Industrial Panel PCs

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Industrial Panel PC Selection Guide

Specifications	Model	IPPC-9170G	IPPC-9150G/IPPC-9150G-R
LCD Display	**Type**	SXGA TFT LCD	XGA TFT LCD
	Size	17"	15"
	Max. Resolution	1280 x 1024	1024 x 768
	Max. Colors	262 K or above	262 K
	Viewing Angle(H, V°)	140,130	120, 100
	Luminance(cd/m²)	300	250
	Backlight life	40,000	30,000
	Contract Ratio	500:1	400:1
CPU		Socket 478 Pentium® 4 (up to 3.06G)	Socket 370 Pentium® III (up to 1.26 GHz) Socket 370 Celeron® (up to 1.3 GHz)
Memory		Up to 2 GB DDR RAM (DDR-DIMM 184 pin)	Up to 1 GB SDRAM (SO-DIMM 168 pin)
I/O Ports		RS-232 Port x 3, RS-232/422/485 port x 1	RS-232 x 2 ports, RS-232/422/485 x 1 port (IPPC-9150G-R) RS-232 x 3 ports, RS-232/422/485 x 1 port (IPPC-9150G) Parallel Port x 1,USB port x 2
Network (LAN)		10/100/1000Base-T	10/100Base-T
Floppy Disk Drive		N/A	N/A
CD-ROM Drive		One 24X	One 24X
Hard Disk Drive (optional)		One 2.5" HDD	One 2.5" HDD
PCMCIA Slot		Type II x 2	Type II x 2
Bus Expansion		2 PCI	2 PCI or 1 PCI + 1 ISA
Touch Screen (optional)		Resistive	Resistive
Power Supply (AC)		250 W	100 W
Front Panel Compliance		NEMA4/IP65	NEMA4/IP65
Operating Temperature		0 ~ 50° C (32 ~ 122° F)	0 ~ 50° C (32 ~ 122° F)
Storage Temperature		-20 ~ 60° C (-4 ~ 140° F)	-20 ~ 60° C (-4 ~ 140° F)
Certifications		CE, FCC, BSMI, CCC	CE, FCC, BSMI, CCC, UL
Dimension (W x H x D)(mm)		482 x 355 x 144 mm (19" x 14" x 5.7")	402 x 302 x 127 mm (15.9" x 11.9" x 5")
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ADVANTECH Industrial Panel PCs

IPPC-9120G/IPPC-9120G-R	IPPC-9120T
SVGA TFT LCD	SVGA TFT LCD
12.1"	12.1"
800 x 600	800 x 600
262 K	262 K
130,100	60, 30
320	250
50,000 hrs	50,000 hrs
300:1	300:1
Socket 370 Pentium® III (up to 1.26 GHz) Socket 370 Celeron® (up to 1.3 GHz)	Socket 370 Pentium® III & Celeron® (up to 850 MHz)
Up to 1 GB SDRAM (SO-DIMM 168 pin)	Up to 256 MB SDRAM (SO-DIMM 168 pin)
RS-232 x 2 ports, RS-232/422/485 x 1 port (IPPC-9120G-R) RS-232 x 3 ports, RS-232/422/485 x 1 port (IPPC-9120G) Parallel Port x 1, USB port x 2	RS-232 x 3 ports, RS-232/422/485 x 1 port Parallel Port x 1, USB port x 2
10/100Base-T	10/100Base-T
N/A	One
One 24X	One 24X (optional)
One 2.5" HDD	1 internal 2.5" (optional)
Type II x 2	Type II x 2
2 PCI or 1 PCI + 1 ISA	2 PCI or 1 PCI + 1 ISA
Resistive	Resistive
100 W	80 W
NEMA4 / IP65	NEMA4 / IP65
0 ~ 50° C (32 ~ 122° F)	0 ~ 50° C (32 ~ 122° F)
-20 ~ 60° C (-4 ~ 140° F)	-20 ~ 60° C (-4 ~ 140° F)
CE, FCC, BSMI, CCC	CE, FCC, BSMI, CCC, UL
402 x 302 x 127 mm (15.9" x 11.9" x 5")	402 x 302 x 127 mm (15.9" x 11.9" x 5")
2-8	2-8

1 Software
2 IPPC
3 TPC
4 FPM
5 ATM & AWS
6 DA&C
7 cPCI
8 ADAM-3000
9 Motion Control
10 ICOM
11 eConnectivity
12 UNO
13 ADAM-4000
14 ADAM-5000
15 ADAM-6000
16 ADAM-8000
17 BAS

