

# *iView* HMI

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HMI solutions *you can view*

# iView HMI

## See the difference

### Advanced HMI Controllers

- Huge range of features included as standard
- Array of communications ports inc. Ethernet
- IP66 rated for increased protection
- 65K colour touchscreen as standard



## iView HMI

IMO's new range of iView HMI's are available five screen sizes 4.3", 7.0", 10.4", 12.1" and 15.0". The HMI range options include M Series models for medium range applications and H Series models with higher capability for demanding applications.

The new HMI's have high resolution 65K colour resistive touch LCD TFT screens operating on an ARM based Processor. The compact and well-designed bodies are packed with features. Communication and data logging is made easy by incorporating a number of ports; two USB, one Ethernet, three serial and a Micro SD up to 16GB. These features make it possible to connect to printers, keyboards or a mouse, and data storage on a Micro SD card or USB Hard Drive.

Rich in communication features, iView allows for remote connectivity via VNC server as well as Ethernet protocols (Modbus TCP/IP, BACnet/IP, Profinet/IP), and Serial protocols (including Modbus RTU, BACnet, Siemens MPI).

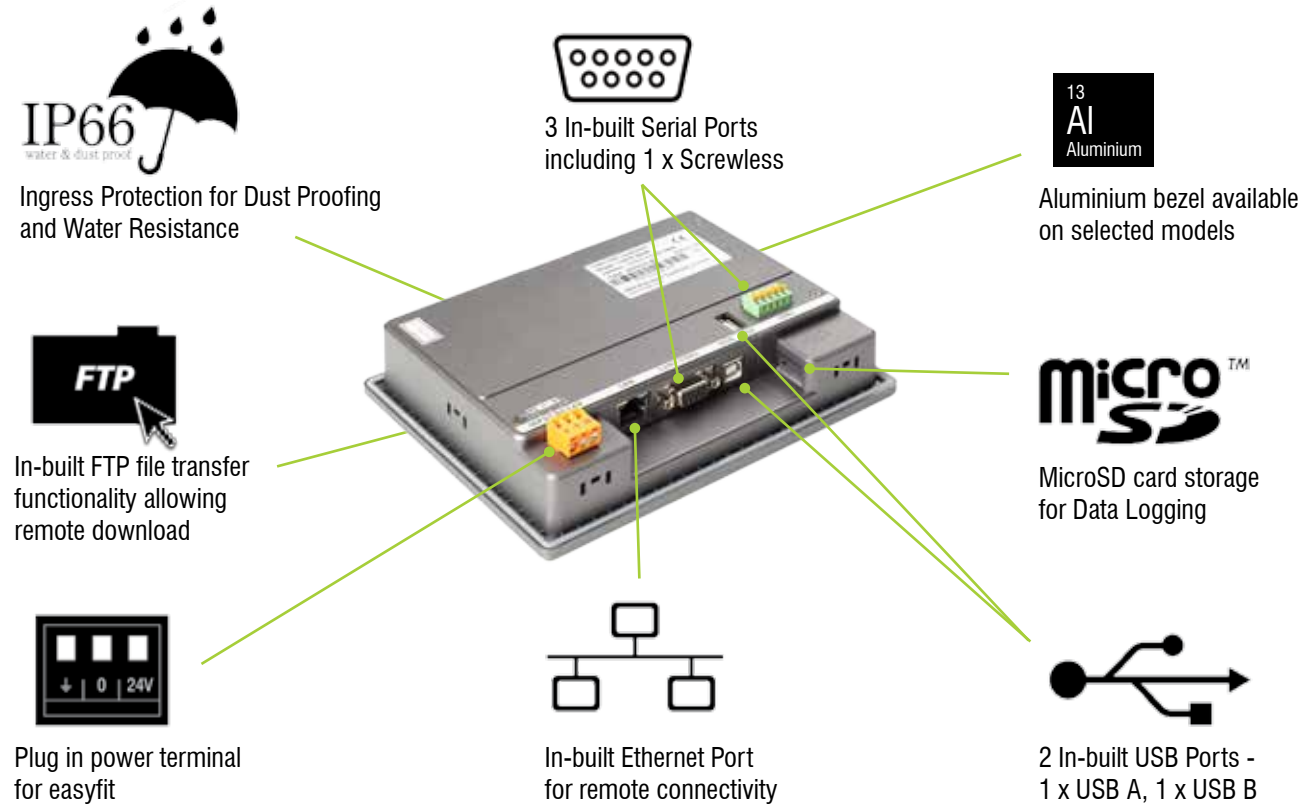
## Software - iView Developer

The included licensed programming software is an exceptionally easy to use integrated development tool, featuring solution-oriented screen objects, high-end vector graphics, Windows fonts for multi-language applications, recipes, alarms, data loggers and operation logging. Other functions include Trending, XY Graph, Alarm Monitoring and Time Scheduling.



## Hardware Features

The iView range of HMI's from IMO are incredibly powerful and feature full colour touch screens with sizes ranging from 4.3" to 15.0". Never before have so many features been included as standard in an HMI, making the iView one of the most advanced HMI controllers ever produced.



## Applications

The iView HMI has been optimised for implementation in the following areas and many more...



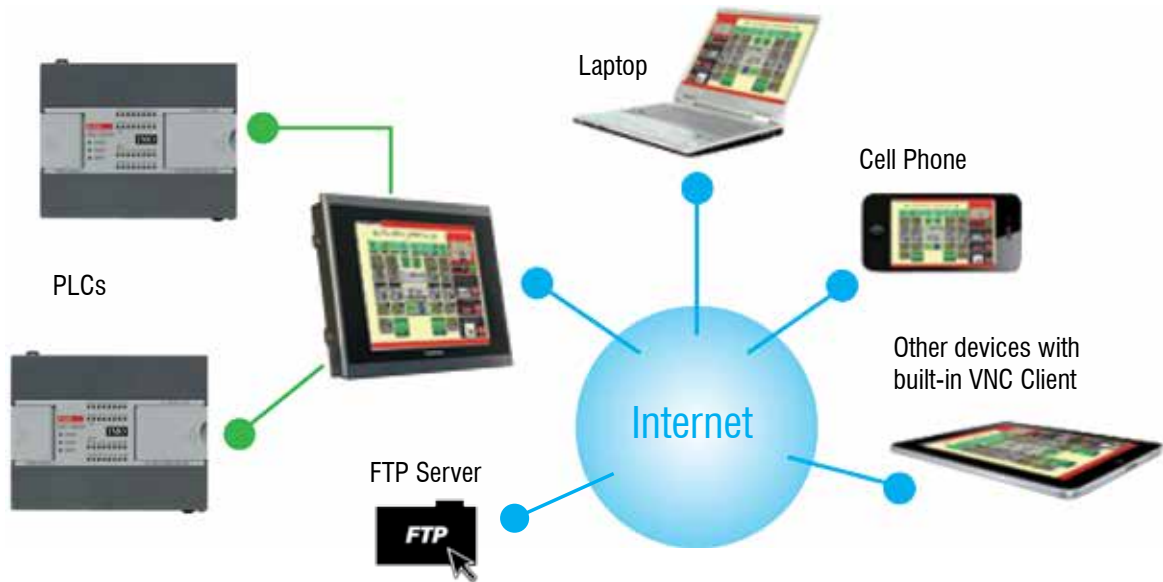
- Packaging Machinery
- Food Processing
- Water & Waste Treatment
- Custom OEM Products
- Motion Control
- Pump Control



