

# Automation Product Range

---



Solutions with **you in mind**

# Automation Product Range

## It makes sense to switch to IMO

### 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



### *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 open Bus communications technology into a single, easy to mount unit.



### 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.



### *i*Smart 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 *i*Smart has the same capability as a small PLC.



### I/Os

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



### *i*View HMI Controller

IMO's market-leading *i*View HMI advanced controller is feature packed and comes as standard with over 380 industry protocols for increased compatibility.



### Photoelectric Sensors

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



# 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 IMO has ever produced.

The range is allowing these designers and engineers globally to deliver significant technological advances, greater efficiency, reliability and performance to their daily operations, in 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 NEW programmable logic controllers, NEW human machine interfaces and improved iSmart intelligent relays packed full of new functions. Our NEW 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.

### 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.



### Signal Conditioning

IMO's signal conditioning range of devices has products from 7.6mm wide giving isolation and conditioning to all types of non-hazardous field signals.



### Proximity Sensors

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



### Power Supplies

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



### Level Controllers

IMO DIN mountable liquid level controllers are easy to install and configure.



### Temperature Controllers

Offering a compact front panel arrangement that combines a digital display with a basic tactile panel, the IMO Temperature Controllers are ideal for industrial environments where the space occupied by large control panels is seen as non-productive and expensive.



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

Range: *i*<sup>3</sup>A, *i*<sup>3</sup>B, *i*<sup>3</sup>CX, *i*<sup>3</sup>CMini, *i*<sup>3</sup>DX, *i*<sup>3</sup>E



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

- Addressable Function Keys
- Configurable Serial Communication Ports
- CAN 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)
- Modem Interface
- CAN & Modbus Based Remote I/O
- PID Control
- Alarm Function
- Real Time Clock
- IP65 (NEMA 4X) Protection
- Free Software
- Voltage Range: 10-30VDC
- CE, UL, cUL Approved



## Key Features *i*<sup>3</sup>A

- 128 x 64 Monochrome LCD Display
- 20 Function Keys
- microSD™ Removable Media 2GB
- Optional Ethernet Add-on Card

## Key Features *i*<sup>3</sup>B

- 160 x 128 Monochrome Touch Screen
- 5 Function Keys
- microSD™ Removable Media 2GB
- Optional Ethernet Add-on Card

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

- 640 x 480 Touch Screen 5.7" Display
- 6 Function Keys
- High Resolution 65K Colours
- microSD™ Removable Media 32GB
- Integral Ethernet Port
- Ethernet Based Remote I/O
- USB Ports for Flash Drives up to 2TB

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

- 320 x 240 Touch Screen 3.5" Display
- 5 Function Keys
- High Resolution 65K Colours
- microSD™ Removable Media 32GB
- Integral Ethernet Port
- Ethernet Based Remote I/O
- 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
- microSD™ Removable Media 32GB
- Integral Ethernet Port
- Ethernet Based Remote I/O
- USB Port for Flash Drives up to 2TB

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

- 800 x 480 Touch Screen 7" Display
- 6 Function Keys
- High Resolution 65k Colours
- microSD™ Removable Media 32GB
- 2 Integral Ethernet Ports
- 2 Integral CAN Ports
- Ethernet Based Remote I/O
- USB Port for Flash Drives up to 2TB

**IMO's new *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 Remote I/O – and integrating T/C 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 IMO Software.

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

	<i>i</i> <sup>3</sup> A	<i>i</i> <sup>3</sup> B	<i>i</i> <sup>3</sup> CX	<i>i</i> <sup>3</sup> CMini	<i>i</i> <sup>3</sup> DX	<i>i</i> <sup>3</sup> E
Supply Voltage	10-30VDC	10-30VDC	10-30VDC	10-30VDC	10-30VDC	10-30VDC
Colours	2	2	65536	65536	65536	65536
Screen	128 x 64 F-Key	160 x 128 Touch	640 x 480 Touch	320 x 240 Touch	640 x 480 Touch	800 x 480 Touch
Analogue Input Resolution	10 Bit (V/mA) / 14 Bit (TC/RTD/V/mA)*	10 Bit (V/mA) / 14 Bit (TC/RTD/V/mA)*	12/14/16/17 Bit (V/mA) (TC/RTD/V/mA)*	12 Bit (V/mA) / 14 Bit (TC/RTD/V/mA)*	10 Bit (V/mA) / 14 Bit (TC/RTD/V/mA)*	12 Bit (V/mA) / 14 Bit (TC/RTD/V/mA)*
Analogue Output Resolution	12 Bit (V/mA)	12 Bit (V/mA)	12/14/16/17 Bit (V/mA)*	12 Bit (V/mA)	12 Bit (V/mA)	14 Bit (V/mA)
Function Keys	20	5	6	5	7	6
Serial Ports	2	2	2	2	2	3
USB Ports	No	No	2	2	2	2
CAN Ports	*	1	1	1	1	2
Ethernet Ports	#	#	1	1	2	2

\* Model dependant # Model dependant / additional option card

## Product Selection

<i>i</i> <sup>3</sup> A	DI	DO	AI	AO
I3A12X/10A01-S00F	12	6 Relay	1	-
I3A12X/10B04-SCHF	12	12	2	-
I3A12X/10D03-SCHF	12	6 Relay	4	-
I3A12X/13C14-SOHF	12	12	2 UAI*	2
I3A12X/20B05-SOHF	24	16	2	-
I3A12X/10E24-SEHF	12	12	6 UAI*	4

<i>i</i> <sup>3</sup> B	DI	DO	AI	AO
I3B12Y/10D03-SCHF	12	6 Relay	4	-
I3B12Y/13C14-SCHF	12	12	2 UAI*	2
I3B12Y/20B05-SCHF	24	16	2	-
I3B12Y/10E24-SEHF	12	12	6 UAI*	4

<i>i</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>i</i> <sup>3</sup> CMini	DI	DO	AI	AO
I3CM12Y/10B04-SEHF	12	12	2	-
I3CM12Y/10D03-SEHF	12	6 Relay	3	-
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

