

TPC-1271H TPC-1271HPB TPC-1271HCA

12.1" SVGA TFT LED LCD Intel® Atom™
Dual-Core D525 Touch Panel Computer

NEW



Features

- Intel® Atom™ D525 1.8 GHz processor
- 12.1" SVGA TFT LED LCD
- Compact design with die-cast Al alloy front bezel
- Fanless cooling system
- IP65 approved front panel
- PCIe and Mini PCIe expansion support
- 8 DI/O and backup SRAM support
- Supports DDR3 SDRAM
- Serial port isolation protection
- Automatic data flow control RS-485
- Gigabit Ethernet supported
- Supports Microsoft® WES7/XP/WES/WinCE
- Supports external antenna for wireless communication
- Supports field-bus communication for PLC connectivity

Introduction

With a high quality TFT LCD display, TPC-1271H range are designed with the Intel® Atom™ D525 processor as its core. The Intel® Atom™ has low power consumption and 1.8 GHz operating frequency. This system is fanless although the kernel is powerful. In addition, spindle-free storage makes the TPC-1271H models durable and reliable platforms. For applications where spindle-free storage is not critical, a fast-access HDD module can be used. The rich I/O portfolio meets diverse requests.

Specifications

General

- **BIOS** AMI 8Mbit
- **Certifications** BSMI, CCC, CE, FCC Class A, UL
- **Cooling System** Fanless design
- **Dimensions (W x H x D)** 311 x 237 x 71.6 mm (12.24" x 9.33" x 2.82")
- **Enclosure** Front bezel: Die-cast Aluminum alloy
Back housing: PC/ABS Resin
- **Mounting** Desktop, Wall or Panel Mount
- **OS Support** Microsoft® WES7/Win7 32/64bit/XP/WES/
WinCE5.0/6.0
- **Power Consumption** 20W (typical)
- **Power Input** 10~29 V_{DC}
- **Watchdog Timer** 1 ~ 255 sec (system)
- **Weight (Net)** 4.57 kg (10.07 lbs)

System Hardware

- **CPU** Intel® Atom™ D525 1.8 GHz with 1MB cache
- **Chipset** ICH8M
- **Memory** 4GB SO-DIMM DDR3 SDRAM
- **LAN** 10/100/1000Base-T x 2
- **Expansion Slots** Half-size PCI-E or full-size Mini PCI-E
- **Storage** CompactFlash® slot x 1
2.5" SATA HDD x 1 (Optional)
- **I/O** RS-232 x 2 (COM1, 2) with isolation
RS-422/485 x 1 (COM3) with isolation and auto data
flow control
USB 2.0 x 2 (Host)
PS/2 x 1
- **DI/DO & backup SRAM** 8 x DI/DO with isolation and backup 1MB SRAM

LCD Display

- **Display Type** SVGA TFT LED LCD
- **Display Size** 12.1"
- **Max. Resolution** 800 x 600
- **Max. Colors** 262 K
- **Luminance cd/m²** 450
- **Viewing Angle (H/V°)** 160/140
- **Backlight Life** 50,000 hrs
- **Contrast Ratio** 700:1

Touchscreen

- **Lifespan** 10 million touches at single point
- **Light Transmission** Above 75%
- **Resolution** Linearity
- **Type** 5-wire, analog resistive

Environment

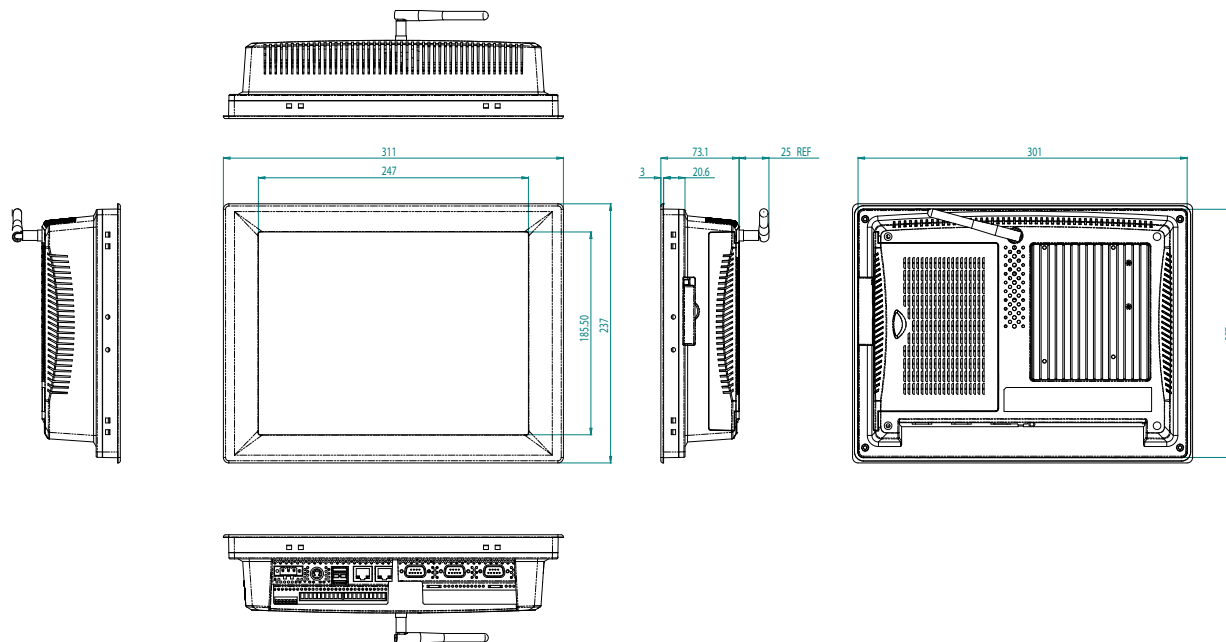
- **Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- **Ingress Protection** Front panel: IP65
- **Operating Temperature** 0 ~ 50°C (32 ~ 122°F)
- **Storage Temperature** -20 ~ 60°C (-4 ~ 140°F)
- **Vibration Protection** With HDD: 1 Grms (5 ~ 500 Hz)
(Operating, random vibration)

