

## Automation Product Range



Solutions with **you** in mind

# Automation Product Range

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

- *Wide range of products from Limit Switches to HMI's & PLC's*
- *The knowledge and experience to deliver the ultimate solution*
- *Peace of mind with a 3 year warranty as standard*
- *Class leading customer & technical support*
- *International approvals*



## IMO Automation Products... Delivering Innovation & Efficiency Worldwide

IMO's range of automation products has been designed specifically to meet the demanding needs of today's designers and engineers whose requirements range from a simple limit switch through to the most advanced HMIs and PLCs ever produced.

The IMO Automation range allows designers and engineers globally to deliver significant technological advances, greater efficiency, reliability and performance in their daily operations for a wide range of applications from a simple wood working machine to the most demanding and complex integrated systems.

IMO's new generation of automation products includes programmable logic controllers, human machine interfaces and improved iSmart intelligent relays packed full of new functions. Our range of sensing and signal conditioning products offer cost effective, high quality solutions to a broad range of processes. With over 40 years experience of servicing the automation market you can be confident that IMO have the products, skills and know-how to help our customers achieve the optimum solution.



## Page 4-8 **i<sup>3</sup> Intelligent Controller**

IMO's acclaimed i<sup>3</sup> Controller reduces equipment costs and build time by integrating PLC, HMI and OpenBus communications technology into a single, easy to mount unit.

## Page 12-13 **iSmart Intelligent Relay**

Easy to use and highly cost-effective controller for small automation applications. Offering 10 to 44 I/O, with Modbus option modules for even greater expandability, the iSmart has the same capability as a small PLC.

## Page 18 **Remote I/O**

A range of compact DIN rail mounting remote I/O conforming to the most popular communication protocols.

## Page 20 **Signal Conditioning**

IMO's Signal Conditioning range of devices has products from 7.2mm wide giving isolation and conditioning to all types of non-hazardous field signals.

## Page 24-30 **Proximity Sensors**

IMO's vast range of inductive sensors are available in many sizes and varying sensing distances suitable for most applications.

## Page 31-33 **Limit Switches**

IMO Limit Switches include features such as safety interlock, bifurcated contacts, high speed actuators and changeable turret positions. A wide variety of actuators complete one of the most comprehensive ranges in the market.

## Page 36 **Power Supplies**

IMO DIN mountable Power Supplies have been especially designed for the control and automation market and include single and three phase versions.

## Page 9-11 **iView HMI Controller**

IMO's market-leading iView HMI Advanced Controller is feature packed and comes as standard with over 480 industry protocols for increased compatibility.

## Page 14-17 **XGB PLC**

The XGB is the PLC that offers maximum automation at an affordable price. With its high performance, functionality and communication features, the XGB can control the most complex of tasks in many different types of applications.

## Page 19 **M2M Data Plans**

IMO M2M SIM cards offer the widest global reach for your machines to communicate with your infrastructure.

## Page 21-24 **Photoelectric Sensors**

High performance Photoelectric Sensors offering accurate and repeatable detection of objects, presence and position for printing, labelling, assembly and packaging applications, to provide cost effective and simple alternative to mechanical guarding.

## Page 30 **Level Controllers**

IMO DIN mountable Liquid Level Controllers are easy to install and configure.

## Page 34-35 **Variable Speed Drives**

For over 30 years, IMO have been at the cutting edge of AC Drives design and manufacturing. The market-leading range of IMO Jaguar AC Drives has continuously innovated in order to maintain its position at the very forefront of inverter technology.

# i<sup>3</sup> Intelligent Control Station

Range: i<sup>3</sup>AX, i<sup>3</sup>BX, i<sup>3</sup>CX, i<sup>3</sup>CMini, i<sup>3</sup>E, i<sup>3</sup>DX



## Common i<sup>3</sup> Features

- Addressable function keys
- Configurable serial communication ports
- Integral CAN port
- Integral Ethernet port
- Up to 24 digital inputs (integral)
- Up to 6 analogue inputs (integral)
- Up to 16 digital outputs (integral)
- Up to 4 analogue outputs (integral)
- High speed counter
- Stepper control (PWM)
- CAN, serial & Ethernet based remote I/O
- Modem interface
- USB port for programming
- microSD™ removable media up to 32GB
- PID control
- Alarm function
- Real time clock
- IP65 (NEMA 4X) protection
- Free software
- Supports i<sup>3</sup>-RMI
- Voltage range: 10-30VDC
- FCC, CE, UL, cUL approved

## Key Features i<sup>3</sup>AX

- 128 x 64 monochrome LCD display
- 20 function keys

## Key Features i<sup>3</sup>BX

- 240 x 128 monochrome touch screen
- 4 function keys



## Key Features i<sup>3</sup>CMini

- 320 x 240 touch screen 3.5" display
- 4 function keys
- High resolution 65k colours
- USB port for flash drives up to 2TB

## Key Features i<sup>3</sup>CX

- 640 x 480 touch screen 5.7" display
- 5 function keys
- High resolution 65k colours
- USB port for flash drives up to 2TB

## Key Features i<sup>3</sup>E

- 800 x 480 touch screen 7" display
- 5 function keys
- High resolution 65k colours
- 2 integral Ethernet ports
- 2 integral CAN ports
- USB port for flash drives up to 2TB

## Key Features i<sup>3</sup>DX

- 640 x 480 touch screen 10.4" display
- 7 function keys
- High resolution 65k colours
- 2 integral Ethernet ports
- 2 integral CAN ports
- USB port for flash drives up to 2TB

**IMO's flagship i<sup>3</sup> Controller reduces equipment costs and build time by integrating PLC, HMI and Openbus communications technology into a single, easy to mount unit.**

Available with a combination of Digital and Analogue I/O including Thermocouple and PT100 inputs, the i<sup>3</sup> Controller is ideal for both process control and factory automation applications; especially as it is backed by IMO's unique 3-year warranty.

Although measuring from just 96mm<sup>2</sup> by 57.5mm deep, the i<sup>3</sup> nevertheless packs in levels of functionality that makes the unit the most flexible and cost effective in its class. In addition to digital and analogue I/O, and integral HMI, the i<sup>3</sup> integrates advanced controls such as PID for process control, PWM for stepper motor control, GSM modem or Ethernet, Recipe, Alarm, Timer, microSD™, High Speed Counter functions, web server and FTP, all of which are supported by FREE to download IMO i<sup>3</sup> Configurator Software.

The i<sup>3</sup> is the no-compromise solution for all-in-one display, control and communication and I/O requirements.

## i<sup>3</sup> Specifications

	i <sup>3</sup> AX	i <sup>3</sup> BX	i <sup>3</sup> CMini	i <sup>3</sup> CX	i <sup>3</sup> E	i <sup>3</sup> DX
Supply Voltage	10-30VDC	10-30VDC	10-30VDC	10-30VDC	10-30VDC	10-30VDC
Colours	2	2	65535	65535	65535	65535
Screen	128 x 64 F-Key	240 x 128 Touch	320 x 240 Touch	640 x 480 Touch	800 x 480 Touch	640 x 480 Touch
Analogue Input Resolution	12/14 (V/mA) Bit 16 Bit (TC/RTD/mV)*	12/14 (V/mA) Bit 16 Bit (TC/RTD/mV)*	12/14 (V/mA) Bit 16 Bit (TC/RTD/mV)*	12/14 (V/mA) Bit 16 Bit (TC/RTD/mV)*	12/14 (V/mA) Bit 16 Bit (TC/RTD/mV)*	12/14 (V/mA) Bit 16 Bit (TC/RTD/mV)*
Analogue Output Resolution	12 Bit (V/mA)	12 Bit (V/mA)	12 Bit (V/mA)	12 Bit (V/mA)	12 Bit (V/mA)	12 Bit (V/mA)
Function Keys	20	5	5	6	6	7
Serial Ports	2	2	2	2	3	2
USB Ports	1	1	2	2	2	2
CAN Ports	1	1	1	1	2	1
Ethernet Ports	1	1	1	1	2	2

\* Model dependant

i <sup>3</sup> AX	DI	DO	AI	AO
I3AX12X/10B04-SEHF	12	12	2	-
I3AX12X/10D03-SEHF	12	6 Relay	4	-
I3AX12X/13C14-SEHF	12	12	2 UAI*	2
I3AX12X/20B05-SEHF	24	16	2	-
I3AX12X/10E24-SEHF	12	12	6 UAI*	4

i <sup>3</sup> BX	DI	DO	AI	AO
I3BX12Y/10D03-SEHF	12	6 Relay	4	-
I3BX12Y/13C14-SEHF	12	12	2 UAI*	2
I3BX12Y/20B05-SEHF	24	16	2	-
I3BX12Y/10E24-SEHF	12	12	6 UAI*	4

i <sup>3</sup> CMini	DI	DO	AI	AO
I3CM12Y/10B04-SEHF	12	12	2	-
I3CM12Y/10D03-SEHF	12	6 Relay	2	-
I3CM12Y/13C14-SEHF	12	12	2 UAI*	2
I3CM12Y/20B05-SEHF	24	16	2	-
I3CM12Y/00000-SEHF	-	-	-	-
I3CM12Y/10E24-SEHF	12	12	6 UAI*	4

\* UAI - Universal Analogue Inputs (V, mA, T/C, PT100, mV)

i <sup>3</sup> CX	DI	DO	AI	AO
I3CX12Z/10D03-SEHF	12	6 Relay	4	-
I3CX12Z/20B05-SEHF	24	16	2	-
I3CX12Z/13C14-SEHF	12	12	2 UAI*	2
I3CX12Z/10E24-SEHF	12	12	6 UAI*	4
I3CX12Z/00000-SEHF	-	-	-	-

i <sup>3</sup> E	DI	DO	AI	AO
I3E14Z/10B04-SEHF	12	12	2	-
I3E14Z/10D03-SEHF	12	6 Relay	4	-
I3E14Z/13C14-SEHF	12	12	2 UAI*	2
I3E14Z/20B05-SEHF	24	16	2	-
I3E14Z/00000-SEHF	-	-	-	-
I3E14Z/10E24-SEHF	12	12	6 UAI*	4

i <sup>3</sup> DX	DI	DO	AI	AO
I3DX12Z/10D03-SEHF	12	6 Relay	4	-
I3DX12Z/13C14-SEHF	12	12	2 UAI*	2
I3DX12Z/10E24-SEHF	12	12	6	4
I3DX12Z/20B05-SEHF	24	16	2	-
I3DX12Z/00000-SEHF	-	-	-	-



## i<sup>3</sup> Configurator Software

IMO provides license free programming software for all i<sup>3</sup> Controllers. Simply go to [www.imopc.com](http://www.imopc.com) and click on "Software" to find the range of products you need software for, and then download as required.

## Accessories

I3-MA-25G	2.5G Modem with Antenna
I3-MA-30G	3G Modem with Antenna
I3-PC45	Serial Programming Cable
PC501	USB to Serial Adaptor
I3-PS	Profibus Slave Expansion
USB-301A	USB Programming Cable

**IMO Solar Cube** Solar Tracker & Measurement Controller  
Intelligently Powered by i<sup>3</sup> - Go to [www.imopc.com](http://www.imopc.com) for more information



[www.imopc.com](http://www.imopc.com)

# i<sup>3</sup> Intelligent Control Station

Range: i<sup>3</sup>ALite, i<sup>3</sup>CLite, i<sup>3</sup>ELite



## Common i<sup>3</sup> Features

- Addressable function keys
- Configurable serial communication ports
- Integral CAN port
- Up to 12 digital inputs
- Up to 4 analogue inputs
- Up to 12 digital outputs
- Up to 2 analogue outputs
- High speed counter
- CAN, serial & Ethernet based remote I/O
- USB port for programming
- microSD™ removable media up to 32GB
- PID control
- Alarm function
- Real time clock
- IP65 (NEMA 4X) protection
- Supports i<sup>3</sup>-RMI\*
- Free software
- FCC, CE, UL, cUL approved

\* Model dependant

## Key Features i<sup>3</sup>ALite

- 128 x 64 monochrome LCD display
- 14 function keys

## Key Features i<sup>3</sup>CLite

- 480 x 272 touch screen 4.3" display
- 4 virtual function keys
- High resolution 65K colours
- Integral Ethernet port
- Integral RTD inputs

## Key Features i<sup>3</sup>ELite

- 800 x 480 touch screen 7.0" display
- 5 virtual function keys
- High resolution 65K colours
- Integral Ethernet port
- Integral RTD inputs



**IMO's flagship i<sup>3</sup> Controller is now available with an entry level i<sup>3</sup> Lite series combining all familiar features and functions you have come to expect from the i<sup>3</sup> range.**

Available with a combination of Digital and Analogue I/O including PT100 inputs, the i<sup>3</sup> Lite Controller is ideal for both process control and factory automation applications; especially as it is backed by IMO's unique 3-year warranty. The i<sup>3</sup> Lite Controller is available with two input/output configurations, reflecting today's application needs.

The i<sup>3</sup> Lite range packs in levels of functionality that makes the unit the most flexible and cost effective in its class. In addition to digital and analogue I/O, and integral HMI, the i<sup>3</sup> Lite integrates advanced controls such as PID for process control, Ethernet\*, Recipe, Alarm, Timer, microSD™, High Speed Counter functions all of which are supported by the same, familiar i<sup>3</sup> Configurator Software used for the standard i<sup>3</sup> range.

The i<sup>3</sup> is the no-compromise solution for all-in-one display, control and communication.