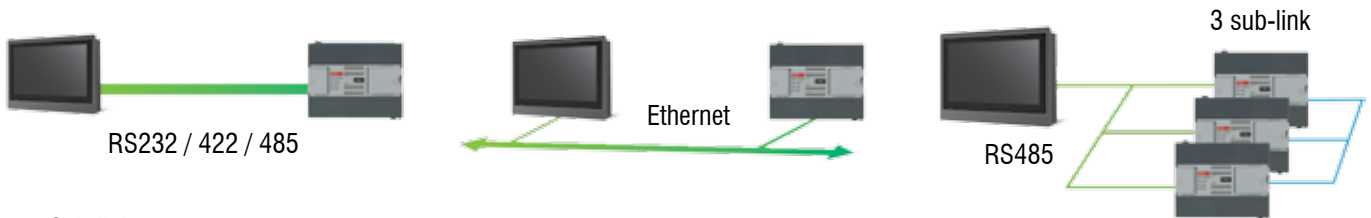
- Custodial Vehicle Management
- HVAC & Environmental Control
- Communications Hub
- Dedicated Alarm Systems
- Building Management
- Process Control

# Communications Features

## Web Server Communications



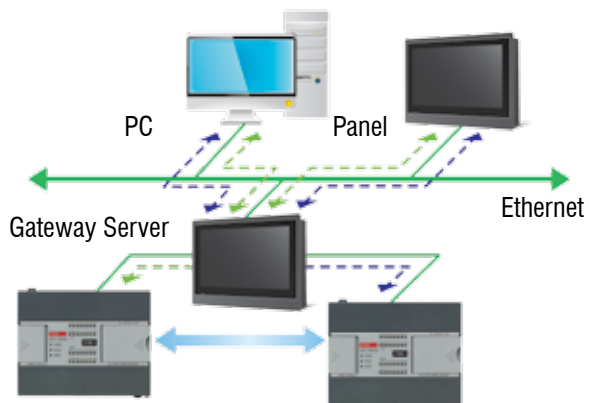
## Direct Link Communications



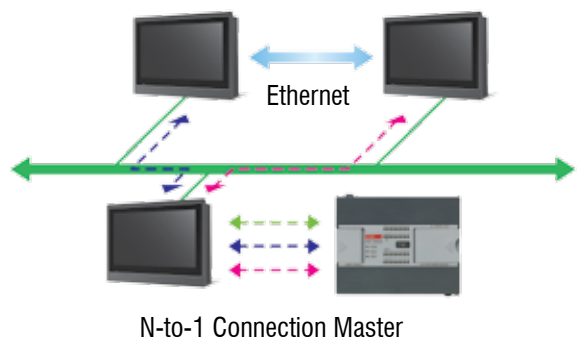
### Sub-link

Using RS485 serial connection to link multiple devices with the same protocol, such as temperature controllers and intelligent sensors. Users can activate / deactivate the sub-link and save the communication process.

## Gateway Service

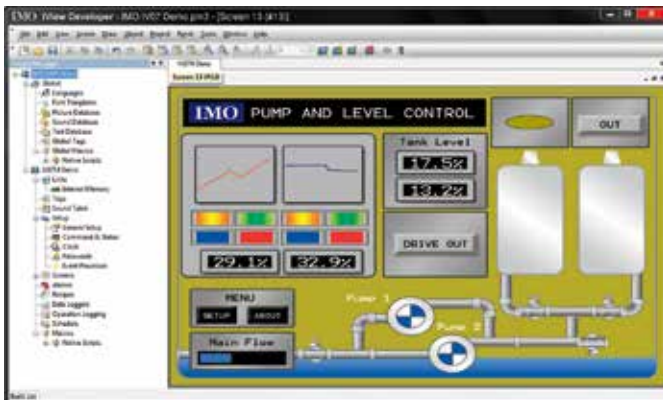


## N to 1 Communication Connection



## Software Features - iView Developer

- Dynamic multi-lingual user interface with Unicode, offering screen text support for multiple languages
- All designs, macros and upload/download operations can be protected by passwords
- In-built serial port, Ethernet, USB and MicroSD card allows for downloading of runtime data
- User configurable script for improved functionality
- Comprehensive index registers are included for modifying device addresses in runtime
- Review and investigate important events using the Operation Log
- Supports over 380 industrial communication protocols inc. Modbus, BACnet MSTP/BACnet IP for 3rd party device communication
- Offline simulator to enable testing of the program before downloading to the iView