<i>i</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>i</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

\* UAI = Universal Analog Inputs

## Accessories

I3-MA	GSM Modem with Antenna
I3-E	Ethernet Expansion
I3-PC45	Programming Cable
PC501	USB to Serial Adaptor
I3-PS	Profibus Slave Expansion



I3-PC45 Programming Cable



I3-MA GSM Modem with Antenna



I3-E Ethernet Expansion

# 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, Modbus and Ethernet options modules for even greater expandability. The iSmart has the same capability as a small PLC, but with reduced complexity and cost, high 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 screen. All 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) by adding a maximum of eight 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 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 7, 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 Base Units

	AC Models	DC Models
<b>Supply Voltage</b>	85-264VAC or 19.6-28.8VAC	19.6-28.8VDC or 10.2-13.8VDC
<b>Output Rating</b>	8A Relay 0.5A Transistor	
<b>Timers</b>	31 (Ladder) or 250 (FBD)	
<b>Counters</b>	31 (Ladder) or 250 (FBD)	
<b>Analogue Input Resolution</b>	n/a	12 bit (0.01V)
<b>Analogue Output Resolution</b>	n/a	12 bit
<b>Function Keys*</b>	8	8
<b>High Speed Inputs</b>	None	2

\* Not in blind version

### 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 have 0-10VDC type in main units

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

### 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	-
SMT-ENET	24VDC	Ethernet Expansion					
PC501	USB to Serial Adaptor						
SMT-USB	USB Programming Cable						
SMT-PC03	Programming Cable						
SMT-PM04-V3	32k Flash Memory						

**NOTE:** Other devices are available, please call for more information



▲ SMT-MA-R8 Expansion Module



▲ SMT-PC03 Programming Cable



▲ SMT-MD-T8 Expansion Module



▲ SMT-USB USB Programming Cable



▲ SMT-PM04 32k Flash Memory



▲ SMT-2AO Expansion Module



▲ SMT-BA-R10-V3

# iView

## Advanced HMI Controller



### Key Features

- IP66 Protection
- 3 Integral Serial Ports (inc. 1 x Screwless)
- FTP Functionality
- Integral Ethernet Port
- microSD™ for Data Logging
- Remote Monitoring via VNC (Web) Server
- 65k Colour Resistive Touch Screen
- Integral Offline Software Simulation
- Over 380 Industry Protocols as Standard
- Aluminium Bezel available on Selected Models
- Screen Configuration in either Landscape or Portrait Mode



### 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 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, three serial and a microSD™ (up to 32GB). These features make it possible to connect to printers, keyboards or a mouse, and data storage on a microSD™ 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).

The included IMO iView Developer 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.

**IP66**  
water & dust proof

Ingress Protection for Dust Proofing and Water Resistance

**microSD™**

microSD™ card storage for Data Logging

**FTP**

FTP file transfer functionality allowing remote download



**13 Al**  
Aluminium

Aluminium bezel available on selected models

Integral Ethernet Port for remote connectivity

2 Integral USB Ports - 1 x USB A, 1 x USB B

Plug in power terminal for easyfit

3 Integral Serial Ports including 1 x Screwless



### iView M Series Specification

	IV04M-SEAP	IV07M-SEAP	IV10M-SEAP	IV12M-SEAA	IV15M-SEAA
<b>Screen Size</b>	4.3" (16:9)	7.0" (16:9)	10.4" (16:9)	12.1" (16:9)	15.0" (16:9)
<b>Resolution</b>	480 x 272	800 x 480	800 x 600	800 x 600	1024 x 768
<b>Colours</b>	65k	65k	65k	65k	65k
<b>Supply Voltage</b>	24VDC	24VDC	24VDC	24VDC	24VDC
<b>microSD™ Slot</b>	Up to 32GB	Up to 32GB	Up to 32GB	Up to 32GB	Up to 32GB
<b>Serial Ports</b>	3	3	3	3	3
<b>USB Ports</b>	2	2	2	2	2
<b>Ethernet Ports</b>	1	1	1	1	1
<b>Operating Temperature</b>	-10°C ~ 60°C	-10°C ~ 60°C	-10°C ~ 60°C	-10°C ~ 60°C	-10°C ~ 60°C

### iView H Series Specification

	IV07H-SEAA	IV10H-SEAA	IV12H-SEAA	IV15H-SEAA
<b>Screen Size</b>	7.0" (16:9)	10.4" (16:9)	12.1" (16:9)	15.0" (16:9)
<b>Resolution</b>	800 x 480	800 x 600	1024 x 768	1024 x 768
<b>Colours</b>	65k	65k	65k	65k
<b>Supply Voltage</b>	24VDC	24VDC	24VDC	24VDC
<b>microSD™ Slot</b>	Up to 32GB	Up to 32GB	Up to 32GB	Up to 32GB
<b>Serial Ports</b>	3	3	3	3
<b>USB Ports</b>	2	2	2	2
<b>Ethernet Ports</b>	1	1	1	1
<b>Audio / Video</b>	Optional	Optional	Optional	Optional
<b>Operating Temperature</b>	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C

### Accessories

<b>MSD-16GB</b>	16GB microSD™ Card
<b>IV-USB</b>	USB Programming Cable



▲  
MSD-16GB  
16GB microSD™ Card



▲  
IV-USB  
USB Programming Cable

## iView Developer Software



- 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
- 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, plus many more benefits and features

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

## Human Machine Interface (HMI)



### Key Features

- PID Control
- Alarm Function
- Real Time Clock
- IP65 (NEMA 4X) 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> 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", 15" and 22" and a typical logic scan rate of 0.2mS/K. In addition, the i<sup>3</sup> 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 distant sites. i<sup>3</sup> units provide control, operator interface, and communication functionality. This modularity allows the i<sup>3</sup> to be more precisely tailored to meet application requirements.