Profibus DP Master (TPC-1271HPB only)

- **Controller** Hilscher NETX 100/ML
- **Connector** DB9 x 1
- **DP Slaves** Max. 125
- **Total Cyclic Input/Output Data** Max. 5712 bytes / Max. 5760 bytes

Dimensions

Unit: mm



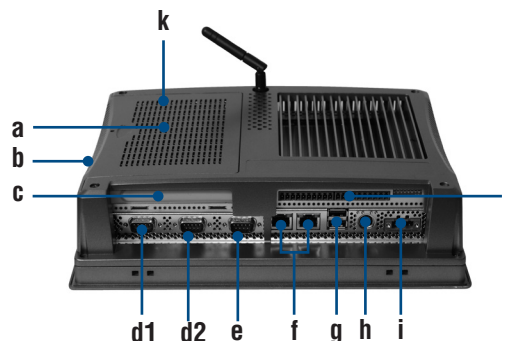
Panel Cut-out Dimensions: 302 x 228 mm (12.08" x 9.12")

- **Cyclic Input/Output Data** Max. 244 bytes/slave
- **Configuration Data** Max. 244 bytes per slave
- **Standard Parameters** 7 bytes/slave
- **Application-specific Parameters** Max. 237 bytes/slave
- **Acyclic communication** DP V1 Class 1 Read/Write
DP V1 Class 1 Alarm
DP V1 Class 2 Initiate/Read/Write/
Datatransport/Abort
- **Acyclic read/write** 240 bytes/slave
- **Baud rate** 9.6kBits/s ~ 12MBits/s

CANopen (TPC-1271HCA model only)

- **Controller** NXP SJA1000
- **Connector** DB9 x 2
- **Transceiver** NXP 82C251
- **Protocol** CAN2.0 A/B
- **Speed** 1Mbps
- **Signal Support** CAN_H, CAN_L, GND
- **Interrupt Support** Legacy INT, MSI

Rear View



- a. HDD
- b. CompactFlash
- c. PCI-E slot
- d1. COM3 (RS-422/485)
- d2. COM2(RS-232)
- e. COM1(RS-232)
- f. LAN (10/100/1000)
- g. USB 2.0
- h. PS/2
- i. Power Receptor
- j. DI/O ports
- k. Mini PCI-E slot

Ordering Information

- **TPC-1271H-D3AE** 12.1" SVGA Touch Panel PC, D525 1.8 GHz, 4GB
- **TPC-1271HPB-D3AE** TPC-1271H-D3AE with PCM-2671PB Profibus Card
- **TPC-1271HCA-D3AE** TPC-1271H-D3AE with PCM-2680 CANopen Card

Accessories

- **TPC-1000H-WMKE** TPC series wallmount kit from 10" to 17"
- **TPC-1000H-SMKE** TPC series stand kit from 10" to 17"
- **1757003463** 100-240V_{AC} to 19V_{DC} 90W Power Adapter
- **1700001524** Power Cord 3P UL 10A 125V 1.8M

- **PWR-247-AE 50W** DC 24V/2.3A Output Power Supply
- **1702002605** Power cable EU Plug 1.8M
- **1702031801** Power cable UK Plug 1.8M
- **1702031836** Power cable China/Australia Plug 1.8M
- **EWM-W139F01E** 802.11 b/g/n, RT5390, 1T1R, Full-size Mini-PCle
- **1750000318** EMI Antenna 2DBI 2.4GHz SMA CONN for ARK-3384
- **1750003222** 802.11b/g 5dBi Dipole Antenna
- **1750003418** Wireless Antenna AN2400-5901RS R/P SMA.M9dB

* VESA support via a wall mounting kit