### Dialog Box

*The property dialog is displayed by double-clicking the object or figure*

Figure changes are immediately reflected on screen, thereby simplifying the process and reducing errors

### Screen Design Worksheet

*Smart Screen Design*

Easy-to-view screens during runtime development, adjustable based on user-oriented application

### Configurable Toolbars

*Icon Display Improves Work Efficiency*

Shortcut icons designed to show objects, figure type, and operations improving work efficiency

Frequently used objects and figures can be registered as favourites

### Project Workspace

*Intuitive Tree Display Makes Runtime Development Easy*

Easy to create, develop, and manage project property efficiency by project-based management worksheets

### Intuitive Error Messaging

*Compile & Simulate Results*

By double-clicking on the error message after compilation, it will jump to the specific place where the error is located



## Product Specification - M Series



Ordering Codes	IV04M-SEAP	IV07M-SEAP	IV10M-SEAP	IV15M-SEAA
Size	4.3" (16:9)	7.0" (16:9)	10.4" (16:9)	15.0" (16:9)
Resolution	480 x 272	800 x 480	800 x 600	1024 x 768
Colours	65k	65k	65k	65k
System Memory	8 MB	8 MB	8 MB	8 MB
In-built Storage Memory	128 MB	128 MB	128 MB	128 MB
Battery Backup Memory	128 KB	128 KB	128 KB	128 KB
COM1	RS232/422/485	RS232/422/485	RS232/422/485	RS232/422/485
COM2	RS232/485	RS232/485	RS232/485	RS232/485
COM3	RS232	RS232	RS232	RS232
USB	2	2	2	2
Real-Time Clock	Built-in	Built-in	Built-in	Built-in
Micro SD Slot	Up to 16GB	Up to 16GB	Up to 16GB	Up to 16GB
Certification	UL, CE, cUL	UL, CE, cUL	UL, CE, cUL	UL, CE, cUL
Ratings	IP66	IP66	IP66	IP66
Voltage Ratings	24VDC ± 10% Isolated	24VDC ± 10% Isolated	24VDC ± 10% Isolated	24VDC ± 10% Isolated
Power Ratings	10 W	20 W	20 W	20 W
Operating Temperature	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C
Net Weight	0.35kg	0.6kg	1.2kg	2.68kg
Bezel Material	Plastic	Plastic	Plastic	Aluminium
Cut-out	119 x 93mm	175 x 132.5mm	260 x 202mm	385 x 283mm

## Product Accessories

Ordering Codes	MSD-16GB	IV-USB
Description	16GB MicroSD Card	USB Programming Cable

## Product Specification - H Series



Ordering Codes	IV07H-SEAA	IV10H-SEAA	IV12H-SEAA	IV15H-SEAA
Size	7.0" (16:9)	10.4" (16:9)	12.1" (16:9)	15.0" (16:9)
Resolution	800 x 480	800 x 600	1024 x 768	1024 x 768
Colours	65k	65k	65k	65k
System Memory	256 MB	256 MB	256 MB	256 MB
In-built Storage Memory	1024 MB	1024 MB	1024 MB	1024 MB
Battery Backup Memory	1 MB	1 MB	1 MB	1 MB
COM1	RS232/422/485	RS232/422/485	RS232/422/485	RS232/422/485
COM2	RS232/485	RS232/485	RS232/485	RS232/485
COM3	RS232	RS232	RS232	RS232
USB	2	2	2	2
Real-Time Clock	Built-in	Built-in	Built-in	Built-in
Micro SD Slot	Up to 16GB	Up to 16GB	Up to 16GB	Up to 16GB
Audio / Video	Optional	Optional	Optional	Optional
Certification	UL, CE, cUL	UL, CE, cUL	UL, CE, cUL	UL, CE, cUL
Ratings	IP66	IP66	IP66	IP66
Voltage Ratings	24VDC ± 10% Isolated	24VDC ± 10% Isolated	24VDC ± 10% Isolated	24VDC ± 10% Isolated
Power Ratings	20 W	20 W	20 W	20 W
Operating Temperature	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C
Net Weight	0.8kg	1.25kg	1.9kg	2.68kg
Bezel Material	Aluminium	Aluminium	Aluminium	Aluminium
Cut-out	192 x 139mm	260 x 202mm	302 x 228mm	385 x 283mm