\* Model dependant

## i<sup>3</sup> Lite Specifications

	i <sup>3</sup> ALite	i <sup>3</sup> CLite	i <sup>3</sup> ELite
Supply Voltage	24VDC	24VDC	24VDC
Colours	Mono	65535	65535
Screen	128 x 64 F-Key	480 x 272 Touch	800 x 480 Touch
Analogue Input Resolution	12 Bit (mA)	12 Bit (mA/RTD)	12 Bit (mA/RTD)
Analogue Output Resolution	12 Bit (mA)	12 Bit (mA)	12 Bit (mA)
Function Keys	14	4	5
Serial Ports	2	2	2
USB Ports	1	1	1
CAN Ports	1	1	1
Ethernet Ports	-	1	1

i <sup>3</sup> ALite	DI	DO	AI	AO
i3AL12X/10D12-SCHF	12	6 Relay + 2	4	2
i3AL12X/10D14-SCHF	12	12	4	2

i <sup>3</sup> C Lite	DI	DO	AI	AO
i3CL12Y/10D12-SEHF	12	6 Relay + 2	4*	2
i3CL12Y/10D14-SEHF	12	12	4*	2

i <sup>3</sup> ELite	DI	DO	AI	AO
i3EL12Y/10D12-SEHF	12	6 Relay + 2	4*	2
i3EL12Y/10D14-SEHF	12	12	4*	2

\* Supports RTD input

# i<sup>3</sup> Intelligent Control Station

Integrated HMI with Control Engine



## Key Features

- PID control
- Alarm function
- Real time clock
- IP65 (NEMA 4) protection
- Free software
- Voltage range: 10-30VDC
- CE, UL, cUL approved



The i<sup>3</sup> Colour-Touch Operator Interface series features a fast, powerful logic engine and high resolution touch screen. The i<sup>3</sup> Operator Interface is a robust, reliable control product that combines a traditional controller, programmed in ladder logic or IEC 61131, an operator interface and networking into an integrated, all-in-one unit using a single software package.

The i<sup>3</sup> Operator Interface has 6 screen sizes to choose from 3.5", 5.7", 7", 10.4" or 15" and a typical logic scan rate of 0.2ms/K. In addition, the i<sup>3</sup> Operator Interface has third party protocols for enhanced PLC connectivity plus embedded Ethernet and supports many Internet capabilities such as remote data access, programming, hosting HTML-based Web pages and FTP sites.

A choice of Ethernet, Modbus, CAN remote I/O options are available for the i<sup>3</sup> Operator Interface to add the I/O system to enhance the control solution. An integral removable media function allows users to easily store machine or process data. Programs can be updated and loaded through the memory card, a real advantage for OEMs or those supporting remote sites. i<sup>3</sup> controllers provide operator interface, process control, and communication functionality. This modularity allows the i<sup>3</sup> Operator Interface to be more precisely tailored to meet application requirements.

## i<sup>3</sup> Operator Interface Specifications

	I3CM12Y/ 00000-SEHF	I3CX12Z/ 00000-SEHF	I3E14Z/ 00000-SEHF	I3DX12Z/ 00000-SEHF	I3HX15/ 00000-SEHF
Supply Voltage	10-30VDC	10-30VDC	10-30VDC	10-30VDC	18-30VDC
Colours	65535	32768	65535	65536	16 million
Screen	3.5" QVGA	5.7" TFT	7" WVGA TFT	10.4" VGA	15" XGA TFT
Removable Media	32GB microSD™	32GB microSD™	32GB microSD™	32GB microSD™	32GB microSD™
Function Keys	5	6	6	7	7
Serial Ports	2	2	3	2	3
USB Port	2	2	2	2	1
CAN Port	1	1	2	2	2
Ethernet Port	1	1	2	2	2

# i<sup>3</sup> Remote Machine Interface

## Monitor & Control Plant Data From Your Mobile Device

Now you can monitor and control plant data from the palm of your hand with IMO i<sup>3</sup> RMI. Published directly from the i<sup>3</sup> Configurator, i<sup>3</sup> RMI allows the same or unique Web pages to be monitored and controlled from your computer, tablet or other mobile device. Developed completely within our i<sup>3</sup> Configurator environment, i<sup>3</sup> RMI allows for state-of-the-art HTML5 development without the need for web programming skills. The licencing and registration process is quick and simple while the benefits and affordability of i<sup>3</sup> RMI will truly change your world.



### i<sup>3</sup> Configurator Configurability

You don't have to be a professional web developer to benefit from the remote-accessing capabilities for i<sup>3</sup> RMI. With i<sup>3</sup> RMI, we've made accessing your i<sup>3</sup> controller as smooth and simple as possible, by putting the i<sup>3</sup> RMI configuration right within our standard programming software. Now i<sup>3</sup> Configurator allows you to create, monitor and control your i<sup>3</sup> application remotely without any manual HTML development.

### Cybersecurity

Our controllers help make your operation run, and by adding our i<sup>3</sup> RMI remote monitoring and control functionality, we will continue to keep you running; even if you are not directly in front of the controller. To do that seamlessly, we have incorporated high level security algorithms like: 128 bit SSL encryption, Industry Standard Hash Security Technology as well as the ability to work within your existing IT structure, ensuring continued uptime at all times.

### Level-Based, Object Security

Within i<sup>3</sup> Configurator you can assign a level of access to specific users and configure their associated passwords. Not only can you manage who accesses certain screens, you can govern who has the ability to control the screens. From graphic objects to application commands - you control who can do what, all with, and through, i<sup>3</sup> RMI.

### IoT - Internet of Things

Contributing to the global trend known as the Internet of Things (or IoT), our i<sup>3</sup> RMI instantly connects you to your automated applications. With i<sup>3</sup> RMI, you have the ability to remotely monitor and control easier and faster than ever before, all through your phone, computer, or tablet - providing you with the necessary insights to grow and improve your business.

### HTML5

Quickly and instantly delivering almost everything you want to accomplish with your application online to your web browser, HTML5 allows communications across all of your devices. Browser independence assures that your i<sup>3</sup> screen looks the same on your phone, tablet, or computer as it does on the actual unit, giving you confidence that the control is in your hands.

### Scalable Vector Graphics (SVG)

Minimizing pixelization and blur, scalable vector graphics are exactly what the name implies - images or pieces of artwork that proportionally change to any specified size. You can scale them to any proportion without losing quality. This means that when you design i<sup>3</sup> screens, they will look just sharp, clear, and professional regardless of the device you use, no matter what size.

### Licencing Capabilities

Whether you're looking to utilize one connected device or many, our licences come in manageable packages that will work within the scope of most applications and organisations. Unable to access the internet while licencing a specific unit? Our i<sup>3</sup> RMI licencing technology allows for off-line licencing. And it is quick, easy and secure. To find out more about i<sup>3</sup> RMI and available licenses, please email [automation@imopc.com](mailto:automation@imopc.com)

Licenses	
I3-RMI-DEMO	1 User, 1 Page, 5 Points
I3-RMI-BASIC	5 Users, 25 Pages, 100 Points
I3-RMI-PRO	254 Users, 1023 Pages, 50000 Points

# iView

## Advanced HMI Controller



### Key Features

- IP66 protection (M & H series)\*
- 5 Integral serial ports (inc. screwless)\*
- FTP functionality\*
- Integral Ethernet port\*
- Removable media for data logging
- Remote capability\*
- 65k colour resistive touch screen
- Integral offline software simulation
- Over 480 industry protocols as standard
- Aluminium bezel available\*
- Screen configuration in either landscape or portrait mode

\* Some of the features listed above are model dependant



### See the difference with a huge range of features included as standard

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

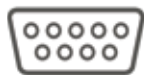
The new HMI's have high resolution 65K colour resistive touch LCD TFT screens operating on an ARM based Processor. The compact and well-designed bodies are packed with features. Communication and data logging is made easy by incorporating a number of ports; two USB, one Ethernet\*, up to five Serial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

Now featuring IoT functionality, the iView is rich in communication features, and allows for remote connectivity via VNC server or Android App "HMI In Hand" and IDCS remote functions. The iView has integrated Ethernet protocols (Modbus TCP/IP, BACnet/IP, Profinet/IP), and Serial protocols (including Modbus RTU, BACnet, Siemens MPI).

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



Ingress Protection for Dust Proofing and Water Resistance



5 In-built Serial Ports including 1 x Screwless\*



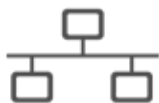
Multiple screen sizes up to 15.0" with portrait or landscape orientation



In-built FTP file transfer functionality allowing remote download



Plug in power terminal for easyfit



In-built Ethernet Port for remote connectivity



2 In-built USB Ports - 1 x USB A, 1 x USB B



Aluminium bezel available on selected models



MicroSD card\* storage for Data Logging

\* Some of the features listed above are model dependant

## iView E Series Specifications

	IV204E-S0CP	IV204E-SECP	IV207E-SECP	IV210E-SECP
Screen Size	4.3" (16:9)	4.3" (16:9)	7.0" (16:9)	10.1" (16:9)
Resolution	480 x 272	480 x 272	800 x 480	1024 x 600
Colours	65k	65k	65k	65k
Supply Voltage	24VDC	24VDC	24VDC	24VDC
Removable Media	Yes	Yes	Yes	Yes
Serial Ports	3	3	3	3
USB Ports	2	2	2	2
Ethernet Ports	No	1	1	1
Operating Temperature	0°C to +50°C	0°C to +50°C	0°C to +50°C	0°C to +50°C
Approvals	CE, FCC	CE, FCC	CE, FCC	CE, FCC

\* E Series iView HMI offer IP65 protection on all models. Aluminium bezel is not available on E Series.

## iView M Series Specifications

	IV204M-SEAP	IV207M-SEAP	IV210M-SEAP	IV212M-SEAA	IV215M-SEAA
Screen Size	4.3" (16:9)	7.0" (16:9)	10.4" (16:9)	12.1" (16:9)	15.0" (16:9)
Resolution	480 x 272	800 x 480	800 x 600	800 x 600	1024 x 768
Colours	65k	65k	65k	65k	65k
Supply Voltage	24VDC	24VDC	24VDC	24VDC	24VDC
Removable Media	Yes	Yes	Yes	Yes	Yes
Serial Ports	4	5	5	5	5
USB Ports	2	2	2	2	2
Ethernet Ports	1	1	1	1	1
Operating Temperature	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C
Approvals	CE, UL, cUL, FCC	CE, UL, cUL, FCC	CE, UL, cUL, FCC	CE, UL, cUL, FCC	CE, UL, cUL, FCC

## iView H Series Specifications

	IV07H-SEAA	IV10H-SEAA	IV12H-SEAA	IV15H-SEAA
Screen 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
Supply Voltage	24VDC	24VDC	24VDC	24VDC
microSD™ Slot	up to 32GB	up to 32GB	up to 32GB	up to 32GB
Serial Ports	3	3	3	3
USB Ports	2	2	2	2
Ethernet Ports	1	1	1	1
Operating Temperature	-20°C to +60°C	-20°C to +60°C	-20°C to +60°C	-20°C to +60°C
Approvals	CE, UL, cUL, FCC	CE, UL, cUL, FCC	CE, UL, cUL, FCC	CE, UL, cUL, FCC

## Accessories

<b>MSD-16GB</b>	16GB microSD™ Card
<b>IV-USB</b>	USB Programming Cable
<b>SMTIV-RS232</b>	iView to iSmart RS232 Communication Cable



MSD-16GB  
16GB microSD™ Card



## iView Developer Software

IMO provides license free programming software for all iView Controllers. Simply go to [www.imopc.com](http://www.imopc.com) and click on "Software" to find the range of products you need software for, and then download as required.

# iView Remote Capability



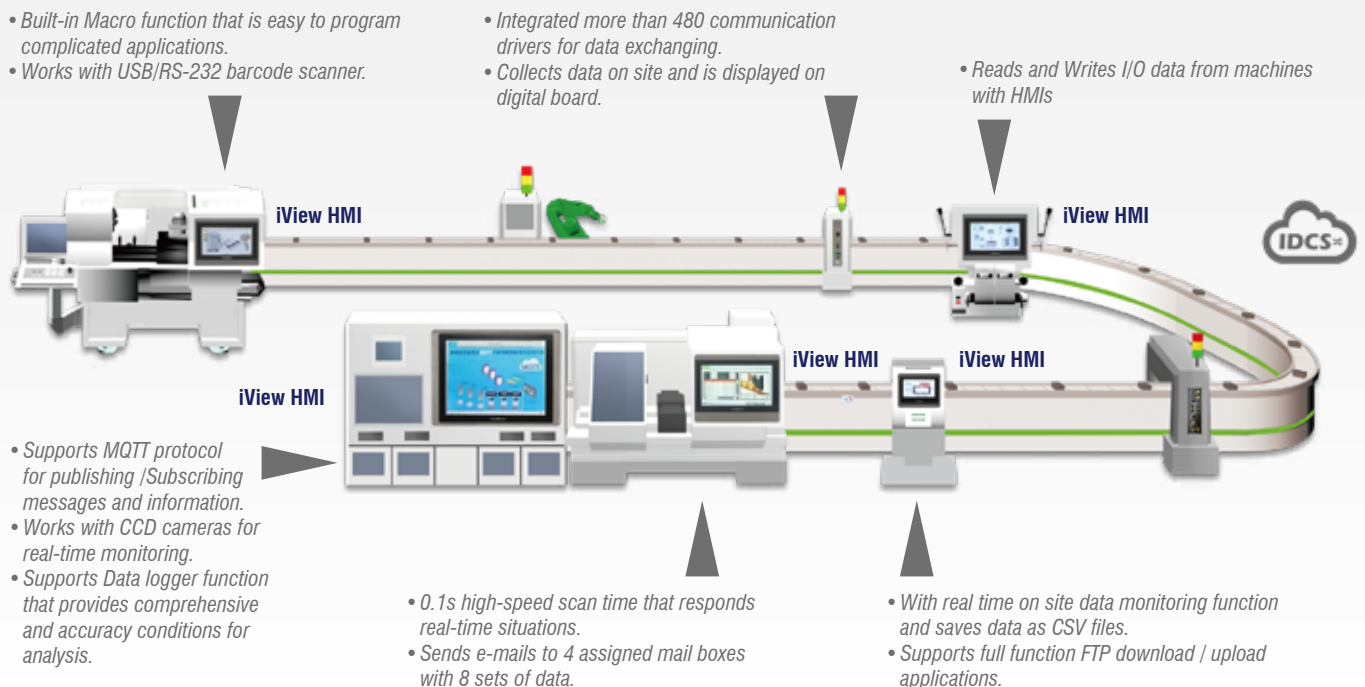
## iView Second Generation HMIs with IoT Features

IMO's second generation of iView Advanced HMIs are provided with IoT features for remote monitoring and control, built-in as standard. The IoT features include IDCS, MQTT, "HMI-in-Hand" Android Application and Windows based software for remote capability. Functionality is available with the iView Developer (v4.0) configuration software. For information regarding complete functionality and pricing, email [automation@imopc.com](mailto:automation@imopc.com).