All product specifications are subject to change without notice

Last updated : January 2005

IPPC-9170

Rugged Intel®Pentium® 4 / Celeron® Industrial Panel PC with 17" LCD

NEW

Features

- Socket 478 CPU structure supports Intel® Pentium® 4 processor
- 17" SXGA TFT LCD provides vivid, sharp and large images
- Offers two expansion slots for PCI add-on cards
- Heavy-duty stainless steel chassis with aluminum front panel
- Strengthened glass protects the front panel from shock damage and is NEMA4/IP65 compliant
- Back door with lock allows easy maintenance and optimal security
- Support for optional PCMCIA wireless LAN adapter accessory
- Supports front USB, Power ON/OFF, KB/PS2 port access
- Hard anodic coating to prevent panel abrasion and acid corrosion
- Supports industrial mounting-Rack and panel mounting

Introduction

The IPPC-9170G is an Industrial Panel PC with support for Pentium® 4 processors to meet the demands of today's applications. The IPPC-9170G is a rugged unit with an aluminum panel, tempered glass, 17" TFT LCD, a stainless steel structure and two expansion slots. The IPPC-9170G is rugged enough to handle the toughest industrial operating environments. With optional mounting accessories, from swing arms to panels and racks, it can be mounted almost anywhere.

Specifications

- **Main Structure** Stainless steel back case, 10 mm thick aluminum front panel meets NEMA4/IP65 protection standard
- **Disk Drive Housing** Supports one 3.5" HDD, one stand 5.25 CD-ROM
- **Cooling Fans** Flow rate: 15.5 CFM x 2
  MTBF: 50,000 hrs
- **Power Supply** 250 W
  Input voltage: 100 V_{AC} ~ 240 V_{AC} @ 47 ~ 63 Hz
  Output voltage: 3.3 V @ 20 A, 5 V @ 26 A,
  12 V @ 14 A, 5 V_{SB} @ 2 A
  MTBF: 120K hrs @ 25° C
- **Operating Temperature** 0 ~ 50° C (32 ~ 122° F)
- **Relative Humidity** 5 ~ 85% @ 40° C (non-condensing)
- **Vibration (operation)** 5 ~ 500 Hz 1 G_{RMS} Random Vibration
- **Certifications** CE, FCC, BSMI, CCC
- **Dimensions (W x H x D)** 482 x 355 x 144 mm (19" x 14" x 5.7")
- **Gross Weight** 14 kg

Standard PC Functions

- **CPU Support** Socket 478 Intel® Pentium® 4 (Up to 3.06 GHz)
- **System Chipset** Intel® 82845G
- **BIOS** Award® 256KB Flash BIOS
- **RAM** Two 184 pin DDR DIMM sockets supports up to 2 GB
- **LAN** Supports 10/100MBase-T Ethernet networking
- **Enhanced Parallel Port** One parallel port, supports SPP/EPP/ECP parallel mode. BIOS configurable to LPT1, LPT2, LPT3 or disabled
- **Serial Ports** Two serial ports with three RS-232 ports. All ports are compatible with 16C550 UARTs
- **Universal Serial Bus (USB) Port** Supports up to four USB 2.0 ports
- **PCMCIA Port** Type II x 2
- **Watchdog Timer** 62-level, interval 1 ~ 62 seconds
- **Bus Expansion** With 2 expansion slots, IPPC-9170 can support up to two PCI add-on cards

Touchscreen (Optional)

- **Type** Analog resistive, continuous resolution
- **Light Transmission** 75%
- **Controller** USB (interface through internal USB port)
- **OS Support** Windows 2000/XP
- **Durability** 100 million touch lifetime at the single point

LCD Specifications

- **Size** 17"
- **Display Type** SXGA TFT
- **Color** 262 K or above
- **Resolution** 1280 x 1024
- **Viewing Angle** 130° (V), 140° (H)
- **Luminance** 300 cd/m²
- **Operating Temperature** 0 ~ 50° C (32 ~ 122° F)
- **Storage Temperature** -20 ~ 60° C (-4 ~ 140° F)
- **Backlight Life** 40,000 hrs

