APAX-5570XPE
APAX-5571XPE
PC-based Controller with Celeron® M CPU

Features

- Intel® Celeron® M 1 GHz or 1.5 GHz CPU processor
- Expands I/O by connecting with APAX-5000 I/O modules
- Provides complete C/C++ and .NET libraries for I/O control and communication
- DVI-I supports dual display
- Dual power input for redundancy with power-fail relay
- 1 x RS-232 and 1 x isolated RS-422/485 ports
- Windows® XP Embedded ready platform
- Combine with APAX-5520KW to deliver dual CPU architecture
- SD card slot for data logging

Introduction

APAX-5570XPE/5571XPE is a controller with high performance Intel Celeron M grade CPU. Built-in Windows XP Embedded operating system makes APAX-5570XPE/5571XPE a ready application platform to shorten development time. Connecting with other APAX-5000 I/O modules, APAX-5570XPE/5571XPE can become a complete control system. Through C/C++ and .NET class libraries for the I/O modules, developers can build applications under the Win32 development environment in a short amount of time.

Specifications

General

- **Certifications** CE, FCC class A
- **Cooling System** APAX-5570XPE: Fanless, heatsink only
  APAX-5571XPE: Heatsink with fan
- **Mounting** DIN-rail, wall mount (panel mount)
- **Dimensions (W x H x D)** 270 x 142 x 126 mm
- **Enclosure** ABS+PC
- **Weight** APAX-5570XPE: 2.42 kg
  APAX-5571XPE: 2.46 kg
- **Power Consumption** APAX-5570XPE: 30 W @ 24 V_{DC}
  (Typical, without APAX-5571XPE: 45 W @ 24 V_{DC}
  inserted module)
- **Power Input** 18 ~ 30 V_{DC} (Dual Power Input)
- **Power Reversal** Yes
- **Real-time Clock** Yes
- **Watchdog Timer** Yes
- **Connected I/O Modules** 32 (max.)*
- **Digital Signals** 2048 (max.)
- **Analog Signals** 512 (max.)

System Hardware

- **CPU** APAX-5570XPE: Intel Celeron M 1 GHz (non-cache)
  APAX-5571XPE: Intel Celeron M 1.5 GHz (1 MB L2 cache)
- **System Chipset** Intel 915 GME
- **Memory** 512 MB DDR2 DRAM on board (Dual channel mode)
- **LED Indicators** Power, Run, Error, Battery
- **Display** DVI-I supports DVI and VGA for dual display
- **Audio** Mic-in, Line-out
- **Storage** 1 x SD card slot (SD card size: up to 16 GB)
- **Reset Button** Yes

*: APAX DI/O modules can use ID number 0 ~ 31, while AI/O modules and counter modules can only use ID numbers 0 ~ 15

Software

- **Operating System** Windows XP Embedded
- **Control Software** C/C++ and .NET library with utility

Communication

- **Serial Ports** 1 x RS-232, 1 x Isolated RS-422/485
- **Serial Port Isolation** 2500 V_{DC} (RS-422/485 only)
- **Serial Baud Rate** RS-232: 50 bps ~ 115.2 kbps
  RS-422/485: 50 ~ 230400 bps
- **LAN Ports** 2 x RJ-45 Ports, 10/100/1000 Mbps (Intel 82574L) (supports teaming function)
- **USB Ports** 4 x USB 2.0