### IDCS - Inter-Device Connection Service

The Inter-Device Connection Service (IDCS) is included with the new generation of iView Advanced HMIs, and accomplishes non-VPN remote monitoring, updating and controlling functions, with the following benefits:

- Accomplishes most tasks remotely, making daily maintenance easier, thus reducing costs
- Saves and retrieves data remotely to non-static IP, public IP and VPN supported devices
- Remote download / upload of HMI and PLC applications
- VNC built-in, HMI-in-Hand Android Application, supports monitor / control multiple HMIs by mobile devices



### Designed for automation and non-IT engineers - Easy to set up!

- Data acquisition and remote debugging functions coexist
- Can resolve IP address conflicts
- Fit large scale applications with built-in security protections
- Supports multi-level rights management
- Self-developed, can be customized on demand
- User operation is controllable and traceable

### MQTT - Message Queuing Telemetry Transport

The Message Queuing Telemetry Transport (MQTT) is designed to be open, simple and lightweight. It is a publisher / subscriber-based communication protocol, which allows message-based transfer between applications. The MQTT is suitable for continuous monitoring of sensory data, such as level, temperature, pressure etc.

IV2-DEV-LIC

iView Remote Device License

# iSmart

## Intelligent Relays



### Key Features

- Digital, analogue & temperature inputs
- Relay, transistor & 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 & PWM outputs
- Link function
- Multi-language selectable
- Expansion modules for more I/O & communication



**IMO's iSmart is a flexible, easy to use and highly cost-effective controller for small automation applications. Offering digital I/O from 10 to 44, up to 12 analogue I/O and Modbus options modules for even greater expandability. The iSmart has the same capability as a small PLC, but with reduced complexity and cost, high relay switching capability (8A), free of charge IMO software and the security of our 3-year guarantee.**

Available in AC or DC versions, the iSmart is an ideal controller for OEM applications, such as packaging machines, vending machines, conveyors and automatic door systems. The range is expandable and can be either blind (without display or keypad), or with display screen. All screen models have multi-language capability (English, German, French, Italian, Spanish, Portuguese, Chinese, Russian, Polish and Turkish) enabling OEM's to closely tailor the iSmart package to suit their ideal cost/control requirements. This is made even easier by the competitive nature of the pricing for the iSmart, with list prices starting at below £60 for a 10 I/O unit.

Easily adapted to all types of machines, the iSmart is a simplified, modular range of intelligent relays, comprising base modules of either 10, 12 or 20 I/O points. These are expandable up to 44 digital I/O (including 4 configurable as analogue inputs) and 12 analogue I/O by adding a maximum of seven modules. In addition, the highly functional iSmart package also includes up to 30 PID loops, two 1kHz High speed inputs, a real time clock, one Pulse Width Modulation output (PWM) for position control, 8A switching relay outputs, a memory module option (particularly useful for OEMs), a communication interface to IMO HMIs or computers and a Modbus high speed data link that enables the linking of remote I/O.

Speedy, time saving programming and set-up of the iSmart is guaranteed by the use of industry standard programming languages: Relay Ladder (300 lines, 1200 steps, 6 instructions per line) or Function Block Diagram (260 function blocks). The controller can be programmed via a PC using SMT Client, IMO's free-of-charge software, or the integral keypad. The SMT Client software provides program simulation for Windows 8 and Windows 10, enabling designs to be verified and tested offline. In addition, the iSmart SMT Client also provides on-line monitoring in both ladder and function block modes to enable rapid fault recognition and diagnosis.



### iSmart SMT Client Software

IMO provides programming software for all iSmart Intelligent Relays. Simply go to [www.imopc.com](http://www.imopc.com) and click on "Software" to find the range of products you need software for, and then download as required.

## iSmart Base Unit Specifications

	AC Models	DC Models
Supply Voltage	85-264VAC or 19.6-28.8VAC	19.6-28.8VDC 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
Function Keys*	8	8
High Speed Inputs	None	2

\* Not in blind version



▲  
SMT-BA-R10-V3  
Main Unit

## iSmart Product Selection

	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
---------------	----	----	---	---	---

\* Analogue inputs are 0-10VDC type in main units

**NOTE:** Transistor outputs are also available, please call for more information



▲  
SMT-MA-R8  
Expansion Module



▲  
SMT-USB  
USB Programming Cable

## Accessories

	Supply	DI	Relay Out	Trn Out	AI*	AO	PT 100
SMT-MA-R8	100-240VAC	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 Adaptor						
SMT-USB	USB Programming Cable						
SMT-PC03	Programming Cable						
SMT-PM04-V3	32k Flash Memory						
SMTIV-RS232	iView to iSmart RS232 Communication Cable						

**NOTE:** 12VDC and 24VAC versions are available, please call for more information



▲  
SMT-PM04  
32k Flash Memory

# XGB

## Programmable Logic Controllers



### Key XBM/XEC/XBC Features

- Max. 5-channel communication with integral functions & expansion modules
- Enhanced user interface with XG5000
- Various monitoring functions
- Network diagnosis & monitoring
- Communication ports: RS232 & RS485
- Network configuration via Ethernet & Cnet I/F



IMO's 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 enhanced user interface of the powerful new XG5000 programming software allows easy network diagnosis plus a variety of monitoring functions.

## XBM Programmable Logic Controllers

### Key Features 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
- Ladder programming

### XBM PLC Specification

Supply Voltage	24VDC
Relay Output Rating	2A Resistive
Transistor Output Rating	0.2A / point
Program Capacity	10k steps
Max. I/O Points	240/256*1
Analogue Input Resolution*2	14 bit
Analogue Output Resolution*2	14 bit
PID Control	Yes
Programming Languages	Ladder
High Speed Inputs	Yes
Positioning	Yes

\*1 Model dependant

\*2 When using Analogue Expansion Units



### XBM PLC Product Selection

	DI	RO (2A)	DO (0.2A)
XBM-DR16S	8	8	-
XBM-DN32S*3	16	-	16

\*3 Please contact IMO in order to correctly specify the required breakout cable and terminal boards

## XBC Programmable Logic Controllers

### Key Features XBC

- 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
- Ladder programming

### XBC PLC Specification

Supply Voltage	24VDC or 100-240VAC
Relay Output Rating	2A Resistive
Transistor Output Rating	0.5A / point
Program Capacity	15k steps
Max. I/O Points	352/384* <sup>1</sup>
Analogue Input Resolution* <sup>2</sup>	14 bit
Analogue Output Resolution* <sup>2</sup>	14 bit
PID Control	Yes
Programming Languages	Ladder
High Speed Inputs	Yes
Positioning	Yes

\*<sup>1</sup> Model dependant

\*<sup>2</sup> When using Analogue Expansion Units



### XBC PLC Product Selection

	DI	RO (2A)	DO* <sup>3</sup> (0.2A)
XBC-DR32H	16	16	-
XBC-DR64H	32	32	-
XBC-DR32H/DC	16	16	-
XBC-DR64H/DC	32	32	-

\*<sup>3</sup> Please contact IMO to order transistor output versions

## XEC Programmable Logic Controllers

### Key Features 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
- Ladder, structured text & SFC programming

### XEC PLC Specification

Supply Voltage	10-24VDC or 100-240VAC
Relay Output Rating	2A Resistive
Transistor Output Rating	0.5A / point
Program Capacity	15k steps
Max. I/O Points	352/384* <sup>1</sup>
Analogue Input Resolution* <sup>2</sup>	14 bit
Analogue Output Resolution* <sup>2</sup>	14 bit
PID Control	Yes
Programming Languages	IEC 61131
High Speed Inputs	Yes
Positioning	Yes

\*<sup>1</sup> Model dependant

\*<sup>2</sup> When using Analogue Expansion Units



### XEC PLC Product Selection

	DI	RO (2A)	DO* <sup>3</sup> (0.2A)
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>3</sup> Please contact IMO to order transistor output versions

\*<sup>4</sup> E-marked versions for 12V vehicle applications

# XGB continued

## XGB U Programmable Logic Controllers



### Key Features XGB U

- Dual port Ethernet
- 1 channel RS232 port
- 1 channel RS485 port
- Integral web server & FTP
- Data logging function
- Integral USB port
- 8 channel high speed counter
- Integral email & SMTP
- Versions available with integral analogue or positioning options



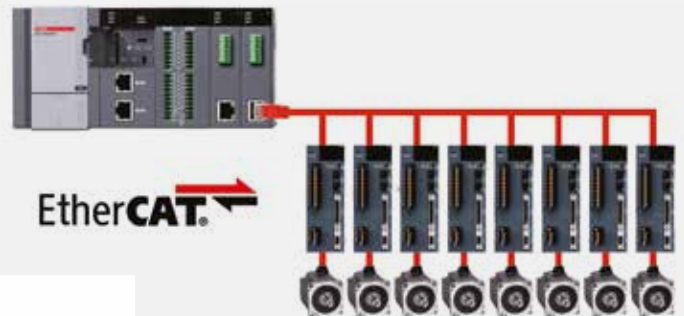
With so many included innovations, the XGB U sets new standards in ultimate PLC performance. Compatible with the existing expansion modules of the XGB range, and with a host of outstanding features, the XGB U will provide the utmost efficiency for your applications. The integral web server offers monitoring of PLC information and data through a web browser that includes basic PLC information, module information, diagnostics and flag monitoring, data log file download capability, O/S updating, ladder program updates and more.

With increased CPU processing speeds and increased program capacity, the XGB U is the future of programmable logic controllers.

### EtherCAT Positioning Module (XBF-PN08B)

Offers high speed backplane transmission through USB host function, and standard EtherCAT protocol, CoE (CANopen over EtherCAT) with 1ms communication cycle.

Other features include Max. 8 axes servo driver control, 2-8 axes linear interpolation, 2 axes circular interpolation, 3 axes helical interpolation and 8 types of CAM data to control CAM.



### XGB U PLC Specification

	XBC-U	XEC-U
Supply Voltage	230VAC/24VDC	230VAC/24VDC
Relay Output Rating	2A Resistive	2A Resistive
Transistor Output Rating	0.5A / point, 2A / COM	0.5A / point, 2A / COM
Program Capacity	32k steps	384kbytes
Max. I/O Points	348/352*1	348/352*1
Analogue Input Resolution*2	1/16000*2	1/16000*2
Analogue Output Resolution*2	1/16000*2	1/16000*2
PID Control	Yes	Yes
Programming Languages	Ladder	IEC 61131
High Speed Inputs	8	8
Positioning	Yes	Yes

\*1 Model dependant

\*2 Applies to models with analogue Input/Output only

### XGB U PLC Product Selection

	DI	RO (2A)	DO (0.2A)
XBC-DN(P)32U*3	16	-	16
XBC-DR28U	16	12	-
XBC-DN(P)32UA*3	16	-	16
XBC-DR28UA	16	12	-
XBC-DN(P)32UP*3	16	-	16
XBC-DR28UP	16	12	-
XEC-DR28U	16	12	-

\*3 N = NPN version P = PNP version

U = Standard UA = With Analogue UP = With Positioning

For 24VDC models please add suffix "/DC" to the part number

## Expansion Units & Accessories

Common for all XGB PLC controllers

	DI	Relay Out	DO	AI	AO	RTD	TC
XBE-DC16B	16	-	-	-	-	-	-
XBE-DC32A*1	32	-	-	-	-	-	-
XBE-RY16A	-	16	-	-	-	-	-
XBE-TN16A	-	-	16	-	-	-	-
XBE-TN32A*1	-	-	32	-	-	-	-
XBE-TP16A	-	-	16	-	-	-	-
XBE-TP32A*1	-	-	32	-	-	-	-
XBE-DR16A	8	8	-	-	-	-	-
XBF-AD04A	-	-	-	4	-	-	-
XBF-AD08A	-	-	-	8	-	-	-
XBF-AH04A	-	-	-	2	2	-	-
XBF-DV04A	-	-	-	-	4	-	-
XBF-DC04A	-	-	-	-	4	-	-
XBF-RD04A	-	-	-	-	-	4	-
XBF-TC04S	-	-	-	-	-	-	4
XBF-AD04C	4 Channel Analogue Input Volt / Current 16 Bit						
XBF-LD02S	2 Channel Load Cell Input Module						
XBL-EMTA	Ethernet Communications Module						
XEL-BSSA	Modbus TCP I/O Adapter						
XBF-PD02A	XGBU Positioning Module, 2 Axis, Line Driver Type						
XBF-PN08B	XGBU Network Positioning Module, 8 Axis, EtherCAT						

PMC-310S	Serial Programming Cable
USB-301A	USB Programming Cable
XBC-XECBATTERY	Replacement Battery
XBO-M1024A	Program EEPROM
R40H/20HH-05S-XBM3	0.5m Cable link to breakout unit TG7-1H40S (XBM)
C40HH-05SB-XBI	0.5m Cable link to breakout unit TG7-1H40S (XBE)
C40HH-10SB-XBI	1m Cable link to breakout unit TG7-1H40S (XBE)
TG7-1H40S	Screw I/O Termination (XBM & XBE)

\*1 Please contact IMO in order to correctly specify the required breakout cable and terminal boards



▲  
C40HH-10SB-XBI  
Cable link to breakout unit



▲  
TG7-1H40S  
Screw I/O Termination




▲  
XEL-BSSA  
Modbus TCP I/O System



▲  
XBF-AH04A  
Expansion Module



▲  
XBE-RY16A  
Expansion Module



## XG5000 Programming Software

IMO provides license free programming software for all XGB PLCs. Simply go to [www.imopc.com](http://www.imopc.com) and click on "Software" to find the range of products you need software for, and then download as required.

