

Modular System Industrial Panel PCs

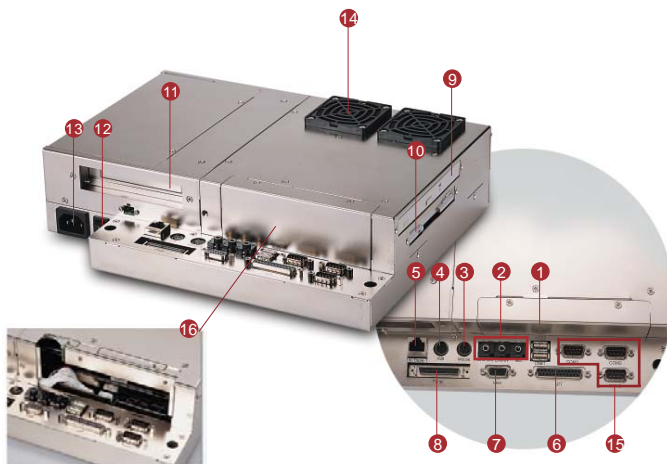
AMB-2021HT/AMB-2051HT



▲ AMB-2021HT
12.1" LCD + ACS-2301
Control Box



▲ AMB-2051HT
15" LCD + ACS-2301
Control Box



▲ ACS-2301 Control Box

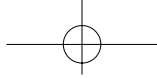
- | | |
|--|--|
| 1. Dual USB ports | 9. 24X CD-ROM drive |
| 2. Mic in/ Speaker/ Line in | 10. 3.5" Floppy disk driver |
| 3. PS/2 mouse connector | 11. One free expansion slot for ISA or PCI |
| 4. PS/2 keyboard connector | 12. Power On/Off |
| 5. LAN connector (Ethernet) | 13. Power connector |
| 6. SPP/ ECP/ EPP parallel port | 14. Cooling fan |
| 7. VGA port | 15. Serial COM port |
| 8. Custom Flat-Panel Display Connector | 16. External IDE and FDD connector |



▲ 1 Meter Remote Operating

Introduction

The AMB-2021HT/AMB-2051HT modular system panel PCs, are PC-based industrial computers that are designed to serve as Human Machine Interfaces. They are full-function PC-based systems with 12.1" SVGA (800 x 600) or 15" XGA (1024 x 768) color TFT hi-brightness, long-life time LCD display and work with different control modules via a 50-pin cable. The compact dimensions are ideal for automation applications when the installation space is critical. These PCs are characterized by their space saving, flexible selection of control boxes. AMB-2021HT/AMB-2051HT have a heavy-duty steel chassis with a sealed plastic or aluminum front panel which meets the toughest industrial and environmental standards.



AMB-2021HT/AMB-2051HT

Features for AMB-2021HT series

(12.1" LCD + ACS-2301 Control Box)

- 12.1" SVGA color TFT LCD display
- Plastic front panel and heavy-duty steel chassis
- Water-proof front panel meets NEMA 4/12 & IP65
- All-in-one FC-PGA Socket 370 SBC (CPU up to Pentium III 850MHz)
- Four 16C550 RS-232C ports; one RS-232C port can also be set as RS-422/485
- 16-bit stereo digital audio
- Disk drive space for CD-ROM, FDD and HDD
- DiskOnChip flash disk socket
- One free expansion slot for ISA or PCI
- Resistive touchscreen (optional)
- Rotatable mounting mechanism (optional)

Specifications for AMB-2021HT series

(12.1" LCD + ACS-2301 Control Box)