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

	I3CM12Y/ 00000-SEHF	I3CX12Z/ 00000-SEHF	I3E14Z/ 00000-SEHF	I3DX12Z/ 00000-SEHF	I3X15/ 00000-SEHD	I3X22/ 00000-SEHD
Supply Voltage	10-30VDC	10-30VDC	10-30VDC	10-30VDC	10-30VDC	10-30VDC
Colours	65535	32768	65535	65536	65535	65535
Screen	3.5" QVGA	5.7" TFT	7" WVGA TFT	10.4" VGA	15" XGA TFT	22" 1080p TFT
Removable Media	32GB microSD™	32GB microSD™	32GB microSD™	32GB microSD™	4x USB 2.0 Drives	4x USB 2.0 Drives
Function Keys	5	6	6	7	7	7
Serial Ports	2	2	3	2	3	3
USB Port	2	2	2	2	4	4
CAN Port	1	1	2	2	2	2
Ethernet Port	1	1	2	2	2	2

# iText

## Programmable Text HMI

### Key Features

- Can be used with iSmart Controllers
- Can be used with a Range of PLC'S
- 4.3" Monochrome Display, 192 x 64 Pixels, Olivine Background
- 24 Addressable Function Keys
- Supports Modbus RTU Protocol
- 2 Communication Ports (RS232 & RS485)
- Voltage Range: 20.4 - 26.4 VDC
- Free IMO Configuration Software
- RS232 Programming Cable (not included)



iText programmable text monitor can be used with a range of PLCs and offers low to medium HMI interface. It can easily be configured by using the free software available as a download from the IMO website, [www.imopc.com](http://www.imopc.com).

The 4.3" monochrome display has 192 x 64 pixels and the unit comes with 24 addressable function keys. The 2 communication ports in the iText can handle RS232 and RS485.

### iText & Accessories

<b>ITEXT</b>	iText Programmable Text HMI
<b>ITEXT-RS232</b>	iText RS232 Programming Cable
<b>SMT-PC03</b>	iText to iSmart Cable
<b>PC501</b>	USB to Serial Adaptor



▲  
ITEXT-RS232  
iText Programming Cable



▲  
SMT-PC03  
iText to iSmart Cable

# iConnect

## Remote M2M Connection



### Key Features

- Connect Automatically to the IMOGateway
- Manage Devices
- Access Log Files Remotely
- Integral Ethernet
- 3G & 4G Options Available



The iConnect is a managed “connected black box” featuring integral Ethernet and optional 3G or 4G modem. iConnect automatically connects to the IMOGateway either via Ethernet or a mobile modem, enabling you to run scripts, set up alerts and access data for storage and analysis from IMO devices such as the *i*<sup>3</sup> Intelligent Controller and iView HMI.

With iConnect you can set up a schedule to collect datalog files from your devices via FTP and synchronise on to your own servers or IMOGateway for analysis and alerts.

IMOGateway is a subscription service portal that enables you to have full control of all of your iConnect devices. This service gives you the option of where to store your data, using either the IMOGateway store, or your own designated service. The IMOGateway store provides 500MB of secure storage per device, all fully encrypted using Advanced Encryption Standard (AES) 256-bit for enhanced security.

IMO offer a robust heavy duty SIM card for use with the iConnect, which allows for data roaming across an extensive range of global networks. Security is at the forefront of the design and utilises the most current adopted standards



IMOGateway interfaces with the iConnect device - this is a subscription service.

The IMOGateway is a portal which enables you to have full control of your iConnect devices, allows you to register new iConnect devices, view, delete or download data files, set up and manage system alerts, and manage the set up of your SIM card estate.

From the IMOGateway you can also determine where to store your data, on IMO’s GATEWAY-STORE or on your own designated servers.

The IMOGateway can also have customised branding and access control for end-users. Please enquire for more information.

### iConnect Selection

		Description
Hardware	ICONNECT-ETHERNET	iConnect for Ethernet
	ICONNECT-3G	iConnect with 3G Modem
	ICONNECT-4G	iConnect with 4G Modem
	ICONNECT-ANTENNA	External Antenna
	GATEWAY-CONNECT	IMOGateway Connection
	GATEWAY-STORE	500MB Storage
Misc	IC-SMS-100	SMS Bundle (pack of 100)

### Storage



GATEWAY-STORE provides 500Mb (per device) secure storage for your data files. IMO storage has 99.99% durability and 99.99% availability, and will automatically encrypt your data at rest using Advanced Encryption Standard (AES) 256-bit for added security.

The GATEWAY-STORE facility is designed to be robust, reliable and incredibly secure, giving added peace of mind that your data is safe and constantly backed-up for immediate access.

# 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 of the planet, using a single and highly competitive price plan. The IMO SIM card does not hold a preference to the network it attaches to, 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

1MB Monthly Allowance
10MB Monthly Allowance
30MB Monthly Allowance
50MB Monthly Allowance
100MB 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
- France
- Australia
- Germany
- United States of America
- Italy
- Russian Federation
- Spain
- South Africa
- China
- + **150 more!**

### Unparalleled Control

Additional to supplying robust SIM cards with extensive global coverage, using IMO*Gateway* - 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.



# XGB

## Programmable Logic Controllers



### Key XBM/XEC/XBC Features

- Max. 5-Ch Communication with Integral Functions & Expansion Modules
- Enhanced User Interface with XG5000 / XG-PD Software
- 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



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

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



### 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*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

### Product Selection

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

\*3 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



### 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*1
Analogue Input Resolution*2	14 bit
Analogue Output Resolution*2	14 bit
PID Control	Yes
Programming Languages	IEC 61131
High Speed Inputs	Yes
Positioning	Yes

