

MAPS HMI

Smart and Simple Human Interface Machine



Open HMI Solutions



Unlimited alarming and datalogging



Multi client view connections



Full C# and VB.net scripting functionality

MAPS Human Machine Interface (HMI)



What is a Human Machine Interface (HMI)?

A Human Machine Interface (HMI) is a graphical interface that allows humans and machines to interact.

An HMI is usually a combination of hardware and software that allows a user to communicate with an automation system.

The HMI solution provides information, alerts and commands to and from a machine or process and thus connects the user with the process being controlled.

Why use HMI?

There are two key factors; cost and environment. A lower cost solution may be required for a machine builder or the operating environment is such that a more ruggedised interface is necessary. Any unusual environmental conditions will narrow the HMI hardware selection.

For example, an abundance of electrical noise or vibration may require the selection

of a ruggedised or hardened industrial panel, whereas an HMI operating in a wash-down environment, such as a food processing plant, might require a high IP (ingress protection) rating.

Extreme temperatures or temperature ranges such as an HMI placed near a blast furnace, or an HMI that is used outside and might require daylight readability are some other environmental factors to consider when choosing the correct HMI.

MAPS HMI Introduction

Following market demands Mitsubishi has introduced a reduced functionality, low cost version of the highly successful Mitsubishi Adroit Process Suite (MAPS SCADA) to the market. The focus is the machine builder and more simple HMI requirements that do not require the capabilities of the full MAPS software.

However, unlike most competitive stand-alone solutions the MAPS HMI software allows users to license up to 2 remote operators/view clients.

This allows the user to have more visibility into the plant or machine being controlled. This feature also allows the user to change the HMI project remotely.

Designing the HMI solution is made easy with the HMI tools that are available. These include the project creation wizard, navigation templates, wizards and shapes and various other tools that are shipped as part of the MAPS HMI product.

In addition MAPSHMI supports simultaneous connections to over 100 different controllers.

MAPS HMI Features

Being based on the MAPS SCADA architecture means that users have access to various Agents when configuring the I/O, allowing a more object-oriented approach to configuration.

Users are therefore not limited to simple tag based configuration but have access to all the power of a SCADA, including unlimited alarming, logging, scripting and interaction to the database that allows for a far more flexible and powerful solution.

- **Variety of user-friendly object-based Agents**

MAPS HMI includes basic Agents such as the Integer, Real, Analog, Boolean, Digital, Date, Expression (for doing internal logic and calculations) and Timer Agents.

For advanced configuration MAPS HMI includes the Marshal, Scripting, Counter, Statistical, String, Stringlist, Notify, DBAccess and DBLog Agents.

Each Agent offers unique user-friendly and simple to understand functionality, allowing users to solve complex problems in an object-oriented and practical way.

- **Scripting supported**

The MAPS HMI I/O Server allows the user to create VB/Java scripting and the Client or Smart User Interface offers full support of VB.net and C# for more advanced requirements.

- **Open HMI solutions**

Apart from offering communications capability to all of the Mitsubishi range of Programmable Logic Controllers (PLCs), MAPS HMI is not limited to the number of different PLCs it can connect to.

Most PLC drivers are included, and licensed drivers purchased at a small additional cost as with the MAPS SCADA to Allen Bradley and Siemens PLCs.

- **Unlimited data logging and Historian functionality**

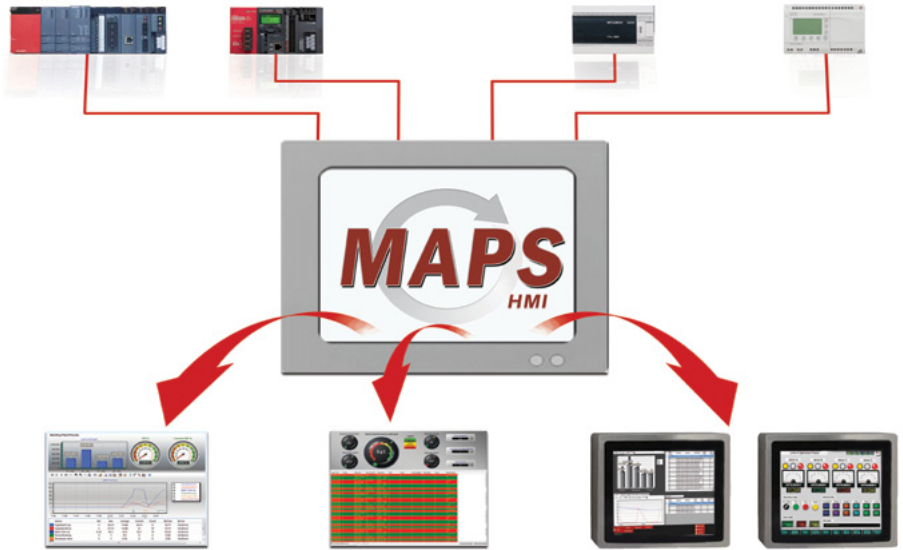
MAPS HMI features a standard and highly efficient native logging system for unlimited trending and can log to an SQL database with no limitations or additional costs.

- **Easy upgrade path**

MAPS HMI can be upgraded seamlessly to the MAPS SCADA or MAPS versions by simply upgrading the license.

- **Alarm Management and Analysis feature**

The Alarm Management reporting capability of the well proven and web-based Alarm Management reporting product can also be used with a licensed Alarm Management Agent.

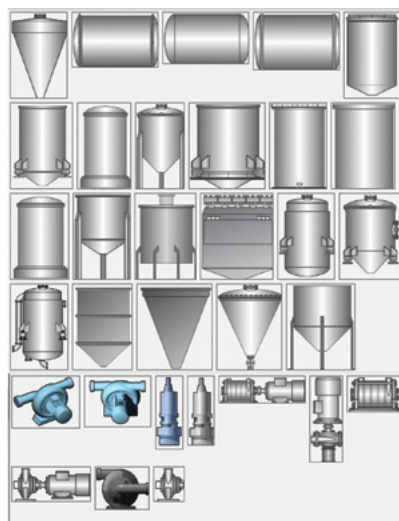


- **Integrated IPC and OEM bundles**

MAPS HMI can be loaded onto practically any Windows based IPC system and used as an OEM system for virtually any market.

- **Library of graphics objects**

The MAPS HMI includes the standard graphic library as in the MAPS SCADA and ships with over 300 static and dynamic objects. Users can design their own wizards and templates, reducing engineering and commissioning time.



- **Multiple operator/View client connections**

For more visibility and access to a user's process, up to 2 additional view clients can be purchased to connect to the I/O Server (Agent Server).

It is also possible to deploy the 1-Click functionality allowing a project to be exposed and viewed within Internet Explorer and on mobile devices such as tablets, iPads and smartphones.

- **Batching and recipe project**

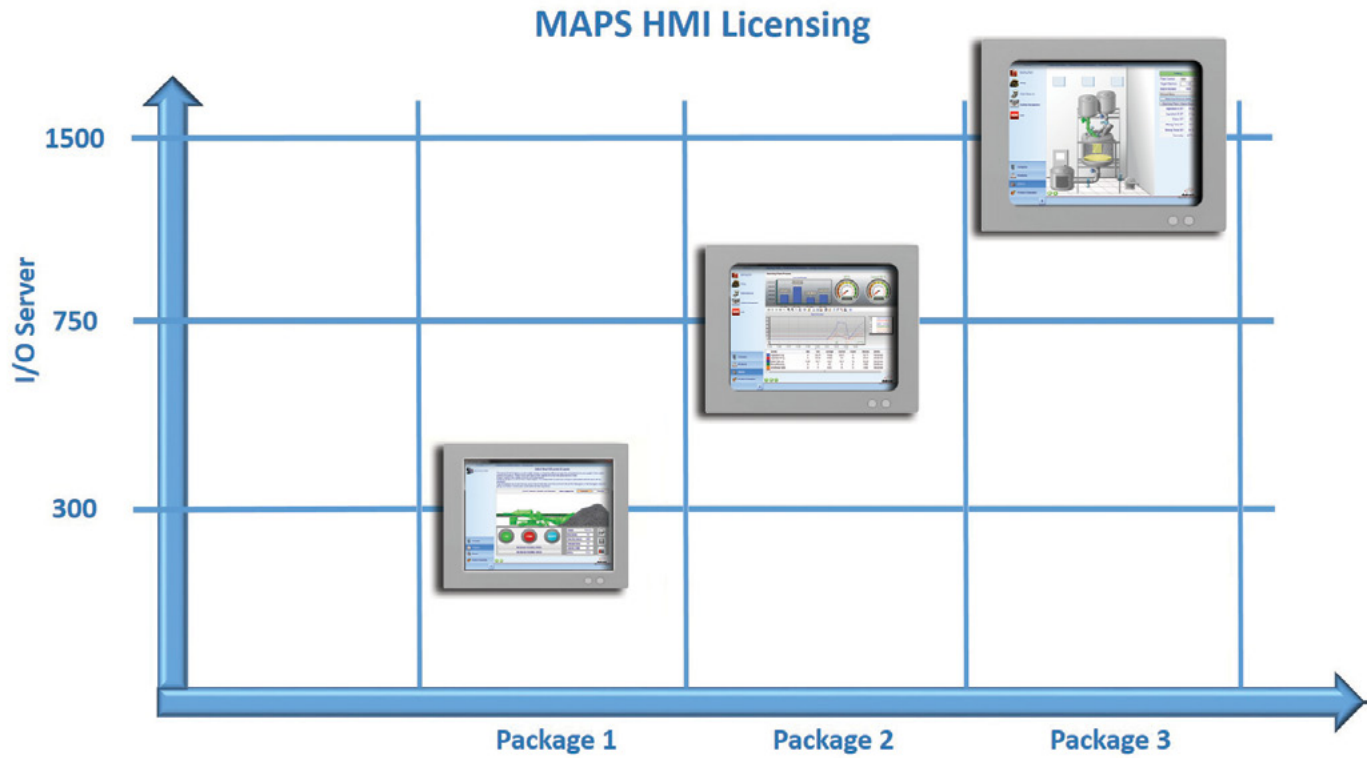
MAPS HMI is extremely powerful around interaction with Databases so building a Batching solution is relatively easy.

The MAPS demo includes a sample solution which users can expand on to meet their own requirements.



MAPS HMI Licensing

MAPS HMI licensing is available in 3 different categories: 300 I/O Server, 750 I/O Server and 1500 I/O Server.



The Agent Server (I/O Server) is licensed for each I/O scanned from a PLC to the MAPS HMI Server. Up to 2 additional view clients can be purchased for each HMI system. A local Development and Operator license is included with each HMI product.

Please note certain drivers are not free, please refer to your MAPS sales representative for details.

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