- **Construction:** Heavy-duty steel chassis & NEMA 4/12 plastic front panel.
- **CPU:** Supports Socket 370 based Intel Pentium III and Celeron CPU, up to PIII 850MHz (FSB 66/100MHz)
- **Memory:** Supports up to 256MB
- **Display:** 12.1" SVGA (800 x 600) color TFT LCD
- **LCD/CRT controller:** C&T 69000 on board VGA controller with 2MB SDRAM. CRT & LCD panel support.
- **Network (LAN):** Realtek RTL8139B 10/100 Base-T Ethernet controller
- **I/O ports:** 4 serial ports: 3 x RS-232, 1 x RS-232/422/485 (One is reserved for touchscreen)
1 parallel port (supports ECP/EPP)
1 PS/2 keyboard interface
1 PS/2 mouse interface
- **Disk Drive Housing:** 3.5" HDD or 2.5" HDD & Slim CD-ROM or 2.5" HDD, Slim CD-ROM and Slim FDD (3 types of housing which are not compatible)
- **USB connector:** Dual USB ports
- **Front panel color:** PMS cool gray 4C
- **Mounting:** Panel mount, Handle mount or Wall mount (ACS-2301Control box only, optional)
- **Expansion slots:** 1 ISA or 1 PCI slot
- **Power supply:** Universal 70W switching power supply
- **Dimension (W x H x D):** 346 x 271 x 104.5mm (13.6" x 10.7" x 4.1")
- **Carton Dimension (W x H x D):** 479 x 384 x 254mm (18.8" x 15.1" x 10")
- **Gross Weight:** 10.5Kg (23.2 lbs)

Features for AMB-2051HT series

(15" LCD + ACS-2301 Control Box)

- 15" XGA color TFT LCD display
- Aluminum alloy front panel and heavy-duty steel chassis
- Water-proof front panel that meets NEMA 4/12 & IP65
- All-in-one FC-PGA Socket 370 SBC (CPU up to Pentium III 850MHz)
- Four 16C550 RS-232C ports; one RS-232C port can also be set as RS-422/485
- 16-bit stereo digital audio
- Disk drive space for CD-ROM, FDD and HDD
- DiskOnChip flash disk socket
- One free expansion slot for ISA or PCI
- Resistive touchscreen (optional)

Specifications for AMB-2051HT series

(15" LCD + ACS-2301 Control Box)

- **Construction:** Heavy-duty steel chassis & NEMA 4/12 aluminum alloy front panel.
- **CPU:** Supports Socket 370 based Intel Pentium III and Celeron CPU, up to PIII 850MHz (FSB 66/100MHz)
- **Memory:** Supports up to 256MB
- **Display:** 15" XGA (1024 x 768) color TFT LCD
- **LCD/CRT controller:** C&T 69000 on board VGA with 2MB SDRAM. CRT & LCD panel support.
- **Network (LAN):** Realtek RTL 8139B 10/100 Base-T Ethernet controller
- **I/O ports:** 4 serial ports: 3 x RS-232, 1 x RS-232/422/485 (One is reserved for touchscreen)
1 parallel port (supports ECP/EPP)
1 PS/2 keyboard interface
1 PS/2 mouse interface
- **Disk Drive Housing:** 3.5" HDD or 2.5" HDD & Slim CD-ROM or 2.5" HDD, Slim CD-ROM and Slim FDD (3 types of housing which are not compatible)
- **USB connector:** Dual USB ports
- **Front panel color:** RAL-7035 (white)
- **Mounting:** Panel mount or Wall mount (ACS-2301 Control box only, optional)
- **Expansion slots:** 1 ISA or 1 PCI slot
- **Power supply:** Universal 70W switching power supply
- **Dimension (W x H x D):** 420 x 300 x 117.7mm (16.5" x 11.8" x 4.6")
- **Carton Dimension (W x H x D):** 531 x 397 x 275mm (20.9" x 15.6" x 10.8")
- **Gross Weight:** 13.5Kg (29.8 lbs)

Power Supply

- **Input Voltage:** 85 ~ 264V AC
- **Output Voltage:**
+5V@10A, +12V@1.5A, -12V@0.3A
- **MTBF**> 200,000 Hrs per MIL — Handbook 217F
- **Safety:** UL, CUL, TUV approved
- **EMI:** FCC Class B, CISPR22B