\*1 Model dependant

\*2 When using Analogue Expansion Units

### Product Selection

	DI	RO (2A)	DO*3 (0.2A)
XEC-DR32H	16	16	-
XEC-DR32H/DC-E*4	16	16	-
XEC-DR64H	32	32	-
XEC-DR64H/DC-E*4	32	32	-

\*3 Please contact IMO to order transistor output versions

\*4 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

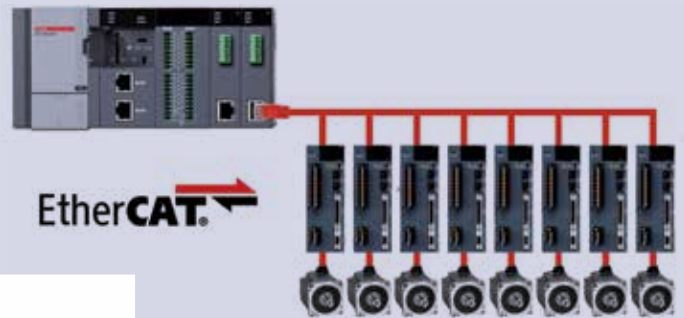


With so many included innovations, the XGB U sets new standards in ultimate PLC performance. Compatible with the existing expansion modules of the XGB range, and with a host of outstanding features, the XGB U will provide the utmost efficiency for your applications. The integral web server offers monitoring 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, & 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 / Memory	32k steps	384kbytes
Max I/O Points	348/352*1	348/352*1
Analogue Input Resolution	1/16000*2	1/16000*2
Analogue Output Resolution	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 only to models with analogue Input/Output

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	-

\*3 N = NPN version P = PNP version  
For 24VDC models please add suffix "/DC" to the part number



## Expansion Units & Accessories

	DI	Relay Out	DO	AI	AO	RTD	TC
XBE-DC08A	8	-	-	-	-	-	-
XBE-DC16A	16	-	-	-	-	-	-
XBE-DC32A*1	32	-	-	-	-	-	-
XBE-RY08A	-	8	-	-	-	-	-
XBE-RY16A	-	16	-	-	-	-	-
XBE-TN08A	-	-	8	-	-	-	-
XBE-TN16A	-	-	16	-	-	-	-
XBE-TN32A*1	-	-	32	-	-	-	-
XBE-TP08A	-	-	8	-	-	-	-
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
XBL-EMTA	Ethernet Communications Module						
XEL-BSSA	Modbus TCP I/O System						
PMC-310S	Serial Programming Cable						
USB-301A	USB Programming Cable						
XBC-XECBATTERY	Replacement Battery						
XB0-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  
TGTGTScrew I/O Termination



▲ XEL-BSSA  
Modbus TCP I/O System



▲ XBL-EMTA  
Ethernet Comms Module



▲ XBF-TC04S  
Expansion Module



▲ XBF-AH04A  
Expansion Module



▲ XBE-RY16A  
Expansion Module

# Remote I/O



## Key Features

- For use with *i*<sup>3</sup>A, *i*<sup>3</sup>B, *i*<sup>3</sup>CX, *i*<sup>3</sup>CMini, *i*<sup>3</sup>DX, *i*<sup>3</sup>E, *i*<sup>3</sup>X & 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 Terminals



## 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/M040XA-D1	-	-	-	4x V/mA	-	-
	IOS/M080XV-D2	-	-	-	8x V	-	-
	IOS/M08BDR-D1	4x NPN	4x 2A Relay	-	-	-	-
	IOS/M12BDD-D2	4x NPN	8x NPN	-	-	-	-
	IOS/M12IDX-D2	12x NPN	-	-	-	-	-
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	-	-	-	-	-
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	-	-
Modbus / TCP	XEL-BSSA	All the expansion units of the XGB range can be used.					
	XCL-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, by using IMO's iSmart Intelligent Relay plus a mix of digital I/O.

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.

# 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.

## Signal Conditioning Selection

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

# Photoelectric Sensors



## Key Features

- Infrared, Visible Red LED & Red Laser
- PNP/NPN & Analogue Outputs
- NO/NC Selectable
- Transparent Object Detection
- Metal & Plastic Detection
- Models With or Without Sensitivity Adjustment
- IP67 Protection



IMO's recently enhanced detection range offers an easy choice of sensor for a wide variety of applications. The addition of the new QC range compliments the QB series with increased sensing distance, precise measurement and colour detection. The table below gives a small selection of IMO's extensive range of photoelectric sensors, please visit [www.imopc.com](http://www.imopc.com) for more information on IMO's full range.

Photoelectric Sensors Selection					
		Type*	Source	Distance	Output
Compact (50 x 50 x 17)	QCRN/OP-0E	Retro-Reflective	Visible LED	5.5m	PNP
	QCLP/OP-0E	Retro-Reflective	Laser	12m	PNP
	QCRA/OP-0E	Diffuse - BGS	Visible LED	0.3m	PNP
	QCLB/OP-0E	Diffuse - BGS	Laser	150mm	PNP
	QCIC/OP-0E	Diffuse - BGS	Laser	0.6m	PNP
	QCLA/OP-0E	Diffuse - BGS	Laser	0.3m	PNP
	QCIS/X0-0E	Through Beam - Emitter	Visible LED	-	-
	QCIR/OP-0E	Through Beam - Receiver	Visible LED	15m	PNP
	QCL3/OA-0E	Diffuse - Measurement	Laser	45 to 85mm	0-10V
	QCL4/OA-0E	Diffuse - Measurement	Laser	45 to 85mm	0-10V
	QCLD/OR-0E	Diffuse - Measurement	Laser	80 to 300mm	0-10V
	QCW5/OP-0E	Diffuse - Colour	Visible LED	32mm	3x PNP
Miniature (20 x 32 x 12)	QBLL/OP-0E	Diffuse - Contrast	Laser	150mm	PNP
	QBR6/OP-0E	Diffuse	Visible LED	0.3m	PNP
	QBLA/OP-0E	Diffuse - BGS	Laser	60mm	PNP
	QBRB/OP-0E	Diffuse - BGS	Visible LED	100mm	PNP
	QBLC/OP-0E	Diffuse - BGS	Laser	110mm	PNP
	QBID/OP-0E	Diffuse - BGS	Infrared	150mm	PNP
	QBR3/OA-0E	Diffuse - B & FGS	Visible LED	80mm	0-10V
	QBRG/OP-0E	Retro - Reflective (Transparent Objects)	Visible LED	0.5m	PNP
	QBLLM/OP-0E	Retro - Reflective	Laser	1m	PNP
	QBRN/OP-0E	Retro - Reflective	Visible LED	2.5m	PNP
	QBRP/OP-0E	Retro - Reflective	Visible LED	4m	PNP
	QBR5/OO-0E	Through Beam - Emitter	Visible LED	-	-
QBR5/OP-0E	Through Beam - Receiver	Visible LED	6m	PNP	
M18 Barrel	FA17/BP-0E	Diffuse	Infrared	0.4m	PNP
	FA14/BP-0E	Diffuse	Infrared	0.2m	PNP
	FAIC/BP-0E	Retro - Reflective	Infrared	4m	PNP
	FAIH/OO-0E	Through Beam - Emitter	Infrared	-	-
	FAID/OP-0E	Through Beam - Receiver	Infrared	20m	PNP