NOTE: Product images shown are for illustration purposes only



# XGB Programmable Logic Controllers



## Common Features

- Max. 5-Ch Communication with built-in functions and expansion modules
- Enhanced user interface with XG5000 / XG-PD
- Various monitoring functions
- Network diagnosis and monitoring
- Batteryless back-up
- Powerful communication: Built-in RS-232C / 485, 2 Expansions for communication
- Network configuration via Ethernet and Serial connection to iView HMI

## XBC / XEC

- 83ns/step processing speed and floating-point arithmetic with on-board CPU
- Max 10 expansion modules, Max. 384 I/O point control: PLC systems for small and medium-scale applications

## XBM

- 160ns/step processing speed and floating-point arithmetic with on-board CPU
- Max 7 expansion modules, max. 256 I/O point control: PLC Systems for small and medium-scale applications

IMO's new XGB range of programmable logic controllers represents a considerable leap forward in next generation PLC technology. The compact design, increased functionality, high speed processing and improved performance delivers maximum automation at minimum cost. The flexibility of the XGB means that it can be integrated into any solution with ease, from simple control to complex applications with the choice of two footprint styles depending on space. Utilising expansion cards, which are compatible with either style, the I/O can reach a maximum of 384 points, 5 communication ports and a scan speed of 83ns/step.

The powerful new software's enhanced user interface allows easy network diagnosis plus a variety of monitoring functions. The batteryless back-up guarantee's security of the program throughout the XGB's life cycle.





## XGB PLC Main Units

PLC Type	XBM	XBC	XEC
Supply Voltage	24VDC	24VDC or 100-240VAC	24VDC or 100-240VAC
Relay Output Rating	2A Resistive	2A Resistive	2A Resistive
Transistor Output Rating	0.2A / point	0.5A / point	0.5A / point
Program Capacity	10k steps	15k steps	15k steps
Max I/O Points	240/256 <sup>1</sup>	352/384 <sup>1</sup>	352/384 <sup>1</sup>
Analog Input Resolution <sup>2</sup>	14 Bit	14 Bit	14 Bit
Analog Output Resolution <sup>2</sup>	14 Bit	14 Bit	14 Bit
PID Control	Yes	Yes	Yes
Programming Languages	Ladder	Ladder	IEC61131
High Speed Inputs	Yes	Yes	Yes
Positioning	Yes	Yes	Yes

<sup>1</sup> Main unit I/O + Maximum Expansion I/O

<sup>2</sup> When using Analog Expansion Units

## Product Specification

Part Number	DI	RO (2A)	DO (0.2A)
XBM-DR16S	8	8	-
XBM-DN32S <sup>3</sup>	16	-	16
XBC-DR32H	16	16	-
XBC-DR64H	32	32	-
XBC-DR32H/DC	16	16	-
XBC-DR64H/DC	32	32	-
XEC-DR32H	16	16	-
XEC-DR32H/DC-E <sup>4</sup>	16	16	-
XEC-DR64H	32	32	-
XEC-DR64H/DC-E <sup>4</sup>	32	32	-

<sup>4</sup> 12VDC powered E-Marked PLC controller

## Expansion Units & Accessories

Part Number	DI	Relay Out	DO (0.2A)	AI	AO	RTD	TC
XBE-DC16B	16	-	-	-	-	-	-
XBE-DC32A <sup>3</sup>	32	-	-	-	-	-	-
XBE-RY16A	-	16	-	-	-	-	-
XBE-TN32A <sup>3</sup>	-	-	32	-	-	-	-
XBE-TP32A <sup>3</sup>	-	-	32	-	-	-	-
XBE-DR16A	8	8	-	-	-	-	-
XBF-AD04A	-	-	-	4	-	-	-
XBF-AH04A	-	-	-	2	2	-	-
XBF-DV04A	-	-	-	-	4	-	-
XBF-DC04A	-	-	-	-	4	-	-
XBF-RD04A	-	-	-	-	-	4	-
XBF-TC04S	-	-	-	-	-	-	4
XBL-EMTA	Ethernet comms module						
XEL-BSSA	Modbus I/O TCP adapters						
PMC -310S	Serial programming cable						
USB-301A	USB programming cable						