Environmental Specifications

- **Operating temperature:** 0° to 45°C (32~113°F)
- **Storage temperature:** -20° to 60°C (-4~140°F)
- **Storage humidity:**
10 to 95%@40°C, non-condensing
- **Vibration:**
1G / 5 ~ 500Hz / operation
- **Shock:** 10G peak acceleration (11 msec. duration)
- **EMI:** FCC/CE Class A

Touchscreen (optional)

Type: 8-wire, analog resistive

Resolution: 1024 x 1024

Light transmission: >75%(AMB-2021), >68%(AMB-2051)

Lifetime: 1 million activations

Operating pressure: 50g average for finger, 25g average with non-metal stylus (AMB-2021), 90g average for finger, 70g average with non-metal stylus(AMB-2051)

Controller: RS-232 interface

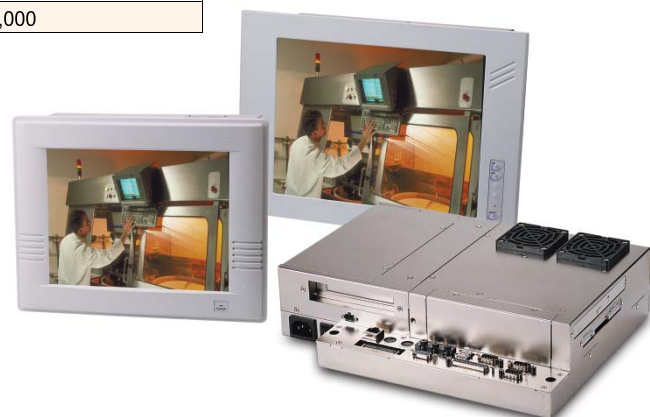
OS support: MS DOS, Windows 3.1, Windows 95, Windows 98, Windows ME, Windows NT, Windows 2000

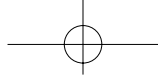
Ordering Information

- **AMB-2021HT**
Modular system Panel PC, ACS-2301 with 12.1" color TFT LCD display
- **AMB-2021HTT**
AMB-2021HT + resistive touchscreen
- **AMB-2051HT**
Modular system Panel PC, ACS-2301 with 15" color TFT LCD display
- **AMB-2051HTT**
AMB-2051HT + resistive touchscreen
- **ACS-2301**
All-in-one FC-PGA Socket 370 SBC, 70W AC power supply
- **Optional**
 - CPU
 - RAM
 - HDD
 - Slim CD-ROM
 - Slim FDD
 - 70W DC10~30V power supply
 - AKB-106 (refer to p.80)
20 function-key membrane keyboard
 - AKB-107 (refer to p.80)
56 data-entry membrane keyboard
 - M012301060
ACS-2301 wall mount kit
 - ARM-MK12-0 (refer to p.81)
Rotatable mounting mechanism for AMB-2021 series

LCD Specification

| Model | AMB-2021HT | AMB-2051HT |
|--------------------------------|----------------------|----------------------|
| Display type | 12.1" color TFT LCD | 15" color TFT LCD |
| Max. Resolution | 800 x 600 | 1024 x 768 |
| Max. Colors | 256K | 256K |
| Dot size (mm) | 0.3075 x 0.3075 | 0.313 x 0.329 |
| Luminance (cd/m ²) | 250 | 250 |
| Viewing angle | 120° (H) | 160° (H) |
| | 90° (V) | 160° (V) |
| Temperature | 0° ~ 50°C (32~122°F) | 0° ~ 50°C (32~122°F) |
| Brightness Control | Yes | Yes |
| LCD MTBF (Hrs) | 50,000 | 50,000 |
| Back Light MTBF (Hrs) | 25,000 | 50,000 |