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

\* BGS = Background Suppression FGS = Foreground Suppression

# Proximity Sensors

## 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 possible) 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.

Proximity Sensors Specifications											
Barrel Size	Type	Standard Distance Part Number	Output Logic	Range (mm)	Exit	Length (mm)	Long Distance Part Number	Output Logic	Range (mm)	Exit	Length (mm)
M8	Shielded	PB0801/DSAP-H	PNP	1.5	M12 Plug	66	PB0802/DSAP-H	PNP	2	M12 Plug	66
	Unshielded	PB0802/DUAP-H	PNP	2	M12 Plug	71	PB0804/DUAN-A	NPN	4	2m Cable	50
M12	Shielded	PB1202/DSAP-H	PNP	2	M12 Plug	65	PB1204/DSAP-H	PNP	4	M12 Plug	65
	Unshielded	PB1204/DUAP-H	PNP	4	M12 Plug	70	PB1207/DUAP-H	PNP	7	M12 Plug	70
M18	Shielded	PB1805/DSAP-H	PNP	5	M12 Plug	62	PB1808/DSAP-H	PNP	8	M12 Plug	62
	Unshielded	PB1808/DUAP-H	PNP	8	M12 Plug	70.5	PB1812/DUAP-H	PNP	12	M12 Plug	70.5
M30	Shielded	PB3010/DSAP-H	PNP	10	M12 Plug	68	PB3015/DSAP-H	PNP	15	M12 Plug	68
	Unshielded	PB3015/DUAP-H	PNP	15	M12 Plug	81	PB3022/DUAP-H	PNP	22	M12 Plug	81

**NOTE:** Some popular options are shown above. For other options, please refer to the appropriate datasheet at [www.imopc.com](http://www.imopc.com)

# Level Detection

## Key Features

- Level Monitoring of Conductive Liquids
- Multifunction
- Secure Isolation of the Measuring Circuit
- Output, One Changeover Contacts
- Width 35mm
- DIN Mountable
- CE, UL, cUL



The IMO DIN mountable liquid level controller is easy to install and 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 by using a 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 Relay			
	Type	Timing Function	Relay Switching Function
WLC-110VAC	110VAC	On Delay and Off Delay	1250VA AC1 at 250VAC
WLC-230VAC	230VAC	On Delay and Off Delay	1250VA AC1 at 250VAC

# Limit Switches



## 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 Switches 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



NOTE: Sample selection shown above, please contact IMO for more information

# Safety Limit Switches



## 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 Switches 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

For other ranges please refer to the IMO website  
[www.imopc.com](http://www.imopc.com)

# AC Variable Speed Drives

## 0.40-710kW (0.55-950HP)



### Key Features

- Better Diagnostics - Easy Programme in many languages
- 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
- Robust Self-Monitoring Power Supplies & Gate Drives with Soft Switching

From our market leading CUB, VXR, VXG, VXH and VXA range of drives with varying functionality and power, IMO has the right frequency inverter to meet the needs of your application, whatever it might be. 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. It will meet the needs of higher performance machines and equipment such as conveyors, fans, pumps, centrifugal separators and food processing machines, as well as the needs of system integration, energy saving, labour saving and total cost reduction.

With an extended range of functions, the IMO VXR features connectivity, compact body, wide model variations and global compatibility. The VXR with Dynamic Torque Vector Control sets new standards for vector controlled drives. It will meet the needs of high performance machines and equipment such as pumps, fans, conveyors, material handling machines, packaging, special machines and textile machines.

The Building Services specific VXH drive has been designed with energy saving in mind. It can be used as part of a BMS system with its many inputs and outputs, or as a stand-alone solution with its 4 PID controllers, PLC and real time clock functions.

The VXA or "AQUA" drive has been designed to suit the demands of the water industry with its application specific functions such as cascading pump control, anti jam and dry pump detection.

The high performance VXG multi function inverter boasts state-of-the-art technology, with control performance that has evolved to a new dimension. Control methods now include: PG Vector control, sensorless vector control, dynamic torque vector control and V/F control. It meets the need of the most demanding drives applications such as hoisting, packaging, material handling, wood, textile and process machinery.

*The IMO Jaguar range is ready to answer your needs, providing the highest performance levels in the industry and redefining the common sense of general purpose inverters.*



IP20



### CUB Micro Inverter Specifications

	Nominal Power kW	HP	Nominal Input Voltage	Rated Output Current (Amps)
CUB3A-1	0.4	0.5	200-240V 1ph 50-60Hz	3
CUB5A-1	0.75	1	200-240V 1ph 50-60Hz	5
CUB8A-1	1.5	2	200-240V 1ph 50-60Hz	8
CUB11A-1	2.2	3	200-240V 1ph 50-60Hz	11
CUB1A5-4	0.4	0.5	380-480V 3ph 50-60Hz	1.5
CUB2A5-4	0.75	1	380-480V 3ph 50-60Hz	2.5
CUB3A7-4	1.5	2	380-480V 3ph 50-60Hz	3.7
CUB5A5-4	2.2	3	380-480V 3ph 50-60Hz	5.5
CUB9A-4	4	5.5	380-480V 3ph 50-60Hz	9