Environment

- **Operating Temperature** -10 ~ 55° C (when mounted vertically)
- **Storage Temperature** -40 ~ 70° C
- **Relative Humidity** 5 ~ 95% (non-condensing)
- **Shock Protection** 30 G @ wall mount, half sine, 11 ms (Confirms to IEC 60068-2-27)
- **Vibration Protection** 2 Grms @ 5 ~ 500 Hz (Random, operating, 1 hr/axis)
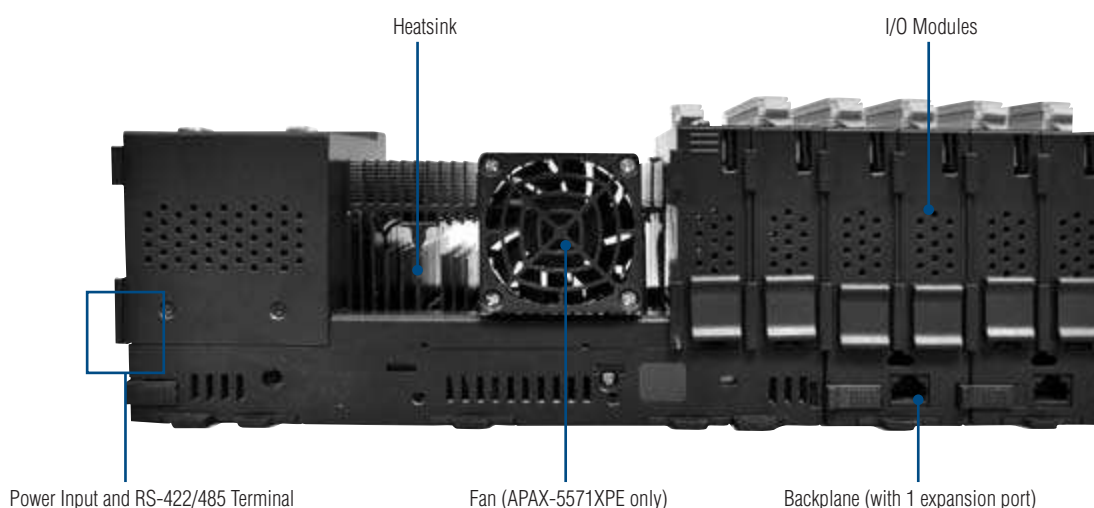 2 G @ 5 ~ 500 Hz (Sine, non-operating, 1 hr/axis) (Confirms to IEC 60068-2-64 and IEC 60068-2-6)
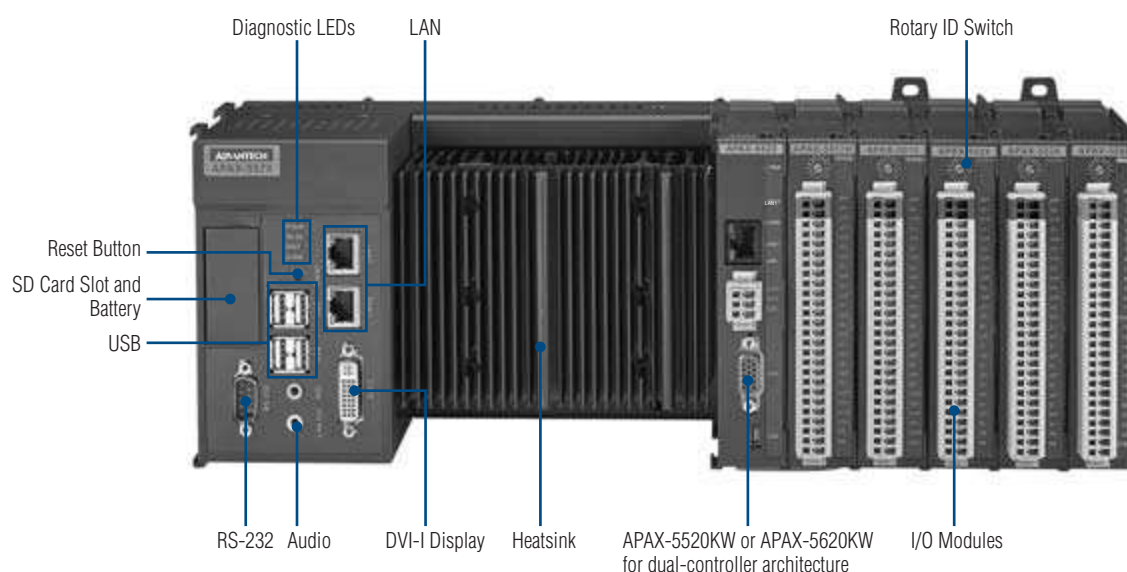
Ordering Information

- **APAX-5570XPE** PC-based Controller w/ Celeron M 1 GHz, XPe
- **APAX-5571XPE** PC-based Controller w/ Celeron M 1.5 GHz, XPe
- **APAX-5343** Power Supply for APAX-5570 Series

APAX-5570XPE
APAX-5571XPE

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Diagnostic LEDs   LAN   Rotary ID Switch

Reset Button
SD Card Slot and
Battery
USB

RS-232 Audio   DVI-I Display Heatsink   APAX-5520KW or APAX-5620KW   I/O Modules
                                            for dual-controller architecture

Heatsink   I/O Modules

Power Input and RS-422/485 Terminal   Fan (APAX-5571XPE only)   Backplane (with 1 expansion port)

Dimensions

Unit: mm

132.00
141.50
263.49

113.90
125.30

113.90
125.30

bottom side