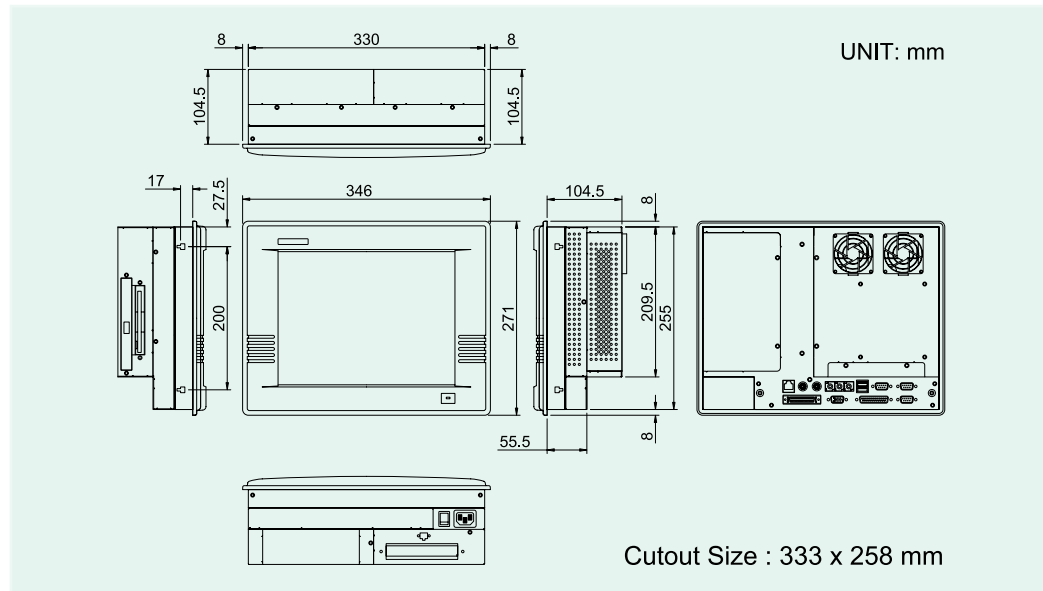




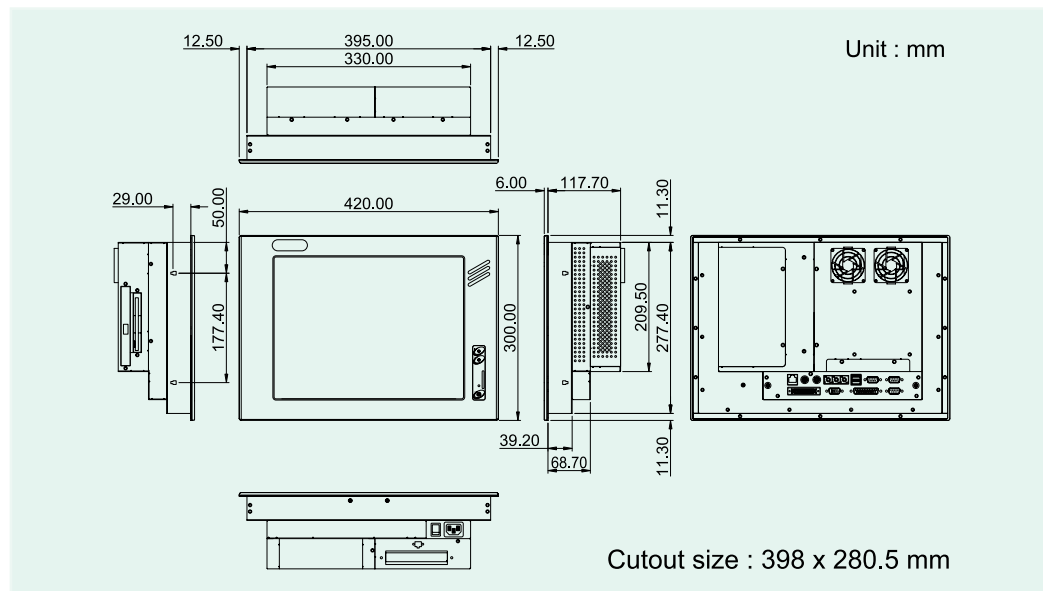
AMB-2021HT/AMB-2051HT

Dimension

AMB-2021HT



AMB-2051HT



ACS-2301

