

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 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



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

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



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SMT-MA-R8
Expansion Module



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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						



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SMT-PM04
32k Flash Memory

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