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



IP20



### VXR Compact Inverter Specifications

	Nominal Power kW	HP	Nominal Input Voltage	Rated Output Current (Amps)
VXR3A-1E	0.4	0.5	200-240V 1ph 50-60Hz	3
VXR5A-1E	0.75	1	200-240V 1ph 50-60Hz	5
VXR8A-1E	1.5	2	200-240V 1ph 50-60Hz	8
VXR11A-1E	2.2	3	200-240V 1ph 50-60Hz	11
VXR1A5-4E	0.4	0.5	380-480V 3ph 50-60Hz	1.5
VXR2A5-4E	0.75	1	380-480V 3ph 50-60Hz	2.5
VXR3A7-4E	1.5	2	380-480V 3ph 50-60Hz	3.7
VXR5A5-4E	2.2	3	380-480V 3ph 50-60Hz	5.5
VXR9A-4E	4	5.5	380-480V 3ph 50-60Hz	9
VXR13A-4	5.5	7.5	380-480V 3ph 50-60Hz	13
VXR18A-4	7.5	10	380-480V 3ph 50-60Hz	18
VXR24A-4	11	15	380-480V 3ph 50-60Hz	24
VXR30A-4	15	20	380-480V 3ph 50-60Hz	30

NOTE: Models showing 'E' are supplied with an integral EMC Filter





IP20 / IP00

### VXG Torque Vector Drives Specifications

	Nominal Power CT		Nominal Power VT		Nominal Input Voltage	Rated Output Current (Amps)	
	KW	HP	KW	HP		CT	VT
VXG1A5-4E	0.4	0.55	0.4	0.55	380-480V 3ph 50-60Hz	1.5	-
VXG2A5-4E	0.75	1	0.75	1	380-480V 3ph 50-60Hz	2.5	-
VXG4A-4E	1.5	2	1.5	2	380-480V 3ph 50-60Hz	4	-
VXG5.5A-4E	2.2	3	2.2	3	380-480V 3ph 50-60Hz	5.5	-
VXG9A-4E	4	5.5	4	5.5	380-480V 3ph 50-60Hz	9	-
VXG16A5L-4E	5.5	7.5	7.5	10	380-480V 3ph 50-60Hz	13.5	16.5
VXG23AL-4E	7.5	10	11	15	380-480V 3ph 50-60Hz	18.5	23
VXG30A5L-4E	11	15	15	20	380-480V 3ph 50-60Hz	24.5	30.5
VXG37AL-4E	15	20	18.5	25	380-480V 3ph 50-60Hz	32	37
VXG45AL-4E	18.5	25	22	30	380-480V 3ph 50-60Hz	39	45
VXG60AL-4E	22	30	30	40	380-480V 3ph 50-60Hz	45	60
VXG75AL-4E	30	40	37	50	380-480V 3ph 50-60Hz	60	75
VXG91AL-4E	37	50	45	60	380-480V 3ph 50-60Hz	75	91
VXG112AL-4E	45	60	55	75	380-480V 3ph 50-60Hz	91	112
VXG150AL-4E	55	75	75	100	380-480V 3ph 50-60Hz	112	150
VXG176AL-4E	75	100	90	125	380-480V 3ph 50-60Hz	150	176
VXG210AL-4E	90	125	110	150	380-480V 3ph 50-60Hz	176	210
VXG253AL-4E	110	150	132	180	380-480V 3ph 50-60Hz	210	253
VXG304AL-4E	132	180	160	218	380-480V 3ph 50-60Hz	253	304
VXG377AL-4E	160	218	200	270	380-480V 3ph 50-60Hz	304	377
VXG415AL-4E	200	270	220	300	380-480V 3ph 50-60Hz	377	415
VXG520AL-4E	220	300	280	380	380-480V 3ph 50-60Hz	415	520
VXG650AL-4E	280	380	315	425	380-480V 3ph 50-60Hz	520	650
VXG740AL-4E	315	425	355	475	380-480V 3ph 50-60Hz	585	740
VXG840AL-4E	355	475	400	530	380-480V 3ph 50-60Hz	650	840
VXG960AL-4E	400	530	500	670	380-480V 3ph 50-60Hz	740	960
VXG1170AL-4E	500	670	630	840	380-480V 3ph 50-60Hz	960	1170
VXG1370AL-4E	630	840	710	950	380-480V 3ph 50-60Hz	1170	1370

NOTE: Models showing 'E' are supplied with an integral EMC Filter



IP55 / IP21 / IP00

### VXH/VXA Variable Torque Drives 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

# 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 slim lines, 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 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 are 40.5mm 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 as standard and 24VDC output (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 slim lines, 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%.

The range of IMO's power supplies 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. They are short-circuit protected and include an integrated internal input filter.

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

### DPS-1 Power Supply Selection

	Input	Current	Output Power	Voltage	
<b>PLASTIC</b>	DPS-1-015-5DC	90-264VAC	3A	15W	5VDC
	DPS-1-018-12DC	90-264VAC	1.5A	18W	12VDC
	DPS-1-018-24DC	90-264VAC	0.75A	18W	24VDC
<b>METAL</b>	DPS-1-030-5DC	85-264VAC	6A	30W	5VDC
	DPS-1-030-12DC	85-264VAC	2.5A	30W	12VDC
	DPS-1-030-24DC	85-264VAC	1.25A	30W	24VDC
	DPS-1-030-48DC	85-264VAC	0.625A	30W	48VDC
	DPS-1-050-5DC	85-264VAC	10A	50W	5VDC
	DPS-1-060-12DC	85-264VAC	5A	60W	12VDC
	DPS-1-060-24DC	85-264VAC	2.5A	60W	24VDC
	DPS-1-060-48DC	85-264VAC	1.25A	60W	48VDC
	DPS-1-100-12DC	115/230VAC	8.4A	100W	12VDC
	DPS-1-100-24DC	115/230VAC	4.2A	100W	24VDC
	DPS-1-100-48DC	115/230VAC	2.1A	100W	48VDC
	DPS-1-120-12DC	115/230VAC	10A	120W	12VDC
	DPS-1-120-24DC	115/230VAC	5A	120W	24VDC
	DPS-1-120-48DC	115/230VAC	2.5A	120W	48VDC
	DPS-1-240-24DC	115/230VAC	10A	240W	24VDC
	DPS-1-240-48DC	115/230VAC	5A	240W	24VDC
	DPS-1-300-24DC	115/230VAC	12.5A	300W	24VDC
	DPS-1-300-48DC	115/230VAC	6.25A	300W	48VDC
	DPS-1-480-24DC	115/230VAC	20A	480W	24VDC
	DPS-1-480-48DC	115/230VAC	10A	480W	48VDC