# Remote I/O



## Key Features

- For use with *i*<sup>3</sup>AX, *i*<sup>3</sup>BX, *i*<sup>3</sup>CX, *i*<sup>3</sup>CMini, *i*<sup>3</sup>DX, *i*<sup>3</sup>E, *i*<sup>3</sup>HX & XGB
- Analogue & Digital I/O modules
- Up to 16 bit resolution
- Configurable DC voltage or current inputs
- Configurable T/C & RTD inputs
- 2kV isolation
- 24VDC supply
- Removable screw terminal plugs



## Remote I/O Selection

		DI	DO	AI	AO	RTD	T/C
iOS - Serial/Modbus	IOS/M04IPX-D1	-	-	-	-	4 (0.01°C)	-
	IOS/M08ICX-D1	-	-	8x mA	-	-	-
	IOS/M08IVX-D1	-	-	8x V	-	-	-
	IOS/M08ITX-D1	-	-	-	-	-	8 (0.01°C)
	IOS/M04OXA-D1	-	-	-	4x V/mA	-	-
	IOS/M08OXV-D2	-	-	-	8x V	-	-
	IOS/M08BDR-D1	4x NPN	4x 2A Relay	-	-	-	-
	IOS/M12BDD-D2	4x NPN	8x NPN	-	-	-	-
	IOS/M12IDX-D2	12x NPN	-	-	-	-	-

iSmart - Modbus	SMT-CD-R20-V3	12	8x 8A Relay	4x 0-10V	-	-	-
	SMT-MD-R8	4	4x 8A Relay	-	-	-	-
	SMT-MD-T8	4	4	-	-	-	-
	SMT-MD-4AI	-	-	4x 0-10V	-	-	-
	SMT-4PT	-	-	-	-	4x PT100	-
	SMT-2AO	-	-	-	2x V/mA	-	-

## Smart I/O System

Smart I/O - Serial or iCAN	GSL-DT4C1	16x 24VDC	16	-	-	-	-
	GSL-RY2C	-	16x 2A Relay	-	-	-	-
	GSL-D24C	32x 24VDC	-	-	-	-	-
	GCL-A21A	-	-	12x V/mA	-	-	-
	GCL-AT1A	-	-	8x V/mA	4x V/mA	-	-
	GCL-DT4A	16x 24VDC	16	-	-	-	-
	GCL-RY2A	-	16x 2A Relay	-	-	-	-
	GCL-D24A	32x 24VDC	-	-	-	-	-

Modbus / TCP	XEL-BSSA	All the expansion units of the XGB range can be used.
--------------	----------	---

iCAN / CAN OPEN	XCL-BSSA*	All the expansion units of the XGB range can be used.
	XOL-BSSA*	All the expansion units of the XGB range can be used.

\* Can only be used with *i*<sup>3</sup> controller

The IMO range of Remote I/O delivers a total choice for each application depending on available space, performance and price per I/O point. For high accuracy on analogues, the iOS and Smart I/O have up to 16 bit resolution.

IMO's iOS Remote I/O system uses serial communications to achieve a reliable interface between the controller and the locations of inputs and outputs. Configurable directly from the *i*<sup>3</sup> Intelligent Controller, iOS offers a flexible and fast solution to systems requiring a high quantity of mixed I/O types not supported by conventional PLC systems. Removable terminals facilitate simple installation and maintenance while 2kV isolated I/O points ensure accurate and noise free integration of analogue signals.

# M2M Data Plans

## Machine to Machine SIMs

### Key Features

- Robust, tougher than normal SIM cards
- Global open roaming
- Over 150 countries covered as standard

IMO M2M SIM cards offer the widest global reach, and the most flexible pricing plans for your machines to communicate with your infrastructure.

Our unique SIM cards are able to roam across most countries, using a single and highly competitive price plan. The IMO SIM card does not hold a preference to the network it attaches to, rather always preferring to connect to the strongest signal available. This will give you complete peace of mind, knowing that where there is a signal, your device will always connect.

### M2M Data Plans

Data Usage	M2M-DATA-10MB	10MB Monthly Allowance
	M2M-DATA-30MB	30MB Monthly Allowance
	M2M-DATA-50MB	50MB Monthly Allowance
	M2M-DATA-100MB	100MB Monthly Allowance
	M2M-DATA-200MB	200MB Monthly Allowance

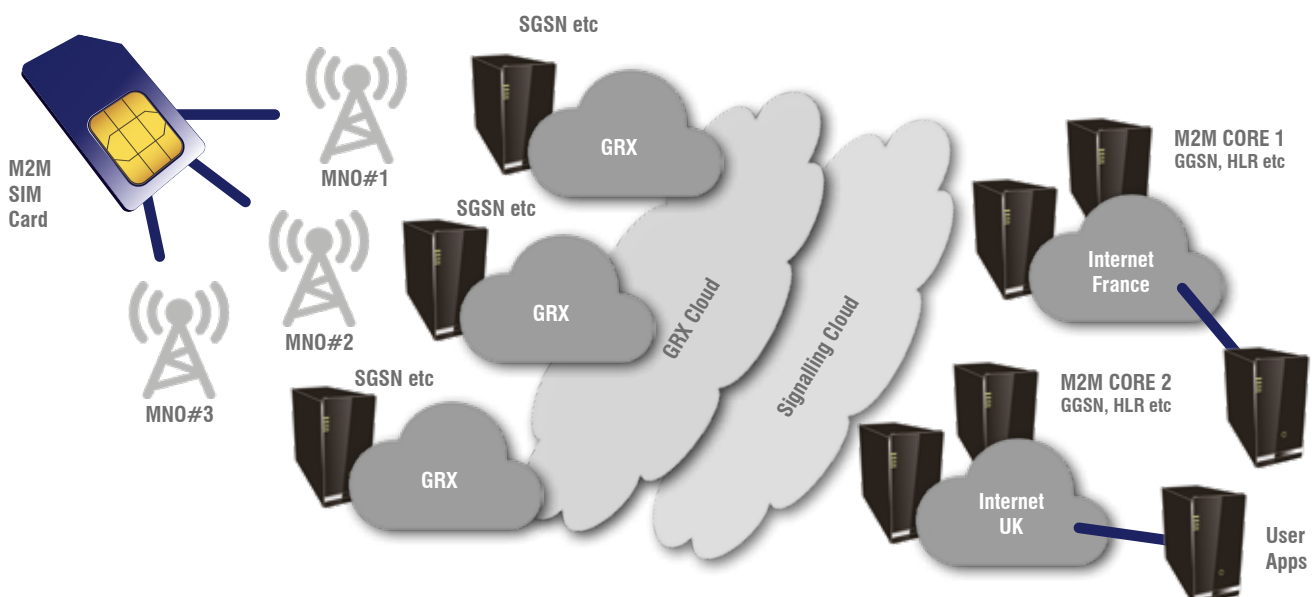
### Global Coverage

Over 150 countries are covered in our standard "Area 1" pricing, on top of this, we also provide a secondary tier "Area 2" pricing for specific requirements. Examples of countries covered in "Area 1":-

- United Kingdom
- United States of America
- South Africa
- France
- Italy
- China
- Australia
- Russian Federation
- + more!
- Germany
- Spain

### Unparalleled Control

Additional to supplying robust SIM cards with extensive global coverage, using IMOGateway - our fully integrated and state-of-the-art portal, you are able to see up to the minute data usage across your entire SIM estate, and increase or reduce your data usage limits as required. IMO offer a fully customisable SIM management area, giving you unprecedented and unparalleled control.



# Signal Conditioning



## Key Features

- Wide range of inputs inc. Thermocouple, RTD, 4-20mA & Voltage
- Full 3-port isolation
- Configurable input type & range
- Non-interactive zero & span controls
- AC & DC power supply versions available



IMO's Signal Conditioners accept a wide range of inputs including 4-20mA, thermocouple, frequency, RTD temperature sensor and voltage signals, which they convert into a high level isolated DC output, or relay switching.

These units provide full 3-port isolation as standard and incorporate an isolated transmitter supply that can be used to power any standard two-wire 4-20mA transmitter loop. The user, via simple DIP switches located on or inside the unit, can configure input and output type and range. All RTD and thermocouple inputs can be fully linearised. The new signal converters are very easy to use, with non-interactive zero and span controls making adjustments quick and simple.

The single output Slimcon unit is only 7.2mm wide and the twin output DUALCON gives the user a signal splitting capability allowing, for example, simultaneous transmission of isolated 4-20mA to a PLC and 0-10V to an inverter.

There are two power supply options available: a wide ranging AC version allows the unit to operate from any supply from 90 to 264VAC, while the low voltage version operates from 12-32VAC and 12-36VDC. Please email [automation@imopc.com](mailto:automation@imopc.com) for any special input types.

## Signal Conditioning Selection

	SLIMCON	ISOCON		DUALCON		TRIP	STRAIN
	SLIMCON-6	ISOCON-3	ISOCON-6	DUALCON-3	DUALCON-6	**	**
Supply Voltage	24VDC	240VAC	24VDC	240VAC	24VDC	24VDC	24VDC
Isolation	1000V	1000V		1000V		1000V	1000V
Width (mm)	7.2	12.5		17.5		30	12.5
Outputs	1	1		2		up to 2	-

Input	0-10mA & 0-10V	Yes	Yes	Yes	-	-
	0-20mA & 1-5V	Yes	Yes	Yes	-	-
	4-20mA & 2-10V	Yes	Yes	Yes	Yes	-
	+/-5A & +/-5V	-	Yes	Yes	-	-
	+/-10A & +/-10V	-	Yes	Yes	-	-
	TC	-	Yes	Yes	Yes	-
	RTD	-	Yes	Yes	Yes	-
	2W Pot	-	Yes	Yes	-	-
	3W Pot	-	Yes	Yes	-	-
	Bridge	-	-	-	-	mV/V*

Output	0-10mA	Yes	Yes	Yes	-	Yes
	0-20mA	Yes	Yes	Yes	-	Yes
	4-20mA	Yes	Yes	Yes	Yes	Yes
	0-10V	Yes	Yes	Yes	-	Yes
	0-5V	Yes	Yes	Yes	-	Yes
	2-10V	-	Yes	Yes	-	Yes
	1 Relay	-	-	-	Yes	-
	2 Relay	-	-	-	Yes	-
	Excitation	-	-	-	-	10VDC

\* Bridge excitation voltage of 10VDC supplied

\*\* Please refer to product datasheet found at [www.imopc.com](http://www.imopc.com)

# QD

## Miniature Photoelectric Sensor



### Key Features

- Infrared, Visible Red LED & Red Laser
- PNP/NPN & analogue outputs
- Pre-cabled & M8 plug options
- NO/NC selectable
- Transparent object detection
- Metal & plastic detection
- Models with or without sensitivity adjustment
- Background suppression
- IP67 protection



### QD Series Selection

		Type	Source	Distance	Output
Miniature (21 x 31.2 x 12.8)	QDIBS/0P-0F	Diffuse - BGS*	Infrared	400mm	NO/NC PNP
	QDRBS/0P-0F	Diffuse - BGS*	Visible Red	100mm	NO/NC PNP
	QDID4/0N-0F	Diffuse	Infrared	1.5m	NO/NC NPN
	QDID4/0P-0F	Diffuse	Infrared	1.5m	NO/NC PNP
	QDIP2/0P-0A	Retro-Reflective	Infrared	7m	NO/NC PNP
	QDRP1/0P-0F	Polarized Retro-Reflective	Visible Red	5m	NO/NC PNP
	QDRCM1/0P-0F	Retro-Reflective (Transparent Objects)	Visible Red	500mm	NO/NC PNP
	QDIER/0P-0A	Through-Beam TX and RX	Infrared	20m	NO/NC PNP
	QDRER/0N-0F	Through-Beam TX and RX	Visible Red	20m	NO/NC NPN
	QDRE/00-0F	Through-Beam Emitter (TX)	Visible Red		-
	QDRR/0N-0F	Through-Beam Receiver (RX)	-	20m	NO/NC NPN

\* BGS = Background Suppression

# FL

## Photoelectric Sensor



### Key Features

- Sensors for car washes
- IP protection: Head IP69K (sensor IP67)
- Wide beam angle for easy alignment
- Totally filled with resin
- Two versions: Long & standard distance
- Synchronization through cable
- Coded emission: Anti mutual-interference



### FL Series Selection

		Type	Source	Distance	Output
M18 T Type	FLIE/00-0C	Through-Beam TX	Infrared	8m	-
	FLIH/00-0C			15m	-
	FLIR/DN-0C	Through-Beam RX		8m	DO NPN
	FLID/DN-0C			15m	DO NPN
	FLIR/LN-0C			8m	LO NPN
	FLID/LN-0C			15m	LO NPN
	FLIR/DP-0C			8m	DO PNP
	FLID/DP-0C			15m	DO PNP
	FLIR/LP-0C			8m	LO PNP
	FLID/LP-0C			15m	LO PNP
	FLIR/DT-0C			8m	DO Push/Pull
	FLID/DT-0C			15m	DO Push/Pull
	FLIR/LT-0C			8m	LO Push/Pull
	FLID/LT-0C			15m	LO Push/Pull

# SQ

## Cubic Photoelectric Sensor



### Key Features

- Compact cubic universal sensor (50x50mm)
- High performance and versatility
- Cable output or revolving M12 connector
- NPN/PNP outputs for VDC models
- SPDT relay output for multi-voltage DC/AC models
- Totally protected against electrical damage
- Diffuse: 1m & 2m
- Background suppression: 500mm
- Polarised: 6m
- Through-beam: 20m
- Two multi-function status LEDs
- IP67 protection rating



### SQ Series Selection

	Type	Source	Distance	Output	Operating Voltage	Exit
SQD/B01-C	Diffuse	Infrared	1m	PNP/NPN - NO+NC	10-30VDC	Pre-cabled
SQD/B01-P	Diffuse	Infrared	1m	PNP/NPN - NO+NC	10-30VDC	M12 plug
SQD/C01-C	Diffuse	Infrared	1m	Relay SPDT	12-240 VDC / 24-240 VAC, 50-60Hz	Pre-cabled
SQD/B02-C	Diffuse	Infrared	2m	PNP/NPN - NO+NC	10-30VDC	Pre-cabled
SQD/B02-P	Diffuse	Infrared	2m	PNP/NPN - NO+NC	10-30VDC	M12 plug
SQD/C02-C	Diffuse	Infrared	2m	Relay SPDT	12-240 VDC / 24-240 VAC, 50-60Hz	Pre-cabled
SGQ/B00.5-C	Diffuse - BGS	Infrared	120/500mm	PNP/NPN - NO+NC	10-30VDC	Pre-cabled
SGQ/B00.5-P	Diffuse - BGS	Infrared	120/500mm	PNP/NPN - NO+NC	10-30VDC	M12 plug
SQP/B06-C	Polarized Retro-Reflective	Infrared	6m	PNP/NPN - NO+NC	10-30VDC	Pre-cabled
SQP/B06-P	Polarized Retro-Reflective	Infrared	6m	PNP/NPN - NO+NC	10-30VDC	M12 plug
SQP/C06-C	Polarized Retro-Reflective	Infrared	6m	Relay SPDT	12-240 VDC / 24-240 VAC, 50-60Hz	Pre-cabled
SQE/0D20-C	Through-Beam Emitter	Infrared	20m	-	10-30VDC	Pre-cabled
SQE/0D20-P	Through-Beam Emitter	Infrared	20m	-	10-30VDC	M12 plug
SQE/0A20-C	Through-Beam Emitter	Infrared	20m	-	12-240 VDC / 24-240 VAC, 50-60Hz	Pre-cabled
SQR/B020-C	Through-Beam Receiver	Infrared	20m	PNP/NPN - NO+NC	10-30VDC	Pre-cabled
SQR/B020-P	Through-Beam Receiver	Infrared	20m	PNP/NPN - NO+NC	10-30VDC	M12 plug
SQR/C020-C	Through-Beam Receiver	Infrared	20m	Relay SPDT	12-240 VDC / 24-240 VAC, 50-60Hz	Pre-cabled

