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.