Ordering Information

- **IPPC-9170G** Rugged Pentium 4 Industrial Panel PC with 17" LCD, 200 W AC power supply, slim FDD. Stainless steel chassis and aluminum front panel
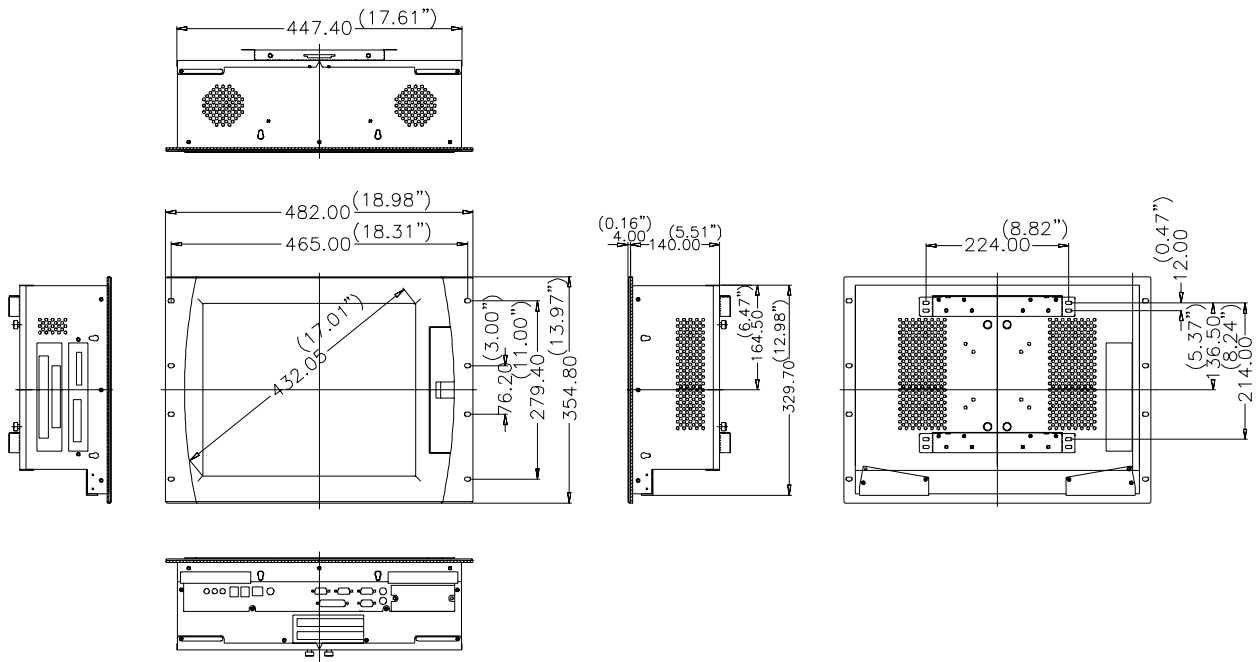- **IPPC-9170G-R** IPPC-9170G with resistive touchscreen

Notes:

1. When used in a panel mounted environment, the panel's thickness can not be over 10 mm
2. An IDE Flash drive is suggested when installed in vibrating applications
3. 4 mm stainless front panel supported by request

ADVANTECH Industrial Panel PCs

IPPC-9170G

1
Software

2
IPPC

3
TPC

4
FPM

5
ATM & AWS

6
DA&C

7
cPCI

8
ADAM-3000

9
Motion Control

10
ICOM

11
eConnectivity

12
UNO

13
ADAM-4000

14
ADAM-5000

15
ADAM-6000

16
ADAM-8000

17
BAS

Dimensions

Unit: mm

IPPC-9150

Rugged Pentium® III/Celeron® Industrial Panel PC with 15" LCD

Features

- Socket 370 CPU structure supports Pentium® III processors up to 1.26 GHz and Celeron® processors up to 1.3 GHz
- 15" XGA TFT LCD provides vivid, sharp and large images
- Offers two expansion slots for PCI/ISA add-on cards
- Heavy-duty stainless steel chassis with aluminum front panel
- Strengthened glass protects the front panel from shock damage and is NEMA4/IP65 compliant
- Back door with lock allows easy maintenance and optimal security
- Support for optional PCMCIA wireless LAN adapter accessory
- Hard anodic coating to prevent panel abrasion and acid corrosion
- Supports industrial mounting-Rack and panel mounting

Introduction

The IPPC-9150 is a fully functional computer system with support for CPUs of different classes (Pentium® III up to 1.26 GHz & Celeron® up to 1.3 GHz) to meet the demands of today's industrial software. The IPPC-9150 is a rugged unit with an aluminum panel, tempered glass 15"TFT LCD, a stainless steel structure and two expansion slots. The IPPC-9150 is rugged enough to handle the toughest industrial operating environments. With optional mounting accessories, from swing arm to panels to racks, it can be mounted anywhere.

Specifications

- **Main Structure** — Stainless steel back case, 10 mm thick aluminum front panel meets NEMA4/IP65 protection standard
- **Disk Drive Housing** — Supports one 2.5" HDD, one slim size CD-ROM
- **Cooling Fans** — Flow rate: 15.6 CFM x 2
  MTBF: 50,000 hrs
- **Power Supply** — 100 W
  Input voltage: 100 V_{AC} ~240 V_{AC} @ 47 ~ 63 HZ
  Output voltage: + 5 V @ 15 A, +12 V @ 5 A, -12 V @ 0.5 A
  MTBF: 200,000 hrs
- **Operating Temperature** — 0 ~ 50° C (32 ~ 122° F)
- **Relative Humidity** — 5 ~ 85% @ 40° C (non-condensing)
- **Vibration (operation)** — 5 ~ 500 Hz 1 G_{RMS} Random Vibration
- **Certifications** — CCC, CE, FCC, BSMI, UL
- **Dimensions (W x H x D)** — 402 x 302 x 127 mm (15.8" x 11.9" x 5")
- **Gross Weight** — 10 kgs (22 lbs)

Standard PC Functions

- **CPU Support** — Socket 370 Intel® Pentium® III up to 1.26 GHz, Socket 370 Intel® Celeron® up to 1.3 GHz
- **Chipset** — VT82C686B
- **BIOS** — Award® 256 KB Flash BIOS
- **RAM** — Two DIMM socket supports up to 1GB SDRAM
- **LAN** — Supports 10/100Base-T Ethernet networking
- **Enhanced Parallel Port** — One parallel port, supports SPP/EPP/ECP parallel mode. BIOS configurable to LPT1, LPT2, LPT3 or disabled
- **Serial Ports** — Four serial ports with three RS-232 ports (COM1, 3, and 4), one RS-232/422/485 port (COM2). All ports are compatible with 16C550 UARTs
- **Universal Serial Bus (USB) Ports** — Supports up to two USB 2.0 ports
- **PCMCIA port** — Type II x 2
- **Watchdog Timer** — 62-level, interval 1 ~ 62 seconds

- **Bus Expansion** — With 2 expansion slots can support up to two PCI or one PCI and one ISA add-on half-size cards.

Touchscreen (Optional)

- **Type** — Analog resistive, continuous resolution
- **Light Transmission** — 75%
- **Controller** — RS-232 (interface through COM4)
- **OS support** — MS DOS, Windows® 95/98/NT/2000/XP
- **Durability** — 1 Million touch lifetime at the single point

LCD Specifications

- **Size** — 15"
- **Display Type** — XGA TFT
- **Color** — 262K or above
- **Resolution** — 1024 x 768
- **Viewing Angle** — 100° (V), 120° (H)
- **Luminance (cd/m²)** — 250
- **Operating Temperature** — 0 ~ 50° C (32 ~ 122° F)
- **Storage Temperature** — -20 ~ 60° C (-4 ~ 140° F)
- **Backlight Life** — 30,000 hrs
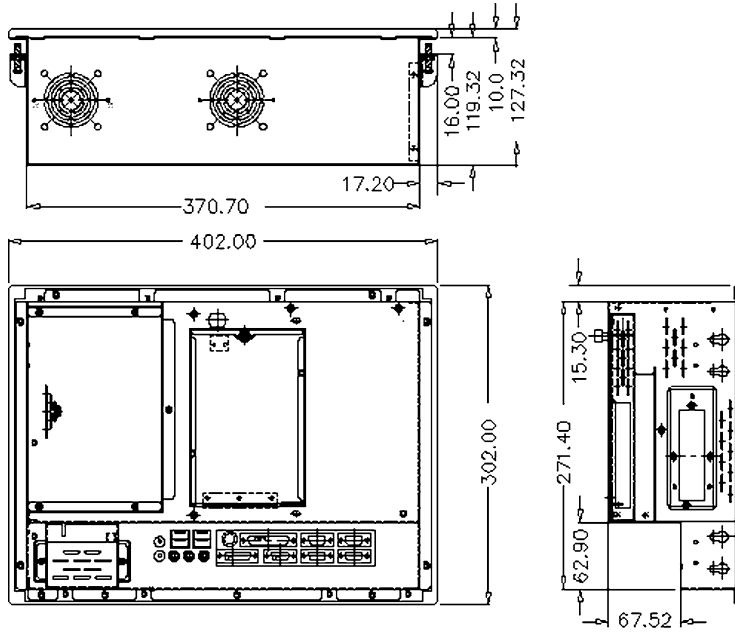
Ordering Information

- **IPPC-9150G** — Rugged Pentium® III/Celeron® Industrial Panel PC with 15" LCD, PCM-9672 B1 CPU board, 100 W AC power supply, CD ROM Drive. Stainless steel chassis and aluminum front panel
- **IPPC-9150G-R** — IPPC-9150G with resistive touchscreen

ADVANTECH Industrial Panel PCs

Dimensions

Unit: mm

Cut-out dimensions: 374 x 275 mm

Accessories

- **IPPC-9150 Stand**   Stand kit for IPPC-9150/9120 series product
- **IPPC-9150 S-ARM**   Swing arm for IPPC-9150/9120
- **IPPC-9150 Rack-MT**   Mounting kit for standard 19" industrial rack

Notes:

1. When used in a panel mounted environment, the panel's thickness can not be over 10 mm.

Optional PCI Fieldbus Card

- **Supports CANopen, DeviceNet™ or Profibus™ by request**
- **4 mm stainless front panel supported by request**

All product specifications are subject to change without notice   Last updated : January 2005

IPPC-9120

Rugged Pentium® III/Celeron® Industrial Panel PC with 12.1" LCD

Features

- Socket 370 CPU structure supports Pentium® III processors up to 1.26 GHz and Celeron® processors up to 1.3 GHz
- 12.1" SVGA TFT LCD provides vivid, sharp and large images
- Offers two expansion slots for PCI/ISA add-on cards
- Heavy-duty stainless steel chassis with aluminum front panel
- Strengthened glass protects the front panel from shock damage and is NEMA4/IP65 compliant
- Back door with lock allows easy maintenance and optimal security
- Support for optional PCMCIA wireless LAN adapter accessory
- Hard anodic coating to prevent panel abrasion and acid corrosion
- Supports industrial mounting-Rack and panel mounting

Introduction

The IPPC-9120 is a fully functional computer system with support for CPUs of different classes (Pentium® III up to 1.26 GHz & Celeron® up to 1.3 GHz) to meet the demands of today's industrial software. The IPPC-9120 is a rugged unit with an aluminum panel, tempered glass 12.1" TFT LCD, a stainless steel structure and two expansion slots. The IPPC-9120 is rugged enough to handle the toughest industrial operating environments. With optional mounting accessories, from swing arm to panels to racks, it can be mounted anywhere.

Specifications

- **Main Structure**: Stainless steel back case, 10 mm thick aluminum front panel meets NEMA4/IP65 protection standard
- **Disk Drive Housing**: Supports one 2.5" HDD, one slim size CD-ROM and one slim size FDD (9120T Only)
- **Cooling Fans**: Flow rate: 15.6 CFM x 2 / MTBF: 50,000 hrs
- **Power Supply**: 100 W (9120G), 80W (9120T)
  Input voltage: 100 ~ 240 V_{AC} @ 47 ~ 63 Hz
  Output voltage: + 5 V @ 15 A, + 12 V @ 5 A, -12 V @ 0.5 A
  MTBF: 200,000 hrs
- **Operating Temperature**: 0 ~ 50° C (32 ~ 122° F)
- **Relative Humidity**: 5 ~ 85% @ 40° C (non-condensing)
- **Vibration (operation)**: 5 ~ 500 Hz 1 G_{RMS} Random Vibration
- **Certifications**: CE, CCC, FCC, BSMI, UL compliant
- **Dimensions (W x H x D)**: 402 x 302 x 127 mm (15.8" x 11.9" x 5")
- **Gross Weight**: 10 kg (22 lb)

Standard PC Functions

- **CPU Support**: Socket 370 Intel® Pentium® III up to 850 MHz (9120T), 1.26 GHz (9120G)/ Celeron® up to 700 MHz (9120T), 1.3 GHz (9120G)
- **Chipset**: Intel® 82443BX/ 82371EB
- **BIOS**: Award® 256 KB Flash BIOS
- **RAM**: Two DIMM Socket supports up to 1 GB SDRAM (9120G) One DIMM Socket supports up to 256MB SDRAM (9120T)
- **LAN**: Supports 10/100Base-T Ethernet networking
- **Enhanced Parallel Port**: One parallel port, supports SPP/EPP/ECP parallel mode. BIOS configurable to LPT1, LPT2, LPT3 or disabled
- **Serial Ports**: Four serial ports with three RS-232 ports (COM1, 3, and 4), one RS-232/422/485 port (COM2). All ports are compatible with 16C550 UARTs
- **Universal Serial Bus (USB) port**: Supports up to two USB 2.0 ports

- **PCMCIA Port**: Type II x 2
- **Watchdog Timer**: 62-level, interval 1 ~ 62 seconds
- **Bus Expansion**: With 2 expansion slots, IPPC-9120 can support up to two PCI, or one PCI and one ISA add-on half-size cards.

Touchscreen (Optional)

- **Type**: Analog resistive, continuous resolution
- **Light Transmission**: 75%
- **Controller**: RS-232 (interface through COM4)
- **OS Support**: MS DOS, Windows® 95/98/NT/2000/XP
- **Durability**: 1 Million touch lifetime at the single point

LCD Specifications

- **Size**: 12.1"
- **Display Type**: SVGA TFT
- **Color**: 262 K
- **Resolution**: 800 x 600
- **Viewing Angle**: 100° (V), 130° (H) (9120G), 30° (V), 60° (H) (9120T)
- **Luminance (cd/m²)**: 320 (9120G), 250 (9120T)
- **Operating Temperature**: 0 ~ 50° C (32 ~ 122° F)
- **Storage Temperature**: -20 ~ 60° C (-4 ~ 140° F)
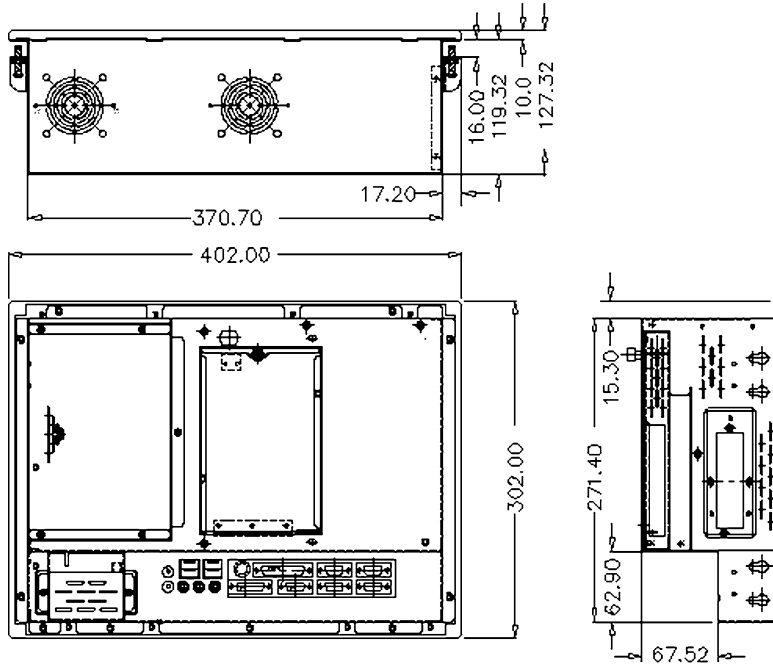- **Backlight Life (hrs)**: 50,000

Ordering Information

- **IPPC-9120G**: Rugged Pentium® III/Celeron® Industrial Panel PC with 12.1" LCD, PCM-9672 B1 CPU board, 100 W AC power supply, slim-type CD-ROM. Stainless steel chassis and aluminum front panel
- **IPPC-9120G-R**: IPPC-9120G with resistive touchscreen
- **IPPC-9120T**: Rugged Pentium® III/Celeron® Industrial Panel PC with 12.1" LCD, PCM-9571 B1 CPU board, 80 W AC power supply, slim FDD. Stainless steel chassis and aluminum front panel
- **IPPC-9120T-T**: IPPC-9120T with touchscreen

ADVANTECH | Industrial Panel PCs

Dimensions

Unit: mm

Cut-out dimensions: 374 x 275 mm

Accessories

- **IPPC-9150 Stand**   Stand kit for IPPC-9150/9120 series product
- **IPPC-9150 S-ARM**   Swing arm for IPPC-9150/9120
- **IPPC-9150 Rack-MT**   Mounting kit for standard 19" industrial rack
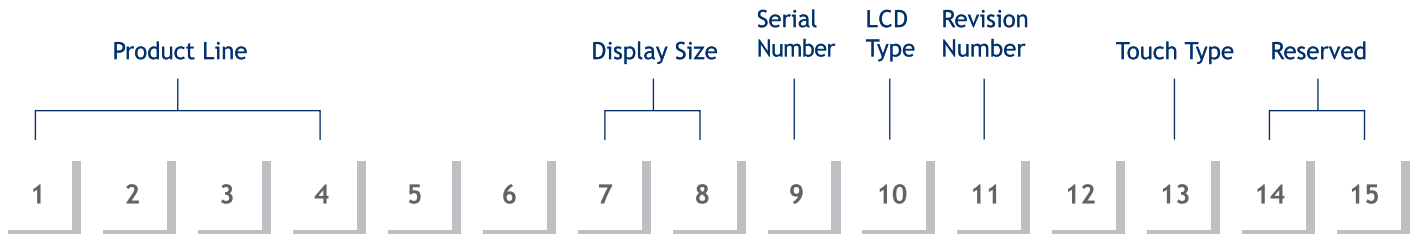
Note:

1. When used in a panel mounted environment, the panel's thickness can not be over 10 mm.
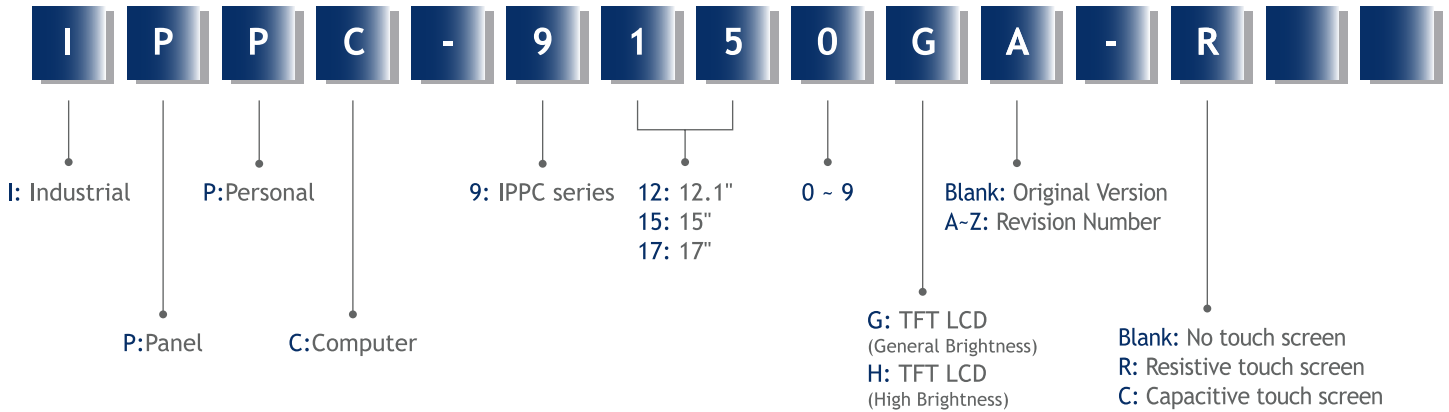
Optional PCI Fieldbus Card

- **Supports CANopen, DeviceNet™ or Profibus™ by request**
- **4 mm stainless front panel supported by request**

IPPC Series Naming Rule

Product Line						Display Size		Serial Number	LCD Type	Revision Number		Touch Type	Reserved	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Ex:

I P P C - 9 1 5 0 G A - R

I: Industrial   **P:** Personal   **9:** IPPC series

12: 12.1"
15: 15"
17: 17"

0 ~ 9

Blank: Original Version
A~Z: Revision Number

P: Panel   **C:** Computer

G: TFT LCD
(General Brightness)
H: TFT LCD
(High Brightness)

Blank: No touch screen
R: Resistive touch screen
C: Capacitive touch screen

➤➤ **Example Description:** 15" Industrial panel PC with resistive touch screen