# ASPRO

## Retroreflective Area Sensor



### Key Features

- Controlled height up to 69mm
- Operating distance up to 4500mm
- Minimum object detection of 6mm in diameter
- Two teach-in settings: Fine and standard
- 10mm optical pitch
- IP67 protection degree
- Blanking function
- Aluminium body



### ASPR Series Selection

	Type	Source	Distance	Output
ASPRO/0B-1T	Retroreflective	Visible Red	200-4500mm	NO/NC NPN+PNP
ASPRO/0I-1T	Retroreflective	Visible Red	200-4500mm	I/O Link
ASPRO/0T-1T	Retroreflective	Visible Red	200-4500mm	NO/NC Push Pull
ASPRO/BN-1T	Retroreflective	Visible Red	200-4500mm	NO+NC NPN
ASPRO/BP-1T	Retroreflective	Visible Red	200-4500mm	NO+NC PNP

# FA

## M18 Barrel Photoelectric Sensor



### Key Features

- Compact M18 sensors, 10-30VDC
- Models with axial & 90° optics
- IR, red light & red light laser emission models available
- Intelligent models with background suppression
- Metal & plastic housings\*
- Models with or without sensitivity adjustment
- IP67 protection rating



### FA Series Selection

	Type	Distance	Output	Sensitivity Adjustment
FAIH/X0-**-	Infrared LED Emission	20m (axial optics), 15m (90° optics)	-	No
FAIH/00-**-	Infrared LED Emission	20m (axial optics), 15m (90° optics)	-	No
FAIZ/**-**-	Receiver	20m (axial optics), 15m (90° optics)	NPN or PNP	No
FAID/**-**-	Receiver	20m (axial optics), 15m (90° optics)		Yes
FALH/X0-**-	Visible Red Laser Emission	50m	-	Yes
FAL4/**-**-	Diffuse Red Laser Emission	300mm	NPN or PNP	Yes (teach function)
FALN/**-**-	Polarized Retro-Reflective	25m with RL110		Yes (teach function)
FARA/**-**-	Diffuse Red LED Emission	50mm		No
FARB/**-**-	Diffuse Red LED Emission	50mm		Yes
FAR2/**-**-	Diffuse Red LED Emission	100mm		No
FAR3/**-**-	Diffuse Red LED Emission	100mm		Yes
FA14/**-**-	Diffuse Infrared Emission	200mm		Yes
FA15/**-**-	Diffuse Infrared Emission	200mm		No
FA16/**-**-	Diffuse Infrared Emission	400mm		No
FA17/**-**-	Diffuse Infrared Emission	400mm		Yes
FA18/**-**-	Diffuse Infrared Emission	1m		Yes
FA19/**-**-	Diffuse Infrared Emission	1m		No
FAIC/**-**-	Retro-Reflective Infrared Emission	4m		No
FAIM/**-**-	Retro-Reflective Infrared Emission	4m		Yes
FAIP/**-**-	Retro-Reflective Red LED Emission	3m (axial optics), 2m (90° optics)		No
FAIN/**-**-	Retro-Reflective Red LED Emission	3m (axial optics), 2m (90° optics)		Yes
FAIL/**-**-	Polarized Retro-Reflective	1m		Yes

\* Please check the product datasheet at [www.imopc.com](http://www.imopc.com) for the correct ordering code.



*In addition to the sensors shown in this brochure IMO also offers an extensive range of cables, reflectors and brackets to suit all our sensors*

# FX

## Fibre Optic Amplifier



### Key Features

- Digital “Teach In” sensitivity adjustment (FX4)
- Multi turn potentiometer adjustment (FX3)
- High speed output response
- Ultra thin 10mm housing
- 20mm to 200mm range
- Pulse stretcher
- CE, UL and cUL approved

### FX Series Selection

	Type	Source	Distance	Output
FX3/0N-0A	Use with diffuse or through-beam fibre	Visible Red	Fibre dependent	NPN - NO/NC
FX3/0N-0F	Use with diffuse or through-beam fibre	Visible Red	Fibre dependent	NPN - NO/NC
FX3/0P-0A	Use with diffuse or through-beam fibre	Visible Red	Fibre dependent	PNP - NO/NC
FX3/0P-0F	Use with diffuse or through-beam fibre	Visible Red	Fibre dependent	PNP - NO/NC
FX4/0P-0F	Use with diffuse or through-beam fibre	Visible Red	Fibre dependent	PNP - NO/NC
FX4/0N-0F	Use with diffuse or through-beam fibre	Visible Red	Fibre dependent	NPN - NO/NC



### CF range of Fibres

	Model	Sensing Distance			Fibre Core Ø	Free-Cut	Lens	Head Type	Fibre & Sleeve Bending Radius R <sub>min</sub>	Temperature Range	Head Material
		FS1	FX3	FX4							
CF/CA1	Diffuse	60mm	140mm	140mm	0.5mm	Yes	Yes	M5	15mm-N/A	-25 to +70°C	V2A INOX/Stainless Steel
CF/CA2	Diffuse	15mm	70mm	110mm	0.5mm	No	No	M4	5mm-N/A	-40 to +70°C	CuZn Ni Plated
CF/CA4	Diffuse	15mm	60mm	80mm	0.5mm	No	No	M4 + Sleeve	5mm-5mm	-40 to +55°C	CuZn Ni Plated
CF/CB1	Diffuse	50mm	200mm	300mm	1mm	Yes	No	M6	10mm-N/A	-40 to +70°C	CuZn Ni Plated
CF/CB3	Diffuse	50mm	200mm	300mm	1mm	Yes	No	M6 + Sleeve	10mm-10mm	-40 to +55°C	CuZn Ni Plated
CF/CC1	Diffuse	15mm	70mm	100mm	1mm	No	Yes	M6	10mm-N/A	-40 to +70°C	CuZn Ni Plated
CF/RA4	Through Beam	30mm	150mm	250mm	0.5mm	No	No	M4 + Sleeve	10mm-10mm	-40 to +55°C	CuZn Ni Plated
CF/RA7	Through Beam	30mm	150mm	250mm	0.5mm	No	No	M3	5mm-N/A	-40 to +70°C	CuZn Ni Plated
CF/RB3	Through Beam	120mm	700mm	700mm	1mm	Yes	Yes	M4 + M2.6	25mm-N/A	-40 to +70°C	CuZn Ni Plated
CF/RB4	Through Beam	120mm	600mm	900mm	1mm	Yes	No	M4 + Sleeve	10mm-10mm	-40 to +55°C	CuZn Ni Plated
CF/RB6	Through Beam	120mm	600mm	900mm	1mm	Yes	No	M4	10mm-N/A	-40 to +70°C	CuZn Ni Plated
CF/RB9	Through Beam	1.2m	8m	10m	1mm	Yes	Yes	Ø 6mm	10mm-N/A	-40 to +70°C	CuZn Ni Plated
CF/RBA	Through Beam	1.2m	8m	10m	1mm	Yes	Yes	M7	10mm-N/A	-40 to +70°C	CuZn Ni Plated
CF/RC6	Through Beam	100mm	500mm	500mm	1mm	No	No	M4	10mm-N/A	-40 to +70°C	CuZn Ni Plated
CF/RC9	Through Beam	1m	6m	8m	1mm	No	Yes	Ø 6mm	10mm-N/A	-40 to +70°C	CuZn Ni Plated
CF/RCA	Through Beam	1m	6m	8m	1mm	No	Yes	M7	10mm-N/A	-40 to +70°C	CuZn Ni Plated

# FS

## Fork Sensor



### Key Features

- 3mm gap
- Label detection
- Multilayer transparent film detection

### Fork Sensor Selection

	Type	Source	Distance	Output	Operating Voltage	Exit
FS3/0P-0F	Fork	Infrared	3mm gap	PNP - NO/NC	12-24VDC	M8 plug
FS3/0N-0F	Fork	Infrared	3mm gap	NPN - NO/NC	12-24VDC	M8 plug
FS3/00-0F	Fork	Infrared	3mm gap	PNP/NPN - NO/NC	12-24VDC	M8 plug



LDL

Photoelectric Luminescence Sensor



Key Features

- M18 / M30 compact housing
- Ultraviolet light emission
- Sensitivity adjustment (M18)
- Self teach local & remote (M30)
- NPN or PNP (NO/NC selectable)
- Delay off selectable (M30)
- Interchangeable lens (M18)
- IP65 protection rating

LDL Series Selection

	Type	Output Logic	Housing	Exit
LDLU/0N-0C	M18 Luminescence Sensor	NPN (NO/NC selectable)	M18 plastic body	Right angle cable exit
LDLU/0N-0K	M18 Luminescence Sensor	NPN (NO/NC selectable)	M18 plastic body	M12 right angle plug
LDLU/0P-0C	M18 Luminescence Sensor	PNP (NO/NC selectable)	M18 plastic body	Right angle cable exit
LDLU/0P-0K	M18 Luminescence Sensor	PNP (NO/NC selectable)	M18 plastic body	M12 right angle plug
LDLV/0N-1K	M30 Luminescence Sensor	NPN (NO/NC selectable)	M30 metal body	M12 right angle plug
LDLV/0P-1K	M30 Luminescence Sensor	PNP (NO/NC selectable)	M30 metal body	M12 right angle plug

AA1

Miniature Cylindrical Inductive Sensor



Key Features

- Ultra-miniaturised inductive sensors Ø3mm
- IP65 protection rating
- Metal housing
- 2m PUR cable exit
- 10-30VDC
- CE, UL and cUL approved



AA1 Series Selection

	Output Type	Output Logic	Sensing Distance	Exit
AA1/AN-1A	Normally Open (NO)	NPN	0.6mm	Standard Cable Exit
AA1/AN-1F				Plug Exit M8
AA1/AN-3A			1.0mm	Standard Cable Exit
AA1/AN-3F				Plug Exit M8
AA1/AP-1A		PNP	0.6mm	Standard Cable Exit
AA1/AP-1F				Plug Exit M8
AA1/AP-3A			1.0mm	Standard Cable Exit
AA1/AP-3F				Plug Exit M8
AA1/CN-1A	Normally Closed (NC)	NPN	0.6mm	Standard Cable Exit
AA1/CN-1F				Plug Exit M8
AA1/CP-1A		PNP		Standard Cable Exit
AA1/CP-1F				Plug Exit M8

# AC1

## Miniature 3-Wire DC Inductive Sensor



### Key Features

- Ultra-small diameter - Ø4mm
- LED status indicator
- Stainless steel housing
- IP67 protection rating
- Short circuit & over voltage protection



### AC1 Series Selection

	Output Type	Output Logic	Shielded	Sensing Distance	Exit	
AC1/AN-1A	Normally Open (NO)	NPN	Standard	0.8mm	Standard Cable Exit	
AC1/AN-1F					Plug Exit M8	
AC1/AN-3A			Long Distance	1.5mm	Standard Cable Exit	
AC1/AN-3F					Plug Exit M8	
AC1/AP-1A		PNP	Standard	0.8mm	Standard Cable Exit	
AC1/AP-1F					Plug Exit M8	
AC1/AP-3A			Long Distance	1.5mm	Standard Cable Exit	
AC1/AP-3F					Plug Exit M8	
AC1/CN-1A	Normally Closed (NC)	NPN	Standard	0.8mm	Standard Cable Exit	
AC1/CN-1F					Plug Exit M8	
AC1/CP-1A		PNP				Standard Cable Exit
AC1/CP-1F						Plug Exit M8

# AD1

## Miniature 3-Wire DC Inductive Sensor



### Key Features

- Ø5mm x 25mm
- LED status indicator
- Stainless steel housing
- High switching speed: 7kHz
- Cable exit & plug-in types available



### AD1 Series Selection

	Output Type	Output Logic	Shielded	Sensing Distance	Exit
AD1/AN-1A	Normally Open (NO)	NPN	Standard	0.8mm	Standard Cable Exit
AD1/AN-1F					Plug Exit M8
AD1/AN-3A			Long Distance	1.5mm	Standard Cable Exit
AD1/AN-3F					Plug Exit M8
AD1/AP-1A		PNP	Standard	0.8mm	Standard Cable Exit
AD1/AP-1F					Plug Exit M8
AD1/AP-3A			Long Distance	1.5mm	Standard Cable Exit
AD1/AP-3F					Plug Exit M8
AD1/CN-1A	Normally Closed (NC)	NPN	Standard	0.8mm	Standard Cable Exit
AD1/CN-1F					Plug Exit M8
AD1/CN-3A			Long Distance	1.5mm	Standard Cable Exit
AD1/CN-3F					Plug Exit M8
AD1/CP-1A		PNP	Standard	0.8mm	Standard Cable Exit
AD1/CP-1F					Plug Exit M8
AD1/CP-3A			Long Distance	1.5mm	Standard Cable Exit
AD1/CP-3F					Plug Exit M8

# PB

## Inductive Proximity Sensor



### Key Features

- Shielded & unshielded versions
- Standard & long sensing range
- LED indication, 360° visible
- IP67 nickel plated brass housing or stainless steel
- AC & DC versions available



IMO Inductive Proximity Sensors range from 3mm in diameter to 30mm threaded, and a small selection of the more popular types is listed below. The standard body is made of nickel plated brass with stainless steel being available in the smaller devices and optional in the bigger sizes. Most devices are available as pre-cabled (2m standard, other lengths available) or with M8/M12 connector. In addition IMO also offers a range of cables to suit all sensors. Please visit [www.imopc.com](http://www.imopc.com) for information on IMO's full range.