**NOTE:** Please contact IMO for more expansion modules.

## Breakout Parts

Part Number	Description	Suits	Length M (if applicable)
R40H/20HH-05S-XBM3	Cable link to break out unit TG7-1H40S	XBM	0.5
C40HH-05SB-XBI	Cable link to break out unit TG7-1H40S	XBE	0.5
C40HH-10SB-XBI	Cable link to break out unit TG7-1H40S	XBE	1
TG7-1H40S	Screw I/O termination	XBM & XBE	-

<sup>3</sup> Please contact IMO in order to correctly specify the required break-out parts and expansion modules.

# iSmart Intelligent Relays



- Digital, Analogue and Temperature inputs
- Relay, Transistor and Analogue Outputs
- Powerful control logic in Ladder or Functional Block Diagram
- Available with or without Text HMI screen including programmable function keys
- PID control (up to 30 loops)
- Maths Functions
- Retentive Data Registers
- High Speed Inputs and PWM Outputs
- Link Function
- Multi-language Selectable
- Expansion modules for more I/O and more communication
- iSmart CD-type module connects to iView HMI



## iSmart Base Units

PLC Type	AC Models	DC Models
Supply Voltage	85-264 or 19.6-28.8VAC	19.6-28.8V or 10.2-13.8VDC
Output Rating	8A Relay, 0.5A Transistor	
Timers	31 (Ladder) or 250 (FBD)	
Counters	31 (Ladder) or 250 (FBD)	
Analogue Input Resolution	N/A	12 bit (0.01V)
Analogue Output Resolution	N/A	12 bit (V, mA)
Function Keys (Not in blind version)	8	8
High Speed Inputs	None	2

## Product Specification

Part Number	Supply	DI	Relay Out	AI	Screen
SMT-EA-R10-V3	AC	6	4	-	Y
SMT-EA-R20-V3	AC	12	8	-	Y
SMT-ED-R12-V3	DC	8	4	2	Y
SMT-ED-R20-V3	DC	12	8	4	Y
SMT-ED12-R12-V3	12VDC	8	4	2	Y
SMT-BA-R10-V3	AC	6	4	-	N
SMT-BA-R20-V3	AC	12	8	-	N
SMT-BD-R12-V3	DC	8	4	2	N
SMT-BD-R20-V3	DC	12	8	4	N
SMT-CD-R20-V3	DC	12	8	4	Y

## Accessories

Part Number	Supply	DI	Relay Out	Trn Out	AI	AO	PT100
SMT-MA-R8	100-240V	4	4	-	-	-	-
SMT-MD-R8	24VDC	4	4	-	-	-	-
SMT-MD-T8	24VDC	4	-	4	-	-	-
SMT-MD-4AI	24VDC	-	-	-	4	-	-
SMT-4PT	24VDC	-	-	-	-	-	4
SMT-2AO	24VDC	-	-	-	-	2	-
PC501	USB to Serial Adapter						
SMT-USB	USB Programming Cable						
SMT-PC03	Programming Cable						
SMT-PM04-V3	32k Flash Memory						

# It makes sense to switch to IMO

## We put more in, so you get more out...

- Wide range of products from Sensors to HMI's & PLC's
- The knowledge and experience to deliver the ultimate solutions
- Peace of mind with a 3 Year Warranty as standard



i<sup>3</sup> Intelligent Controller



Remote I/Os



Temperature Controllers



XGB PLC



PLC Starter Kit



Proximity Sensors



Signal Conditioners



Photoelectric Sensors



Other IMO products available include Limit Switches, Level Controllers and much more.

## IMO Worldwide Offices

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