

1 GENERAL INFORMATION

The PROVIT IPC 5000 and IPC 5600 are high performance industrial PCs. The IPCs are compact and designed using the latest technology. They offer a modular solution with all of the well known features of an industrial PC.



The IPC 5000 and IPC 5600 are modular industrial PCs consisting of the following components:

- Bus Unit
- System Unit
- Interface Board
- Mass Memory
- Processor
- System Memory

Measurements

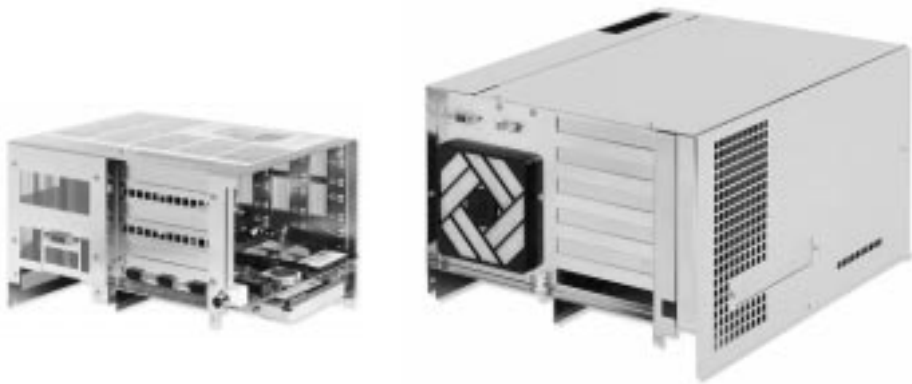
For the most part, measurements are given as metric values in this manual. There are metric to imperial conversion tables provided on the last page of this publication.

1.1 STRUCTURE

The IPC 5000 and IPC 5600 are modular industrial PCs consisting of the following components:

Bus Unit

The bus unit makes up the upper housing and contains the system bus and power supply. Bus units are available with a 24 VDC or 100 - 240 VAC power supply.



System Unit

The system unit makes up the lower housing and contains the motherboard and system interfaces.



Interface Board

The optional interface board provides 2 extra COM ports, a CAN interface and a PC Card slot. It can be ordered with or without Ethernet connection.



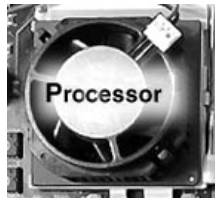
Mass Memory

A hard drive or bootable silicon disk (PCMCIA) can be used as mass memory.



Processor

Pentium® processors with clock frequencies from 100 - 200 MHz and also AMD K6/266 processors are available.



System Memory

DRAM ranging from 8 - 128 MB can be installed on the IPC 5000/5600.



1.2 GENERAL TECHNICAL DATA

Controller	IPC 5000 / IPC 5600
Processor	Pentium 100, 166, 200 MMX and AMD K6/266
Motherboard	Real Time Clock CMOS Backup in FlashPROM Temperature monitoring
DRAM	8 MB (up to 128 MB possible)
Cache	512 KB PB-Cache
Flash Disk ¹⁾	6 to 220 MB
Hard Disk ¹⁾	2.1 GB or 4.3 GB
Floppy	External disk drive
Fan	Housing ventilation, analog controlled
PC Card ¹⁾	1 type III slot
Operating Voltage	100 - 240 VAC or 24 VDC ($\pm 6V$) depending on bus unit
Power Consumption	Depends on configuration (see Chapter 5 "System Configuration")
COM1	RS232, 16 Byte FIFO
COM2	RS232, 16 Byte FIFO
COM3 ¹⁾	RS232 / RS422 (tri-state) electrically isolated, 16 Byte FIFO
COM4 ¹⁾	RS232 / RS422 (tri-state) electrically isolated, 16 Byte FIFO
CAN	Electrically isolated, supports NMI
LPT1	Standard, EPP and ECP modes
LPT2 ¹⁾	Only used internally for Hardware Security Key
USB	Universal Serial Bus
ETHERNET ¹⁾	NE2000 compatible, Thin Wire (Twisted Pair or BNC)
Math Processor	Built into processor, no socket
Keypad Modules ¹⁾	Max. 127 keys (max. 1 A current consumption), 48 LEDs
AT Keyboard	AT keyboard using PS/2 plug (only for service)
PS/2 Mouse	Standard PS/2 mouse
External Monitor	Connected via standard 15 pin VGA D-type connector (F) Max. resolution 1024 x 768 with 256 colors
Flat Displays	Various types and sizes Up to 5 m cable
Battery	Separate battery for setup and SRAM Battery monitoring
BIOS	AWARD EliteBIOS
VGA Controller	1 MB RAM or 2 MB RAM ¹⁾