### DPS-3 Power Supply Selection

	Input	Current	Output Power	Voltage	
<b>METAL</b>	DPS-3-120-12DC	340-575VAC	10A	120W	12VDC
	DPS-3-120-24DC	340-575VAC	5A	120W	24VDC
	DPS-3-240-24DC	340-575VAC	10A	240W	24VDC
	DPS-3-240-48DC	340-575VAC	5A	240W	48VDC
	DPS-3-480-24DC	340-575VAC	20A	480W	24VDC
	DPS-3-480-48DC	340-575VAC	20A	480W	48VDC
	DPS-3-960-24DC	340-575VAC	40A	960W	24VDC
	DPS-3-960-48DC	340-575VAC	20A	960W	48VDC

### MPS-1 Power Supply Selection

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



# Temperature Controllers



## Key Features

- Multi-Selectable Inputs inc. Thermocouple, RTD, Current & Voltage
- PID with Auto Tune
- Alarm as standard on all models
- IP66 Protection
- Operating Voltage 85-264VAC Or 20-28VAC/DC
- Reduced Front Panel providing Real-Time Viewing



Offering a compact front panel arrangement that combines a digital display with a basic tactile panel, IMO Temperature Controllers are ideal for industrial environments where the space occupied by large control panels is seen as non-productive and expensive.

Bringing users significant cost savings, the controllers employ a 'reduced' front panel which provides real-time viewing as well as the ability to override communications and make manual adjustments locally. IMO Temperature Controllers come in a range of standard DIN sizes, from 24 x 48mm (1/32 DIN) to 96 x 96mm (1/4 DIN).

The complete range has multi-selectable input, including a large range of thermocouples, RTD's, current (4-20mA) and voltage (0-10V) inputs. PID with auto tune, PD or on/off modes can be selected on all models and a selection of outputs are available, such as relay, signal voltage, 4-20mA or 0-10VDC. One alarm comes as standard on all models. The units have IP66 protection for the front cover and a wide operating voltage of 85-264VAC or 20-28VAC/DC.

A wide range of options are also available. A second alarm option gives flexibility of control and the heater burnout alarm option gives more protection to the controlling system. Other options include Heat/Cool outputs, 2 Set point selection, RS485 communications with Modbus or IMO protocol and Master/Slave capabilities.

## Temperature Controller Specifications

	TP20	TP40	TP80	TP90
<b>Supply Voltage</b>	20-28VAC/DC, 85-264VAC	20-28VAC/DC, 85-264VAC	20-28VAC/DC, 85-264VAC	20-28VAC/DC, 85-264VAC
<b>Dimensions (mm)</b>	48 x 24 x 110	48 x 48 x 110	48 x 96 x 96	96 x 96 x 110
<b>Input / Sensor Type</b>	Multi Input for Thermocouple, RTD, mA/Volt	Multi Input for Thermocouple, RTD, mA/Volt	Multi Input for Thermocouple, RTD, mA/Volt	Multi Input for Thermocouple, RTD, mA/Volt
<b>Control Action</b>	On/Off, PD, PID, or PID w/auto tuning	On/Off, PD, PID, or PID w/auto tuning	On/Off, PD, PID, or PID w/auto tuning	On/Off, PD, PID, or PID w/auto tuning
<b>Options</b>	Relay, SSR, 4-20mA, 0-10VDC	Relay, SSR, 4-20mA, 0-10VDC	Relay, SSR, 4-20mA, 0-10VDC	Relay, SSR, 4-20mA, 0-10VDC
<b>Second Alarm</b>	-	Yes	Yes	Yes
<b>Loop Break Alarm</b>	-	Yes	Yes	Yes
<b>2 Set Points</b>	Yes	Yes	Yes	Yes
<b>RS485 Communication</b>	Yes	Yes	Yes	Yes
<b>Heater Burnout Alarm</b>	-	5A/10A*	5A/10A*	5A/10A*
<b>Cooling Output Alarm</b>	-	Yes	Yes	Yes
<b>Cooling Output SSR</b>	-	Yes	Yes	Yes
<b>Cooling Output Signal</b>	-	Yes	Yes	Yes
<b>Cooling Output 4-20mA</b>	-	Yes	Yes	Yes
<b>Isolated Power Output</b>	-	-	-	-
<b>Current Re Transmission</b>	-	-	-	-
<b>Voltage Re Transmission</b>	-	-	-	-

\* To special order, please contact IMO

# 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 customers requirement. They are designed to familiarise customers with the use and programming of IMO intelligent products. Each module is usually based on one product range. IMO is flexible in offering a training program that best suit's the requirements of its customer.



### IMO Training

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



# IMO Product Ranges

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

The IMO Automation and Controls range fully addresses the sense, control and switch demands of today's factory automation and control environment. In terms of choice, the IMO line-up is peerless, offering everything today's engineer needs, from circuit protection and panelware to PLCs and AC drives. The first company in Europe to do so, IMO gives a no-quibble three year warranty on the majority of its electronics based control components and a five year warranty on its successful range of IMO Jaguar Drives.

IMO Electronics range is at the leading edge of electro-mechanical PCB component technology, with a range of highly specified products designed to meet the most demanding applications. The company offers one of the most competitive, high quality and comprehensive PCB relay and Terminal Block connector ranges available, supported by sophisticated IT systems and infrastructure. The Electronics Division at IMO is perfectly positioned to meet all vendor and administration reduction requirements.