### PB Series Selection

Barrel Size	Type	Part Number	Output Logic	Sensing Distance	Exit	Length (mm)
M8	Shielded	PB0801/DSAP-H	PNP	1.5mm	M12 Plug	66
	Unshielded	PB0802/DUAP-H	PNP	2mm	M12 Plug	71
M12	Shielded	PB1202/DSAP-H	PNP	2mm	M12 Plug	65
	Unshielded	PB1204/DUAP-H	PNP	4mm	M12 Plug	70
M18	Shielded	PB1805/DSAP-H	PNP	5mm	M12 Plug	62
	Unshielded	PB1808/DUAP-H	PNP	8mm	M12 Plug	70.5
M30	Shielded	PB3010/DSAP-H	PNP	10mm	M12 Plug	68
	Unshielded	PB3015/DUAP-H	PNP	15mm	M12 Plug	81

Part Number	Output Logic	Sensing Distance	Exit	Length (mm)
PB0802/DSAP-H	PNP	2mm	M12 Plug	66
PB0804/DUAN-A	NPN	4mm	2m Cable	50
PB1204/DSAP-H	PNP	4mm	M12 Plug	65
PB1207/DUAP-H	PNP	7mm	M12 Plug	70
PB1808/DSAP-H	PNP	8mm	M12 Plug	62
PB1812/DUAP-H	PNP	12mm	M12 Plug	70.5
PB3015/DSAP-H	PNP	15mm	M12 Plug	68
PB3022/DUAP-H	PNP	22mm	M12 Plug	81

**NOTE:** Some popular options are shown above. For other options, please contact IMO.

# FM

## Inductive Proximity Sensor



### Key Features

- Complete range of full metal inductive sensors
- AISI316L stainless steel housing, including the facia



Barrel Size	Installation	Sensing Distance	Connection	Distance (mm)	PNP NO	NPN NO	PNP NC	NPN NC
M8	Shielded	Enhanced	M8	2mm	FMES/AP-3F	FMES/AN-3F	FMES/CP-3F	FMES/CN-3F
M12	Shielded	Enhanced	M12	3mm	FMM6/AP-3H	FMM6/AN-3H	FMM6/CP-3H	FMM6/CN-3H

Barrel Size	Installation	Sensing Distance	Connection	Distance (mm)	PNP NO	NPN NO	PNP NO+NC	NPN NO+NC
M18	Shielded	Enhanced	M12	5mm	-	-	FMK6/BP-3H	FMK6/BN-3H
M30	Shielded	Enhanced	M12	10mm	-	-	FMT6/BP-3H	FMT6/BN-3H

# AE / AM / AK

## Inductive Analogue Sensor



### Key Features

- Analogue output
- Metal housing
- M8, M12 & M18 housing
- Flush mounting



### Inductive Analogue Sensor Selection

	Operating Voltage	Sensing Distance (mm)	Output	Exit	Length (mm)
AE1/D1-7A	15-30VDC	4	0-10VDC	Pre-cabled	45
AM1/D2-5A	15-30VDC	6	0-10VDC / 4-20mA	Pre-cabled	50
AM1/D2-5H	15-30VDC	6	0-10VDC / 4-20mA	M12 plug	60
AK6/D2-5A	15-30VDC	10	0-10VDC / 4-20mA	Pre-cabled	36
AK6/D2-5H	15-30VDC	10	0-10VDC / 4-20mA	M12 plug	48.5

NOTE: Some popular options are shown above. For other options, please contact IMO.

# UK6 / UKR6

## Ultrasonic Sensor M18



### Key Features

- Short body
- M18 diffuse and retro-reflective models
- Digital output
- Analogue output
- Plastic or AISI 316L stainless steel housing
- M12 plug exit



### Ultrasonic Sensor Selection

	Housing	Detection mode	Operating Voltage	Sensing Distance (mm)	Output	Exit
UKR6A/HP-0E	Plastic	Retroreflective	10-30VDC	50-300	PNP - NO/NC	M12
UK6A/HP-1E	Metal	Diffuse		40-300		
UK6C/HP-1E	Metal			60-800		
UK6A/HP-0E	Plastic			40-300	4-20mA	
UK6D/H2-1E	Metal			80-1200		
UK6C/H2-1E	Metal			60-800		
UK6A/H2-1E	Metal			40-300	PNP - NO/NC	
UK6C/HP-0E	Plastic			60-800		
UK6A/HN-0E	Plastic			40-300	NPN - NO/NC	
UK6D/HP-1E	Metal			80-1200	PNP - NO/NC	
UK1F/E1-0E	Plastic			200-2200	0-10VDC	
UK1A/G2-0E	Plastic			50-400	4-20mA	
UK1C/GW-0E	Plastic			100-900	2 x PNP - NO/NC	

NOTE: Some popular options are shown above. For other options, please contact IMO.

# UT2

## Ultrasonic Sensor M30



### Key Features

- Models with voltage or current outputs programmable slope to optimize resolution
- Adjustable working area (window mode or object mode) by Teach-in button available on all models for quick and easy installation
- Plastic or AISI 316L stainless steel housing



### UT2 Series Selection

	Housing	Detection mode	Operating Voltage	Sensing Distance (mm)	Output	Exit
UT2F/E2-0E	Plastic	Diffuse	15-30VDC	350-6000	4-20mA	M12 plug

# C30P / C30M

## Capacitive Sensor M30



### Key Features

- Plastic or metal housing
- DC or AC versions
- High noise immunity
- Adjustable sensitivity
- Pre-cabled or M12 plug versions



### Capacitive Sensor Selection

	Housing	Source - Detection mode	Operating Voltage	Sensing Distance (mm)	Output	Exit	
C30P/00-1A	Plastic	Shielded	20-250VAC	16	NO+NC - SCR	Pre-cabled	
C30P/00-1E						M12 plug	
C30P/BP-1E						M12 plug	
C30M/00-1E	Stainless Steel		10-40VDC		NO+NC - NPN	M12 plug	
C30M/BN-1A						Pre-cabled	
C30M/BN-1E						NO+NC - PNP	M12 plug
C30M/BP-1E							M12 plug

**NOTE:** Some popular options are shown above. For other options, please contact IMO.

# C18P

## Capacitive Sensor M18



### Key Features

- Plastic housing
- DC or AC versions
- High noise immunity
- Adjustable sensitivity
- Pre-cabled or M12 plug versions



### C18P Series Selection

	Housing	Mounting	Operating Voltage	Sensing Distance (mm)	Output	Exit
C18P/A0-1E	Plastic	Shielded	20-250VAC	8	NO - SCR	M12 plug
C18P/BP-1A			10-40VDC		NO + NC - PNP	Pre-cabled
C18P/BP-1E			10-40VDC		NO + NC - PNP	M12 plug

NOTE: Some popular options are shown above. For other options, please contact IMO.

# WLC

## Level Detection Sensor



### Key Features

- Level monitoring of conductive liquids
- Multifunction
- Secure isolation of the measuring circuit
- Output, one changeover contact
- Width 35mm
- DIN rail mountable
- CE, UL, cUL approved



The IMO DIN mountable liquid level controller is easy to install, with its additional functions one can set On Delay and/or Off Delay timing. The probe SK1-140 designed for use with the unit is insulated and can be mounted at the required level in the metal tank and should use suitable insulated cable of the right length. The design of the probe will allow it to be touching the tank without making electrical contact but ensuring contact with the fluid. (Ultrasonic options are also available, please contact IMO for more information).

### Fluid Level Monitoring Selection

	Type	Timing Function	Relay Switching Function
WLC-230VAC	Level Controller 230VAC	On Delay and Off Delay	1250VA at 250VAC
SK1-140	Probe (140mm)	-	-

# Limit Switches

## Compact Heavy Duty



### Key Features

- Bifurcated Contacts for Low Resistance & High Reliability – Suitable for Switching Low-Level Electronic Currents
- Turret Head Position Rotatable in 90° increments
- Centre-Position Indicator Arrow – Lever Actuators
- Wide Range of Actuators
- Single, Dual & Triple Cable Entry models
- Removable Contact Block for ease of wiring
- Metal or Plastic Housing options
- IP67 Protection
- Sealed Fully Potted Modular versions available



IMOs Limit Switches are being installed and used daily in every type of industrial machinery, in all types of weather conditions and in many different industry sectors including Wood, Metal, Plastic, Automotive, Packaging and Lifting.

The IMO Limit Switch is available in eight basic body styles, many contact switch blocks and numerous styles of actuators, giving over 3,000 configurations. The popular LR range of limit switches has been specially designed to meet the increasing complexity of modern machinery, with an operating temperature range of -25°C to +80°C (-40°C on request), and adjustable heads which move in 10° steps. The LR range can be supplied with industry standard entries such as PG13.5 or others including M12 plugs for faster connectivity.

IMO's Limit Switch range delivers an extremely flexible and competitive package.

### Limit Switch Selection

	Plastic		Metal	
	Single	Double	Single	Double
Short Piston Plunger	LRC5A01	LXC5A01	LMC5A01	LZC5A01
One-Way Roller (Top Actuated)	LRC5A02	LXC5A02	LMC5A02	LZC5A02
One-Way Roller (Side Actuated)	LRC5A05	LXC5A05	LMC5A05	LZC5A05
One-Way Roller (Adjustable)	LRC5A07	LXC5A07	LMC5A07	LZC5A07
Piston Plunger (Sealed)	LRC5A08	LXC5A08	LMC5A08	LZC5A08
M12 Piston Plunger	LRC5A10	LXC5A10	LMC5A10	LZC5A10
M18 Roller Piston Plunger	LRC5A13	LXC5A13	LMC5A13	LZC5A13
11mm Roller Plunger	LRC5A15	LXC5A15	LMC5A15	LZC5A15
Coil Spring & Rod (Sealed)	LRC5A20	LXC5A20	LMC5A20	LZC5A20
Cats Whisker	LRC5A21	LXC5A21	LMC5A21	LZC5A21
Coiled Spring (Sealed)	LRC5A25	LXC5A25	LMC5A25	LZC5A25
Roller Lever	LRC5A31	LXC5A31	LMC5A31	LZC5A31
Lever Rod (Square)	LRC5A33	LXC5A33	LMC5A33	LZC5A33
Lever Rod (Round)	LRC5A50	LXC5A50	LMC5A50	LZC5A50
Large Offset Roller Lever	LRC5A51	LXC5A51	LMC5A51	LZC5A51
Roller Lever Long	LRC5A52	LXC5A52	LMC5A52	LZC5A52
Offset Roller Lever	LRC5A54	LXC5A54	LMC5A54	LZC5A54
Adjustable Roller Lever	LRC5A55	LXC5A55	LMC5A55	LZC5A55
Lever Rod (Glass Fibre)	LRC5A69	LXC5A69	LMC5A69	LZC5A69



	Metal	
	Single	Triple
Short Plunger	LDC5A01	LLC5A01
Long Plunger	LDC5A08	LLC5A08
Roller Plunger	LDC5A15	LLC5A15
Spring	LDC5A25	LLC5A25
Roller Lever	LDC5A31	LLC5A31
Rod Lever	LDC5A32	LLC5A32
Adjustable Roller Lever	LDC5A35	LLC5A35
Single Track 2 Stable Positions	LDC5A41	LLC5A41
Rope Operated	LDC5A76	LLC5A76
Roller Lever With Big Offset	LDC5A51	LLC5A51

**NOTE:** Some popular options are shown above. For other options, please contact IMO.

# MA / MB / PA

## Fully Sealed Cabled or Plug Exit Limit Switches



### Key Features

- Modular
- IP67 Protection
- UV Resistant Powder Coated Housing
- Positive Break Models
- Cabled or Plug exit



### Limit Switch Selection

	Contact Action/Arrangement	Type	Housing	Fixing Centres (mm)
MAS110B4-RB2	Snap NO+NC	Roller Plunger, M12	Metal	20
MAS110A5-RB2	Snap NO+NC	Roller Plunger In-line	Metal	20
MAS11HC2-RB2	Snap NO+NC	Roller Lever	Metal	20
MAD110A5-RB2	Snap NO+NC	Roller Plunger In-line	Metal	20
MAD11HC2-RB2	Snap NO+NC	Offset Roller Lever	Metal	20
MAS110A2-RB2	Snap NO+NC	Piston Plunger	Metal	20
MAS110A5-RB2	Snap NO+NC	Roller Plunger In-line	Metal	20
MBS110A9-RP3	Snap NO+NC	Roller Plunger In-line	Metal	25
MBS11HC7-RP3	Snap NO+NC	Offset Roller Lever	Metal	25
PAS110A2-RB2	Snap NO+NC	Piston Plunger	Plastic	20
PAD110A2-RB2	Snap NO+NC	Piston Plunger	Plastic	20

NOTE: Some popular options are shown above. For other options, please contact IMO.

# MSS

## Micro Switches



### Key Features

- Wide Range of Actuator Style
- IP20, IP40 & IP65 Protection
- Glass Reinforced Plastic (GRP) Housing
- 10 Million Mechanical Operational Cycles
- Fixing Centres - 25.4mm
- Versions with Positive Openings

### Micro Switch Selection

	Contact Action/Arrangement	Type
MSSTC11DA05	Snap Changeover	Plunger
MSSTC11DA06		Plunger + M10 Neck
MSSTC11DA09		Plunger + M10 Neck
MSSTC11DA10		Plunger + M12 Neck
MSSTC11DA15		Inline Roller Plunger + M12 Neck
MSSTC11DA17		90 Degree Roller Plunger + M12 Neck
MSSTC11DA30		Lever - Radius 63mm
MSSTC11DA35		Lever - Radius 146.5mm
MSSTC11DA40		Roller Lever - Radius 47.5mm
MSSTC11DA42		Roller Lever - Radius 37.5mm
MSSTC11DA45		Roller Lever - Radius 24.6mm
MSSTC12DA15		Inline Roller Plunger + M12 Neck

NOTE: Some popular options are shown above. For other options, please contact IMO.



# Safety Limit Switches

For Safety Guarding



## Key Features

- Available with a wide choice of Contact Block Configurations
- Single, Double & Triple Conduit Entry Types
- Heavy Duty, Die-Cast Metal Alloy Housing Models
- Impact Resistant, Self-Extinguishing, Glass-Reinforced Thermoplastic Housing Models
- Standard & Compact Sizes
- Dimensions in Accordance with EN 50047 & EN 50041
- IP67 Protection
- Conforms to BS EN 60204-1 & BS EN 1088



IMO's range of Safety Limit Switches are specially designed to match the increasing complexity of modern machinery, where safety guarding is paramount and necessary.

The comprehensive IMO range provides solutions for rope switch actuation, rotating head and lever switching for open guard sensing and high-speed key entry switching with a design that protects against damage caused by slamming guards. The safety switches can operate at up to 3600 operations per hour and have bifurcated gold plated contacts that offer longer life and improved continuity. Contact change at 6° means that the switches give an early indication of an open guard. They come with PG13.5 or optional M20 conduit entry, an IP67 rated terminal chamber and eight contact block configurations.

## Safety Limit Switch Selection

	Type	Contact Arrangement	Key Type
LRC6DK-DX70	Key operated safety interlock with M12 plug exit	NO + NC	Flat
LDC18RRS	Rope operated stop switch	NO + NC	-
LRC6DK-D1	Key operated safety interlock	NO + NC	90 Degree
PSC2060F024-F	Solenoid key operated safety interlock	NO + 2NC	Flat
LRC20DK-D2	Key operated safety interlock	NO + 2NC	Flexible
PSC2060F024-F1	Solenoid key operated safety interlock	NO + 2NC	90 Degree
LDC6JK-F2	Key operated safety interlock	NO + NC	Flexible
LRC6DK-D	Key operated safety interlock	NO + NC	Flat
PSC2060F024-F3	Solenoid key operated safety interlock	NO + 2NC	Adjustable Flexible
LRC9DK-D	Key operated safety interlock	2NC	Flat

## Accessories - LED Signalling Indicators

	Operating Voltage	Lens Colour	Connection Type
AC-SL1AREPA1	24VAC/DC	Red	Push-In Terminal Strip
AC-SL1AYEPA1	24VAC/DC	Yellow	Push-In Terminal Strip





# AC Variable Speed Drives

0.40 - 710kW (0.55 - 950HP)



## Key Features

- Multi-language Programming with Improved Diagnostics
- Faster CPUs, Opto-Isolation, Multi-Layer PCBs, Short Circuit Protected
- Quicker response to Dynamic Load Changes
- Improved Low-Speed Performance
- Latest Generation IGBTs
- More application options

IMO has the right frequency inverter to meet the needs of your application, whatever it might be with our market leading CUB, VXT, VXH and VXA range of drives with varying functionality and power. From a simple small pump or fan through to the most complex large scale hoists, you can be assured that IMO has the drive and the knowledge to meet your application needs.

The IMO CUB features a full range of functions, a compact body, simple operation, wide model variations and global compatibility.

The brand new, high performance VXT Sensorless Dynamic Torque Vector inverter boasts quadruple rating, brushless DC motor controls, PG vector control, STO safety level of SIL3, integral EMC filter, Modbus RTU and CANopen communications comes as standard on every model.

The VXG offers high performance with PG, sensorless, V/F and dynamic torque vector control, alongside extensive connectivity options.

The industry specific VXA for water applications and VXH for HVAC applications have been specifically developed to suit the requirements of their respective industries whilst delivering market-leading energy savings.



IP20



## CUB Micro Inverter Specifications

	Nominal Power		Nominal Input Voltage	Rated Output Current (Amps)
	kW	HP		
CUB3A-1	0.4	0.5	200-240V 1ph 50-60Hz	3.0
CUB5A-1	0.75	1.0	200-240V 1ph 50-60Hz	5.0
CUB8A-1	1.5	2.0	200-240V 1ph 50-60Hz	8.0
CUB11A-1	2.2	3.0	200-240V 1ph 50-60Hz	11.0
CUB1A5-4	0.4	0.5	380-480V 3ph 50-60Hz	1.5
CUB2A5-4	0.75	1.0	380-480V 3ph 50-60Hz	2.5
CUB3A7-4	1.5	2.0	380-480V 3ph 50-60Hz	3.7
CUB5A5-4	2.2	3.0	380-480V 3ph 50-60Hz	5.5
CUB9A-4	4.0	5.5	380-480V 3ph 50-60Hz	9.0

NOTE: Filtered versions available, please contact IMO for more information



IP20 / IP00



## VXT Inverter Specifications

	Nominal Power		Nominal Input Voltage	Rated Output Current (Amps)
	kW	HP		
Single Phase 200V Single Rated				
VXT-3A-1E	0.4	0.5	200-240V 1ph 50-60Hz	3.0
VXT-5A-1E	0.75	1.0	200-240V 1ph 50-60Hz	5.0
VXT-8A-1E	1.5	2.0	200-240V 1ph 50-60Hz	8.0
VXT-11A-1E	2.2	3.0	200-240V 1ph 50-60Hz	11.0
Three Phase 200V Dual Rated				
VXT-2A-2	0.4	0.5	200-240V 3ph 50-60Hz	2.0
VXT-4A-2	0.75	1.0	200-240V 3ph 50-60Hz	3.5
VXT-6A-2	1.1	1.5	200-240V 3ph 50-60Hz	6.0
VXT-10A-2	2.2	3.0	200-240V 3ph 50-60Hz	9.6
VXT-12A-2	3.0	4.0	200-240V 3ph 50-60Hz	12.0
VXT-20A-2	5.5	7.5	200-240V 3ph 50-60Hz	19.6
VXT-30A-2	7.5	10.0	200-240V 3ph 50-60Hz	30.0
VXT-40A-2	11.0	15.0	200-240V 3ph 50-60Hz	40.0
VXT-56A-2	15.0	20.0	200-240V 3ph 50-60Hz	56.0
VXT-69A-2	18.5	25.0	200-240V 3ph 50-60Hz	69.0
VXT-88A-2	22.0	30.0	200-240V 3ph 50-60Hz	88.0
VXT-115A-2	30.0	40.0	200-240V 3ph 50-60Hz	115.0
Three Phase 400V Quadruple Rated				
VXT-2A-4E	0.75	1.0	380-480V 3ph 50-60Hz	2.1
VXT-4A-4E	1.5	2.0	380-480V 3ph 50-60Hz	4.1
VXT-6A-4E	2.2	3.0	380-480V 3ph 50-60Hz	5.5
VXT-7A-4E	3.0	4.0	380-480V 3ph 50-60Hz	6.9
VXT-12A-4E	5.5	7.5	380-480V 3ph 50-60Hz	12.0
VXT-22A-4E	11.0	15.0	380-480V 3ph 50-60Hz	21.5
VXT-29A-4E	15.0	20.0	380-480V 3ph 50-60Hz	28.5
VXT-37A-4E	18.5	25.0	380-480V 3ph 50-60Hz	37.0
VXT-44A-4E	22.0	30.0	380-480V 3ph 50-60Hz	44.0
VXT-59A-4E	30.0	40.0	380-480V 3ph 50-60Hz	59.0
VXT-72A-4E	37.0	50.0	380-480V 3ph 50-60Hz	72.0
VXT-85A-4E	45.0	60.0	380-480V 3ph 50-60Hz	85.0
VXT-105A-4E	55.0	75.0	380-480V 3ph 50-60Hz	105.0
VXT-139A-4E	75.0	100.0	380-480V 3ph 50-60Hz	139.0
VXT-168A-4E	90.0	125.0	380-480V 3ph 50-60Hz	168.0
VXT-203A-4E	110.0	150.0	380-480V 3ph 50-60Hz	203.0
VXT-240A-4E	132.0	175.0	380-480V 3ph 50-60Hz	240.0
VXT-290A-4E	160.0	215.0	380-480V 3ph 50-60Hz	290.0
VXT-361A-4E	200.0	270.0	380-480V 3ph 50-60Hz	361.0
VXT-415A-4E	220.0	300.0	380-480V 3ph 50-60Hz	415.0
VXT-520A-4E	280.0	375.0	380-480V 3ph 50-60Hz	520.0
VXT-590A-4E	315.0	420.0	380-480V 3ph 50-60Hz	590.0

NOTE: Ratings displayed above related to use with Pumps & Fans. For General Purpose & Heavy Duty ratings, please visit [www.imopc.com](http://www.imopc.com). Unfiltered versions available. Contact IMO for more information



IP20 / IP40



## VXG Inverter Specifications

	Nominal Power		Nominal Input Voltage	Rated Output Current (Amps)
	kW	HP		
Three Phase 400V Single Rated				
VXG1A5-4E	0.4	0.5	380-480V 3ph 50-60Hz	2.0
VXG2A5-4E	0.75	1.0	380-480V 3ph 50-60Hz	3.5
VXG4A-4E	1.1	1.5	380-480V 3ph 50-60Hz	6.0
VXG5.5A-4E	2.2	3.0	380-480V 3ph 50-60Hz	9.6
VXG9A-4E	3.0	4.0	380-480V 3ph 50-60Hz	12.0
Three Phase 400V Dual Rated				
VXG16A5L-4E	0.75	1.0	380-480V 3ph 50-60Hz	2.1
VXG23AL-4E	1.5	2.0	380-480V 3ph 50-60Hz	4.1
VXG30A5L-4E	2.2	3.0	380-480V 3ph 50-60Hz	5.5
VXG37AL-4E	3.0	4.0	380-480V 3ph 50-60Hz	6.9
VXG45AL-4E	5.5	7.5	380-480V 3ph 50-60Hz	12.0
VXG60AL-4E	11.0	15.0	380-480V 3ph 50-60Hz	21.5
VXG75AL-4E	15.0	20.0	380-480V 3ph 50-60Hz	28.5
VXG91AL-4E	18.5	25.0	380-480V 3ph 50-60Hz	37.0
VXG112AL-4E	22.0	30.0	380-480V 3ph 50-60Hz	44.0
VXG150AL-4E	30.0	40.0	380-480V 3ph 50-60Hz	59.0
VXG176AL-4E	37.0	50.0	380-480V 3ph 50-60Hz	72.0
VXG210AL-4E	45.0	60.0	380-480V 3ph 50-60Hz	85.0
VXG253AL-4E	55.0	75.0	380-480V 3ph 50-60Hz	105.0
VXG304AL-4E	75.0	100.0	380-480V 3ph 50-60Hz	139.0
VXG377AL-4E	90.0	125.0	380-480V 3ph 50-60Hz	168.0
VXG415AL-4E	110.0	150.0	380-480V 3ph 50-60Hz	203.0
VXG520AL-4E	132.0	175.0	380-480V 3ph 50-60Hz	240.0
VXG650AL-4E	160.0	215.0	380-480V 3ph 50-60Hz	290.0
VXG740AL-4E	200.0	270.0	380-480V 3ph 50-60Hz	361.0
VXG840AL-4E	220.0	300.0	380-480V 3ph 50-60Hz	415.0
VXG960AL-4E	280.0	375.0	380-480V 3ph 50-60Hz	520.0
VXG1170AL-4E	315.0	420.0	380-480V 3ph 50-60Hz	590.0
VXG1370AL-4E	315.0	420.0	380-480V 3ph 50-60Hz	590.0

**NOTE:** Ratings displayed above related to use with Pumps & Fans. For General Purpose & Heavy Duty ratings, please visit [www.imopc.com](http://www.imopc.com). Unfiltered versions available. Contact IMO for more information



IP55 / IP21 / IP00



## VXH/VXA Variable Torque Drive Specifications

		Nominal Power		Nominal Input Voltage	Rated Output Current (Amps)
		kW	HP		
VXH2A5#-4E	VXA2A5#-4E	0.75	1	380-480V 3ph 50-60Hz	2.5
VXH4A1#-4E	VXA4A1#-4E	1.5	2	380-480V 3ph 50-60Hz	4.1
VXH5A5#-4E	VXA5A5#-4E	2.2	3	380-480V 3ph 50-60Hz	5.5
VXH9#-4E	VXA9#-4E	4	5.5	380-480V 3ph 50-60Hz	9
VXH13A5#-4E	VXA13A5#-4E	5.5	7.5	380-480V 3ph 50-60Hz	13.5
VXH18A5#-4E	VXA18A5#-4E	7.5	10	380-480V 3ph 50-60Hz	18.5
VXH24A5#-4E	VXA24A5-4E	11	15	380-480V 3ph 50-60Hz	24.5
VXH32#-4E	VXA32#-4E	15	20	380-480V 3ph 50-60Hz	32
VXH39#-4E	VXA39#-4E	18.5	25	380-480V 3ph 50-60Hz	39
VXH45#-4E	VXA45#-4E	22	30	380-480V 3ph 50-60Hz	45
VXH60#-4E	VXA60#-4E	30	40	380-480V 3ph 50-60Hz	60
VXH75#-4E	VXA75#-4E	37	50	380-480V 3ph 50-60Hz	75
VXH91#-4E	VXA91#-4E	45	60	380-480V 3ph 50-60Hz	91
VXH112#-4E	VXA112#-4E	55	75	380-480V 3ph 50-60Hz	112
VXH150#-4E	VXA150#-4E	75	100	380-480V 3ph 50-60Hz	150
VXH176#-4E	VXA176#-4E	90	125	380-480V 3ph 50-60Hz	176
VXH210-4E	VXA210-4E	110	150	380-480V 3ph 50-60Hz	210
VXH253-4E	VXA253-4E	132	180	380-480V 3ph 50-60Hz	253
VXH304-4E	VXA304-4E	160	218	380-480V 3ph 50-60Hz	304
VXH377-4E	VXA377-4E	200	270	380-480V 3ph 50-60Hz	377
VXH415-4E	VXA415-4E	220	300	380-480V 3ph 50-60Hz	415
VXH520-4E	VXA520-4E	280	380	380-480V 3ph 50-60Hz	520
VXH585-4E	VXA585-4E	315	425	380-480V 3ph 50-60Hz	585
VXH650-4E	VXA650-4E	355	475	380-480V 3ph 50-60Hz	650
VXH740-4E	VXA740-4E	400	530	380-480V 3ph 50-60Hz	740
VXH960-4E	VXA960-4E	500	670	380-480V 3ph 50-60Hz	960
VXH1170-4E	VXA1170-4E	630	840	380-480V 3ph 50-60Hz	1170
VXH1370-4E	VXA1370-4E	710	950	380-480V 3ph 50-60Hz	1370

**NOTE:** Replace '#' on selected models for different IP rated protective structure

S = IP00      M = IP21      L = IP55

# DPS / MPS / BPS

## Power Supplies



### Key Features

- Universal Input Voltage
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- PFC Function available
- Parallel Function
- Compact design
- Single & Three Phase versions



IMO's DPS-1 range of AC/DC DIN Rail mounted power supplies has been designed especially for the Control and Automation market. Offering the benefits of slimline design, universal input, and the security of IMO's 3-year warranty, the DPS-1 range provides multiple choices for all low power electrical or electronic systems commonly used in automation applications.

The DPS-1 range provides a reliable power source for components such as sensors, relays, contactors, timers, temperature controllers, PLC's, process controllers and HMI's, all of which are also available from IMO.

Offering high efficiency up to 90%, the DPS-1 range is short-circuit protected and has its own integrated internal input filter. It includes 5W, 10W, 15W and 18W class 2 power supplies all of which are slim-line units in just 22.5mm wide, plastic enclosures. These units are complemented by larger power supplies in metal enclosures: the 30W and 60W units (Class 2 types available) are 40.5mm wide, 100W units are 54mm wide, 120W units are 63.5mm wide, 240W and 300W units are 83mm wide, and the 480W units are 175mm wide.

The DPS-1 power supply offers the advantage of a universal input voltage range, from 85-264VAC and 120-375VDC (version dependent) and 24VDC output as standard (version dependant); 5V, 12V and 48V output versions are also available.

In addition to the above, IMO's DPS-3 range of 3 phase AC DIN-Rail mounted power supplies come in four output power options; 120W, 240W, 480W and 960W, designed for more power demanding panels and applications, and offer high efficiency up to 93%.

IMO's MPS-1 range of AC/DC DIN-Rail mounted modular power supplies has been designed for the Control & Automation market, keeping in mind the demand from BMS solutions that require low voltage DC supplies.

Offering the benefits of slimline design, universal input, modular, AC/DC operation and the security of IMO's 3 Year Warranty, the MPS-1 range provides multiple choices for all low power electrical or electronic devices commonly used in automation applications, with high efficiency up to 82%.

IMO's BPS-1 range of power supplies can be used where a slimline design and basic operation is required without advanced features.

Approvals for all IMO Power Supplies are model dependant. Please refer to [www.imopc.com](http://www.imopc.com) for details.

Range	Construction	Input Voltage Range	No of Phases	Class	Approvals
DPS-1	Metal / Plastic	85-264VAC 120-375VDC	Single Phase	2*	CE, cULus, cURus
DPS-3	Metal	340-575VAC 480-820VDC	Three Phase	-	CE, cULus, cURus
MPS	Plastic	90-264VAC 120-375VDC	Single Phase	2*	CE, cULus, cURus
BPS	Metal / Plastic	90-264VAC 127-370VDC	Single Phase	-	CE, cURus

\* All IMO Power Supply Classes are model dependant.



## BPS-1 Power Supply Selection

PLASTIC	BPS-1-15-12DC BPS-1-30-12DC BPS-1-60-12DC BPS-1-100-12DC	Input 90-264VAC 127-370VDC	Output		
			Current	Power	Voltage
			1.2A	15W	12VDC
			2.5A	30W	12VDC
			5A	60W	12VDC
			8A	100W	12VDC

METAL	BPS-1-15-24DC BPS-1-30-24DC BPS-1-70-24DC BPS-1-120-24DC BPS-1-180-24DC BPS-1-240-24DC	Input 90-264VAC 127-370VDC	Current	Power	Voltage
			0.65A	15W	24VDC
			1.3A	30W	24VDC
			3A	70W	24VDC
			5A	120W	24VDC
			7.5A	180W	24VDC
			10A	240W	24VDC



## MPS-1 Power Supply Selection

PLASTIC	MPS-1-007-5DC MPS-1-015-5DC MPS-1-022-5DC MPS-1-035-5DC* MPS-1-060-5DC* MPS-1-010-12DC MPS-1-024-12DC MPS-1-033-12DC MPS-1-054-12DC MPS-1-072-12DC* MPS-1-010-24DC MPS-1-024-24DC MPS-1-036-24DC MPS-1-060-24DC MPS-1-100-24DC*	Input 90-264VAC 120-375VDC	Output		
			Current	Power	Voltage
			1.5A	7.5W	5VDC
			3A	15W	5VDC
			4.5A	22W	5VDC
			7A	35W	5VDC
			12A	60W	5VDC
			0.83A	10W	12VDC
			2A	24W	12VDC
			2.75A	33W	12VDC
			4.5A	54W	12VDC
			6A	72W	12VDC
			0.42A	10W	24VDC
			1A	24W	24VDC
			1.5A	36W	24VDC
			2.5A	60W	24VDC
			4.8A	100W	24VDC



## DPS-1 / DPS-3 Power Supply Selection

PLASTIC	DPS-1-005-24DC DPS-1-010-24DC DPS-1-015-5DC DPS-1-018-12DC DPS-1-018-24DC	Input 90-264VAC 120-375VDC	Current	Power	Voltage
			0.21A	5W	24VDC
			0.42A	10W	24VDC
			3A	15W	5VDC
			1.5A	18W	12VDC
			0.75A	18W	24VDC

METAL	DPS-1-030-5DC DPS-1-030-12DC DPS-1-030-24DC DPS-1-030-48DC DPS-1-050-5DC* DPS-1-060-12DC DPS-1-060-24DC DPS-1-060-48DC DPS-1-100-12DC* DPS-1-100-24DC* DPS-1-100-48DC* DPS-1-120-12DC* DPS-1-120-24DC* DPS-1-120-48DC* DPS-1-240-24DC* DPS-1-240-48DC* DPS-1-300-24DC* DPS-1-300-48DC* DPS-1-480-24DC* DPS-1-480-48DC*	Input 85-264VAC 90-375VDC	6A	30W	5VDC
			2.5A	30W	12VDC
			1.25A	30W	24VDC
			0.625A	30W	48VDC
			10A	50W	5VDC
			5A	60W	12VDC
			2.5A	60W	24VDC
			1.25A	60W	48VDC
		Input 90-264VAC 120-375VDC	8.4A	100W	12VDC
			4.2A	100W	24VDC
			2.1A	100W	48VDC
			10A	120W	12VDC
		Input 90-132VAC or 180-264VAC (switchable) 210-375VDC	5A	120W	24VDC
			2.5A	120W	48VDC
			10A	240W	24VDC
			5A	240W	24VDC
			12.5A	300W	24VDC
			6.25A	300W	48VDC
			20A	480W	24VDC
			10A	480W	48VDC

METAL	DPS-3-120-12DC* DPS-3-120-24DC* DPS-3-240-24DC* DPS-3-240-48DC* DPS-3-480-24DC* DPS-3-480-48DC* DPS-3-960-24DC* DPS-3-960-48DC*	Input 340-575VAC 480-820VDC	10A	120W	12VDC
			5A	120W	24VDC
			10A	240W	24VDC
			5A	240W	48VDC
			20A	480W	24VDC
			20A	480W	48VDC
			40A	960W	24VDC
			20A	960W	48VDC

NOTE: Some popular options are shown above. For other options, please contact IMO.

\* These products are not Class 2 rated

# IMO Training

Bespoke Training Courses for all levels

## Key Features

- In-house or On-site
- Standard & Advanced levels catered for
- Bespoke offering to suit your requirements
- Modular courses

IMO offers in-house or on-site training for all its HMI, PLC and Drives products. The training modules can be standard or higher level, tailored to the application requirement. They are designed to familiarise customers with the use and programming of IMO automation products. Each module is usually based on one product range. IMO is flexible in offering a training program that best suits the requirements of its customer.



	Description	Location	Duration
SOFTWARE-ENGINEERING	Software & Engineering Support Services Course	In House	Project Dependent
AUTOTRAIN1	Full Day Automation Technical Training Course	In-House or On-Site	1 Day
AUTOTRAIN2	Half Day Automation Technical Training Course	In-House or On-Site	½ Day
VSDTRAIN1	Full Day Inverter Technical Training Course	In-House or On-Site	1 Day
VSDTRAIN2	Half Day Inverter Technical Training Course	In-House or On-Site	½ Day

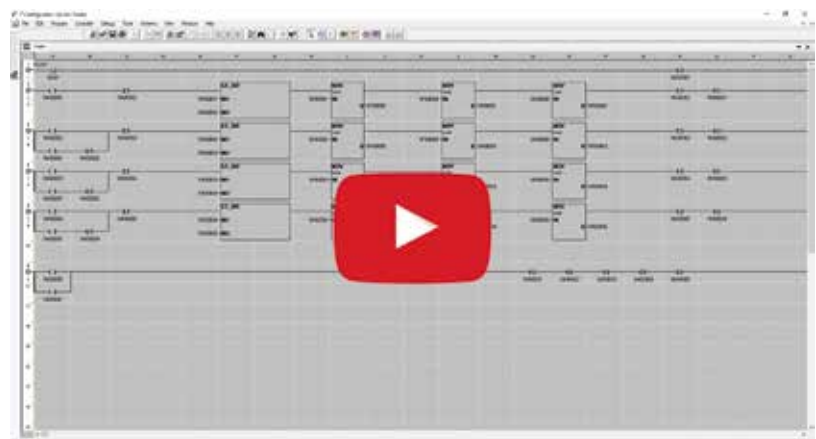
## Online Tutorials

Automation Tutorials on our YouTube Channel

If you have ever wondered how to configure a fixed scan cycle program in the XG5000 for XEC PLC, or if you wanted to know how to automatically transfer files from an *i3* Controller using *i3* Transfer scripting, then you should take a look at our ever expanding YouTube channel.



Scan me to view the  
IMO YouTube Channel

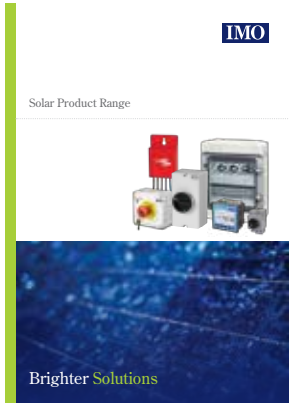


**For all your Industrial Automation requirements...**

email [automation@imopc.com](mailto:automation@imopc.com) or call **01707 414 444**

# Also Available From IMO

From a single product to a complete application solution, IMO has the product range and knowledge to meet today's most demanding application requirements...

 <p>Panel Product Range</p> <p>Click on a <b>better solution</b></p>	 <p>Solar Product Range</p> <p>Brighter <b>Solutions</b></p>	 <p>AC Variable Speed Drives 0.4kW-75kW (0.55-100HP)</p> <p>A solution for every <b>application</b></p>	 <p>iView HMI</p> <p>HMI solutions you can <b>view</b></p>
 <p>Scan me for more information...</p>			
 <p>Terminal Blocks</p> <p>Connecting to <b>the future</b></p>			 <p>DIN Rail Terminals</p> <p>Keeping on the <b>right track</b></p>
 <p>Miniature Circuit Breakers</p> <p>Bridging the <b>gap</b></p>	 <p><b>FireRaptor</b> Solar Panel Rapid Shutdown Safety Solution</p>	 <p>UL Approved Miniature Circuit Breakers</p>	 <p><b>EV</b> Solutions for Electric Vehicle Charging</p>
Miniature Circuit Breakers	FireRaptor Safety Shutdown	UL Approved MCBs	EV Charging Components

...visit [www.imopc.com](http://www.imopc.com) for a full range of products and downloadable brochures

## IMO Worldwide Offices

### IMO Precision Controls Limited

The Interchange  
Frobisher Way  
Hatfield, Herts AL10 9TG  
United Kingdom

Tel: 01707 414 444  
Fax: 01707 414 445  
Email: [imo@imopc.com](mailto:imo@imopc.com)  
Web: [www.imopc.com](http://www.imopc.com)

### IMO Jeambrun Automation SAS

5, Rue Alfred De Musset  
94100  
Saint-Maur-Des-Fosses  
France

Tel: 0800 912 712 (n° gratuit)  
Fax: 0145 134 737  
Email: [imo-fr@imopc.com](mailto:imo-fr@imopc.com)  
Web: [www.imojeambrun.fr](http://www.imojeambrun.fr)

### IMO Automazione

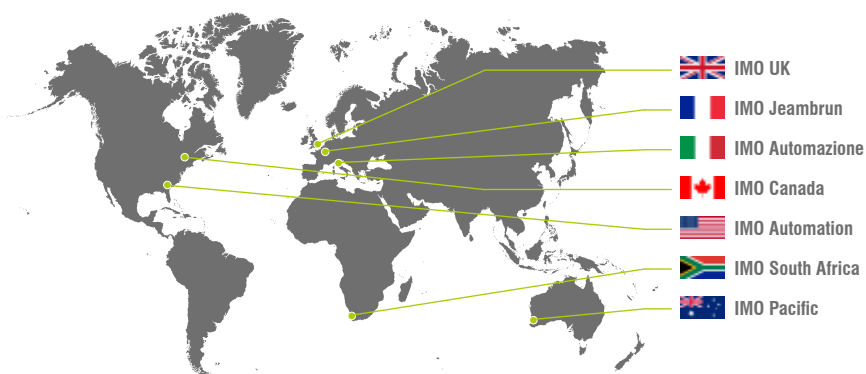
Via Belfiore 10,  
50144 Firenze (FI)  
Italia

Tel: 800 930 872 (toll free)  
Fax: 8000 452 6445  
Email: [imo-it@imopc.com](mailto:imo-it@imopc.com)  
Web: [www.imopc.it](http://www.imopc.it)

### IMO Canada

Unit 32 - B - North  
18 Strathearn Avenue, Brampton  
Ontario L6T 4Y2  
Canada

Tel: 905 799 9237  
Fax: 905 799 0450  
Email: [imo-ca@imopc.com](mailto:imo-ca@imopc.com)  
Web: [www.imopc.com](http://www.imopc.com)



### IMO Automation LLC

Steeplechase Industrial Park  
Suite E, 5845 Steeplechase Blvd  
Cumming, GA 30040  
USA

Tel: 404 476 8810  
Fax: 678 679 7112  
Email: [imo-usa@imopc.com](mailto:imo-usa@imopc.com)  
Web: [www.imoautomation.com](http://www.imoautomation.com)

### IMO South Africa (Pty) Ltd

G16 Centurion Business Park  
Montague Gardens  
Cape Town 7441  
South Africa

Tel: 021 551 1787  
Fax: 021 555 0676  
Email: [info@imopc.co.za](mailto:info@imopc.co.za)  
Web: [www.imopc.co.za](http://www.imopc.co.za)

### IMO Pacific Pty Ltd

Unit 9, Dillington Pass  
Landsdale  
Perth WA 6065  
Australia

Tel: 1300 34 21 31  
Fax: 08 9303 9908  
Email: [sales@imopacific.com.au](mailto:sales@imopacific.com.au)  
Web: [www.imopacific.com.au](http://www.imopacific.com.au)



*Connect with and follow IMO Precision Controls Ltd.  
for the latest news, views and reviews*