Controller	IPC 5000 / IPC 5600
Software	100% IBM compatible
Valid Standards / Tests Carried Out	
Emission	EN 50081-2 / EN 50022 + A1
Temperature	IEC 61131-2 / IEC 60068-2-x
Shock	IEC 61131-2 / IEC 60068-2-27 ²⁾
Vibration	IEC 61131-2 / IEC 60068-2-6 ³⁾
Immunity	IEC 61131-2 / IEC 61000-4-x
Certification	Production according ISO 9001
Installation	Upright (connectors facing down), tilted max. $\pm 45^\circ$ to front or back Max. $\pm 25^\circ$ with integrated disk drive / CD ROM drive
Operating Temp.	0 - 50 °C with HDD, 0 - 55 °C without HDD (Pentium processors) 0 - 50 °C with HDD, 0 - 50 °C without HDD (AMD K6/266)
Relative Humidity	5 - 95 % (not condensing)

¹⁾ Not available in all configurations

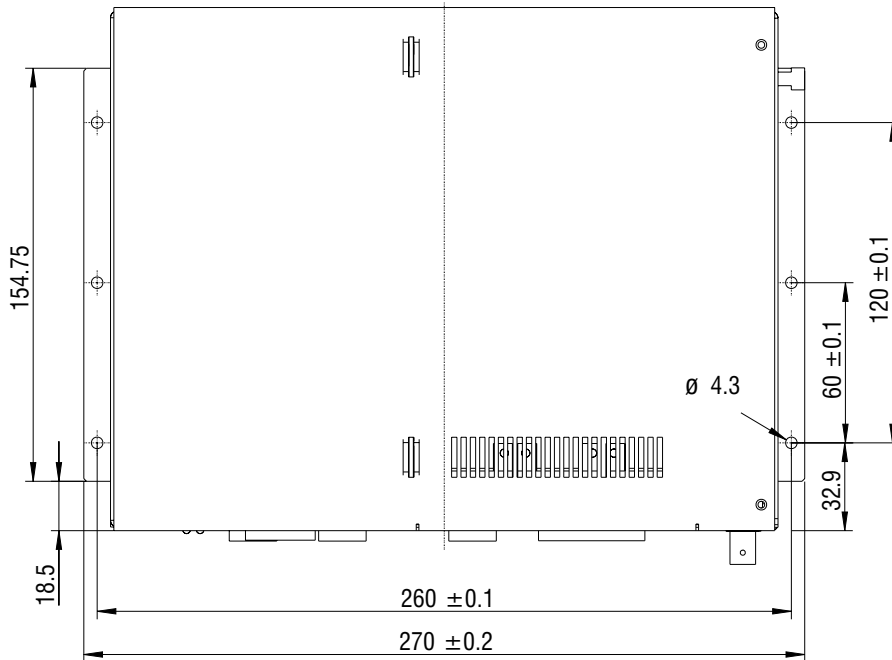
²⁾ For hard disk: 150 G, 2 msec

³⁾ For hard disk: 0.5 G, 5 – 500 Hz

2 INSTALLATION

2.1 INSTALLATION DIMENSIONS - IPC 5000

Installation dimensions for IPC 5000 Controller with 2 or 4 slots:



2.2 INSTALLATION DIMENSIONS - IPC 5600

Installation dimensions for IPC 5600 Controller with 4 or 6 slots are shown on the following page.

2.3 INSTALLATION GUIDELINES

- IPC 5000 and IPC 5600 controllers can be installed on the back of the display unit (standard installation).
- The screws delivered with the controller must be used for the installation.
- The IPC 5000 controller must be installed in the upright position (connectors facing down).
- The IPC 5600 controller must be installed horizontally (connectors facing right as seen from the back).
- IPC 5000 and IPC 5600 controller can be installed up to ±45° from the vertical position (tilted to front or back).

3 COMPONENT OVERVIEW

3.1 IPC 5000

The following components are available on the IPC 5000:

