**MITSUBISHI ELECTRIC**
**FACTORY AUTOMATION**

# IPC 1000

## Industrial Panel PCs

## PC with Touchscreen Interface
### Perfect process visualisation



**SPEED UP** — Powerful microprocessors (up to Core 2 Duo), fanless CPU and maximum processor performance

**MORE FLEXIBILITY** — Ideal for simultaneous real-time control and visualisation in a single device

**LATEST STANDARDS** — Use as a powerful data terminal with the process visualisation software SoftGOT1000 or MX4 HMI

**INTELLIGENT DESIGN** — Tough touchscreen displays available in several different sizes

# IPC 1000 – Industrial Panel PCs



Implement monitoring and control functions in heavy-duty environments.

## Tough design for tough environments

A wide operating and storage temperature range, tough vibration resistance and the high IP65 rating mean these IPCs can be used in locations users could never consider before. These industrial panel PCs get by without a processor fan, which further increases their reliability by eliminating one of the main failure sources. This reduces the risk of expensive production downtime and other headaches caused by the failure of simple moving parts.

## Getting connected to the right devices

Mitsubishi's IPCs come with a wide range of standard interfaces including Ethernet, USB ports and standard RS232 ports. In addition, all systems are available with one of three optional fieldbus networking configurations. Direct connection to either Profibus/DP, CANopen or DeviceNet is provided by these fieldbus networking boards.



Displays from 12" to 17" for maximum flexibility in a wide range of applications

## New industrial panels

Just as personal computers have become an indispensible part of our daily lives, industrial PCs are now standard components in modern automation and process control solutions.

The new IPC 1000 line delivers exceptional high-end performance, building on ETX technology and power-saving fanless Intel® Celeron® Core Duo processors. ETX technology enables variable, load-based processor performance with enough number-crunching power for virtually all industrial PC applications.
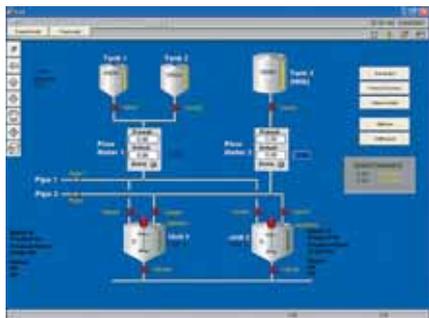
## The right model for every need

Panel PCs in different series are available with 12.1", 15" and 17" displays. The integrated PCI slots in the VP Panels enable the installation of expansion cards to accommodate special needs. This means that it is always possible to reconfigure the units for new applications and tasks.

# Software solutions designed to meet your needs

Mitsubishi's range of IPC solutions are designed to meet the needs of most industrial users, but if the IPC is enhanced with a Mitsubishi visualisation solution, then users can really start to get the most out of their hardware and production processes.

Software solutions available from Mitsubishi include:



The right software solution is available for every application.

- ■ **MX Sheet** – a program utility written for MS Excel for trending and data capture functions from a connected PLC.

- ■ **MX Component** – a powerful library of ActiveX controls to simplify connection between Industrial PC and PLC

- ■ **MX OPC Server** – a tool for fast and secure access to Mitsubishi controllers from a users OPC-compatible software



A high-performance panel PC in action

- ■ **SoftGOT1000** – Mitsubishi has a perfect solution for users of traditional HMI technology who need a little extra functionality on the occasional application. SoftGOT1000 is a software module of GTWorks and as such allows applications to be deployed to traditional GOT platform or IPC platforms.

- ■ **MX4-SCADA and MX4 HMI** – These two software packages are among the most versatile process visualisation systems available from Mitsubishi. MX4 HMI is for smaller and stand-alone applications. MX4 SCADA is the perfect choice for more complex and network-based applications, for example those requiring two redundant servers.

The FASTLINX system integrated in MX4 makes it easy to access variable names directly from the PLC. This eliminates much time-consuming configuration and makes setup and programming much faster.

Contact your local Mitsubishi dealer for more information on these software packages.

# What is Vision 1000?

Vision 1000 is a visualisation package that brings the customer what they really want: comprehensive choice.



Through Mitsubishi's Vision 1000 program users who need visualisation solutions can find the solution they need. The package brings together three elements of shop floor visualisation solutions but offers them all from a single manufacturer:

- ■ **Dedicated HMI solutions**

The GOT1000 operator terminals enable direct and fundemental integration of Mitsubishi HMI technology with Mitsubishi PLC, Inverter, Servo, CNC and Robot solutions.

- ■ **Open HMI solutions**

The E1000 operator terminals provide a combination of dedicated HMI technology and flexibility of open drivers and architecture to directly connect to leading automation suppliers.

- ■ **Industrial PC solutions**

IPC1000 offers engineers total open connectivity to use their own dedicated software or to use packages such as MX4-SCADA and MX4 HMI.

# Specifications ///

| Specifications | | IPC-MC1121 | IPC-MC1151 | IPC-VP1151 | IPC-VP1171 |
|---|---|---|---|---|---|
| Display unit | type | TFT | TFT | TFT | TFT |
| | dimensions (mm) | 12.1" | 15" | | 17" |
| | graphical resolution (pixels) | 800 x 600 | 1024 x 768 | | 1280 x 1024 |
| Power supply | | 24 V DC | | | |
| Processor type | | Intel Celeron 800 MHz | | Intel Core Duo 2 x 1,06 GHz | |
| Processor cooling system | | Fanless | | | |
| Operating system | | Windows XP Professional | | | |
| AInternal memory capacity | | 512 MB RAM | | | |
| Screen type | | Resistive analog touch-panel | | | |
| Integrated harddisk capacity | | 40 GB | | | |
| LED indicator | | 1 (Power ON) | | | |
| Interfaces | serial | 1 x RS232C | | 2 x RS232C | |
| | others | 2 x USB (2 x rear side) | | 5 x USB (1 x front side; 4 x rear side) | |
| LAN network interface | | 2 x 10/100 | | 1 x 10/100, 1 x 100/1000 | |
| Field busses | | CANopen, DeviceNET, Profibus/DP | | | |
| Free card slots | | — | | 2 x PCI | |
| IP Rating | | IP65 (front) | | | |
| Operating temperature range | | 0 – 50 ℃ | | | |
| Storage temperature range | | -20 – +60 ℃ | | | |
| Allowable operating humidity range | | 20 – 85 % (no condensation) | | | |
| Vibration resistance | | 1G (resistant to vibrations from  10 – 500 Hz along all 3 axes (acc. to EN 60068-2-6) | | | |
| Dimensions WxHxD (mm) | | 380 x 300 x 53 | 452 x 362 x 57 | 450 x 354 x 158 | 461 x 399 x 166 |

**MITSUBISHI ELECTRIC**
FACTORY AUTOMATION

**Mitsubishi Electric Europe B.V. /// FA - European Business Group /// Gothaer Straße 8 /// D-40880 Ratingen /// Germany**
Tel.: +49(0)2102-4860 /// Fax: +49(0)2102-4861120 /// info@mitsubishi-automation.com /// www.mitsubishi-automation.com