible slot after removing the protective cover. HDD is not included in the basic supply) | |
| Extension | 1x Internal Mini-PCIe slot full size | |
| Display | | |
| Type | 18.5" TFT-LCD | 21.5" TFT-LCD |
| Resolution | 1366x768 | 1920x1080 |
| Colours | 16.7M | 16.7M |
| Backlight | 300 cd | 250 cd |
| Display viewing angle H/V | 170° / 160° | 178°/178° |
| Contrast Ratio | 1000:1 | 3000:1 |
| Backlight Lifetime | 50,000 hrs | 30,000 hrs |
| Touchscreen | | |
| Type | Projected Capacitive Touch | |
| Throughput | 90 % | |
| Supply | | |
| Power Input | 9...36 V DC | |
| Power Consumption | MAX: 48 W | MAX: 61 W |
| Power Supply | 12 V, 5 A (supplied) | |
| Mechanical properties | | |
| Chassis Color | RAL9007 | |
| Construction | Aluminum / Panel Mounting option | |

| | | |
|----------------------------|----------------------------------|--------------------|
| Front Bezel Metal | Aluminum / Panel Mounting option | |
| Rear Panel Metal | Aluminum / VESA 100 x 100 | |
| Dimensions (W×H×D) (mm) | 499.6 × 314.6 × 72 | 557 x 268.5 x 64.8 |
| Weight | 7.3 kg | 7.5 kg |
| IP Rating | IP66 Compliant Front Panel | |

Environmental

| | | |
|-----------------------|-----------------------------------|--|
| Operating Temperature | 0...50 °C, 0...40 °C (for 21.5") | |
| Storage Temperature | -30...70 °C | |
| Storage Humidity | 10 to 90 %@ 40 °C, non-condensing | |
| Certificate | CE / FCC Class A | |

Operating System Support

Windows Embedded Compact 7, Windows Embedded Standard 7, Windows 7 Pro (FES), Windows 7 Ultimate (FES), Windows Embedded 8 Standard, Windows Embedded 8.1 Industry Pro, Windows 10 IoT Enterprise 2015LTSB

Optional OS

Windows 7 Embedded, Windows 10 IoT

The operating system must be ordered separately. The operating system is supplied on an SSD disk.

Ordering Information

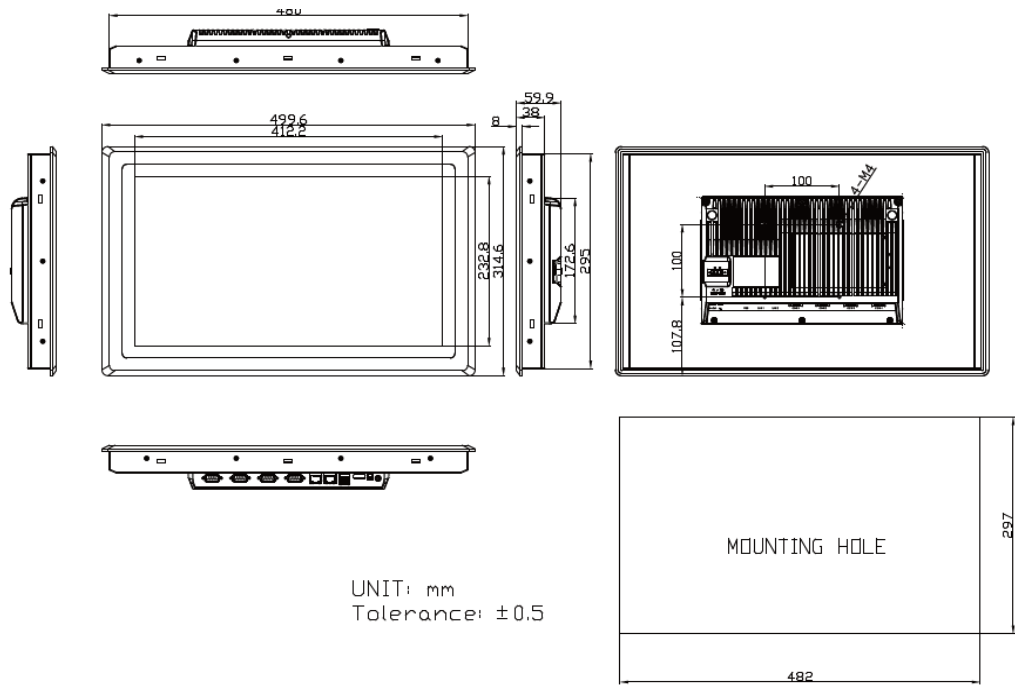
To order please specify:

| | type PC | SATA HDD/ SSD disk | Optional I/O ports | operating system | Runtime RCware SoftPLC |
|---------|-------------|--------------------|--------------------|------------------|------------------------|
| default | IPC 18 118T | - | - | - | - |
| default | IPC 21 118T | - | - | - | - |

Example orders compared to the standard:

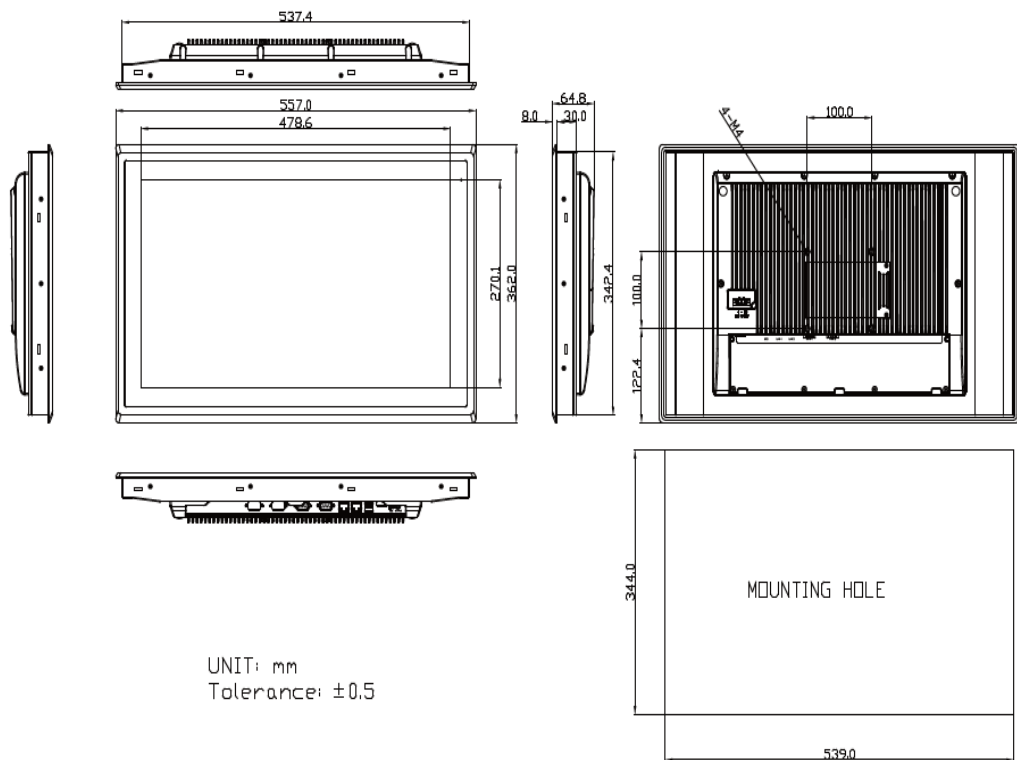
IPC 21 118T, 128 GB SSD SATA, 2x RS-232 DB-9, Win 10 IoT, RC-SoftPLC Runtime

Dimensions IPC 08 118



UNIT: mm
Tolerance: ±0.5

IPC 21 118



UNIT: mm
Tolerance: ±0.5

Dimensions are in *mm*.

WEEE notice The device contains a non-rechargeable battery which backups the real-time clock and part of the memory. After the device is not operable, please return it to the manufacturer or dispose of it in compliance with local regulations.

Safety note The device is designed for monitoring and control of heating, ventilation, and air conditioning systems. It must not be used for protection of persons against health risks or death, as a safety element, or in applications where its failure could lead to physical or property damage or environmental damage. All risks related to device operation must be considered together with design, installation, and operation of the entire control system which the device is part of.

**Changes in
versions**

06/2020 – First datasheet version.

05/2021 – Stylistic changes