All products are manufactured to IMO's defined specification applying rigorous quality assurance and reliability standards. IMO products are built to comply with all relevant international approvals.



DIN Rail Terminals



Contactors



Relays



Switches



Miniature Circuit Breakers



Isolators



Motor Circuit Breakers



PCB Terminal Blocks



Pushbuttons & Pilot Lights



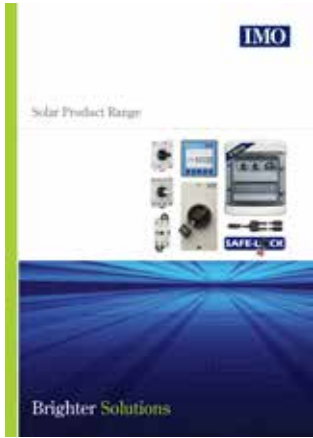
Enclosures



iDrive2 Variable Speed Drives

# Also Available From IMO

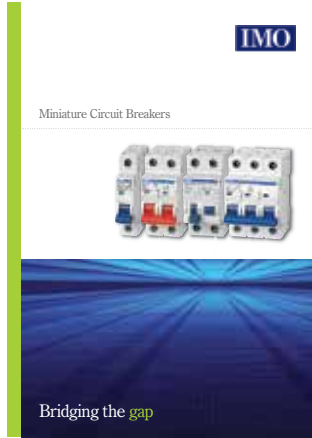
From a single product to a complete application solution, IMO has the product range and knowledge to meet today's most demanding application requirements...



Solar Product Range



iDrive2 Low-Cost Drives



Miniature Circuit Breakers



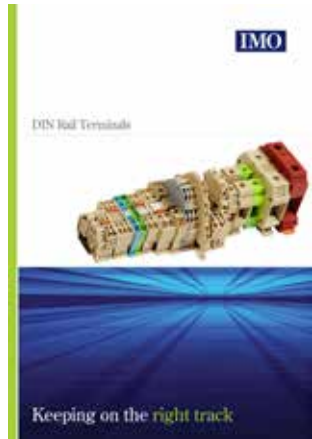
Panel Product Range



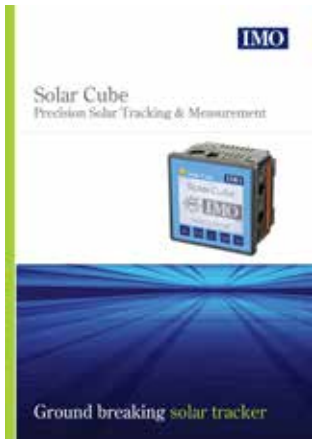
Relays



PCB Terminal Blocks



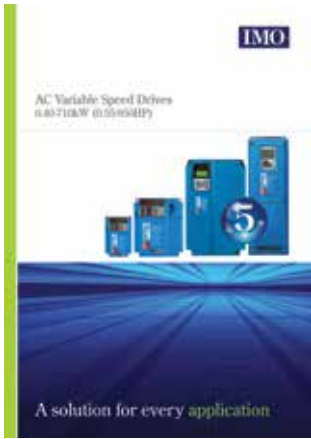
DIN Rail Terminals



Solar Cube



iView Advanced HMI



AC Variable Speed Drives



iConnect (Remote M2M)



Push Buttons (Online Only)

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

## IMO Worldwide Offices

### IMO Precision Controls Limited

1000 North Circular Road  
Staples Corner  
London NW2 7JP  
United Kingdom

Tel: 020 8452 6444  
Fax: 020 8450 2274  
Email: sales@imopc.com  
Web: www.imopc.com

### IMO Jeambrun Automation SAS

Centre D'Affaires Rocroy  
30, Rue de Rocroy  
94100 Saint-Maur-Des-Fosses  
France

Tel: 0800 912 712 (n° gratuit)  
Fax: 0145 134 737  
Email: sales@imopc.com  
Web: www.imojeambrun.fr

### IMO Automazione

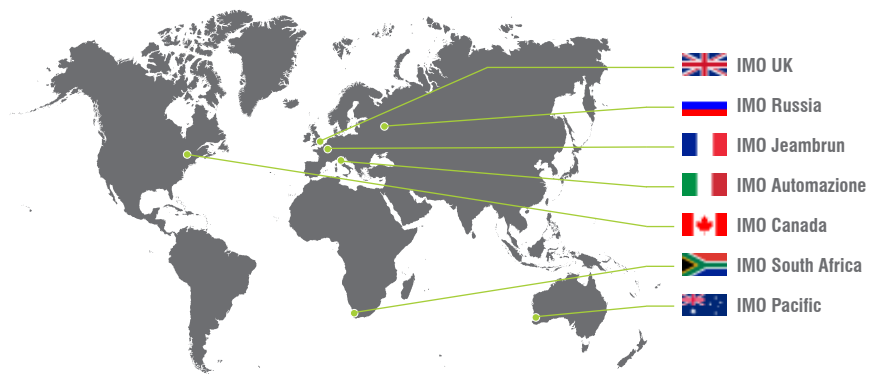
Via Ponte alle Mosse, 61  
50144 Firenze (FI)  
Italia

Tel: 800 930 872 (toll free)  
Fax: 8000 452 6445  
Email: sales@imopc.com  
Web: www.imopc.it

### IMO Canada

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

Tel: 905 799 9237 (local)  
Fax: 905 799 0450  
Email: sales@imopc.com  
Web: www.imopc.com



### IMO Russia

Office N° 4063  
9, Zemlyanoy Val, 105064  
Moscow  
Russia

Tel: 8 800 100 8540 (toll free)  
Fax: 8 800 100 8541  
Email: sales@imopc.com  
Web: www.imopc.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  
Web: www.imopc.co.za

### IMO Pacific Pty Ltd

1/6 Dillington Pass  
Landsdale  
Perth WA 6065  
Australia

Tel: 08 9302 5246 (local)  
Fax: 08 9303 9908  
Email: sales@imopacific.com.au  
Web: www.imopacific.com.au