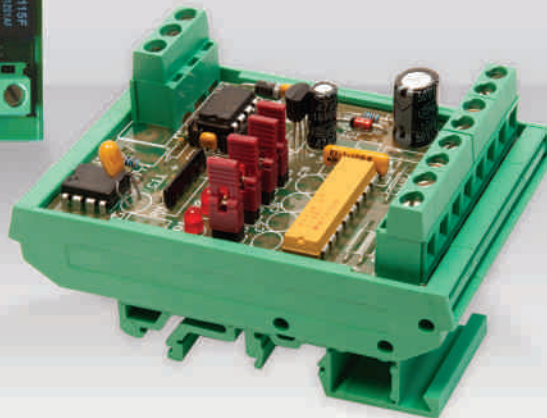
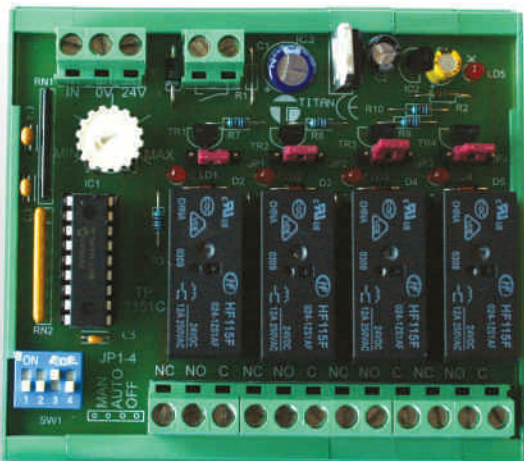


# Titan Products

Take control of your environment



# Digital Input Multiplexers



**IO/DIM4**

Converts 4 digital input signals into a single multiplexed / analogue output

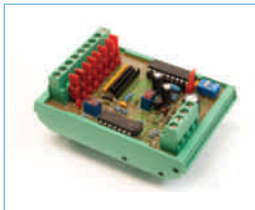
- Expands I/O capacity
- Microprocessor based technology
- 0-10V Output
- Voltfree digital inputs
- 24V AC or DC supply



**IO/DIM4/OI**

Converts 4 digital opto-isolated input signals into a single multiplexed / analogue voltage output (Opto-Isolated)

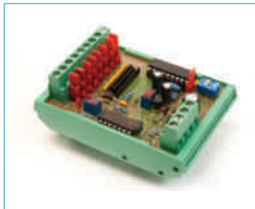
- Expands I/O capacity
- Microprocessor based technology
- 0-10V Output
- 24V AC or DC Supply
- Opto-Isolated inputs max. 50V AC



**IO/DIM6-8**

Converts 6 or 8 digital input signals into a multiplex 0-10V or 4-20mA output

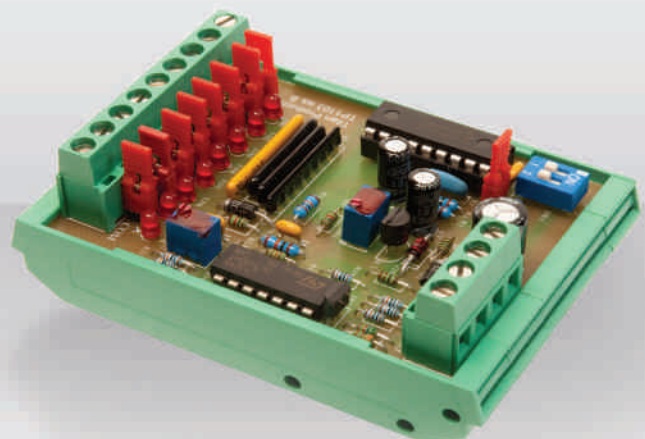
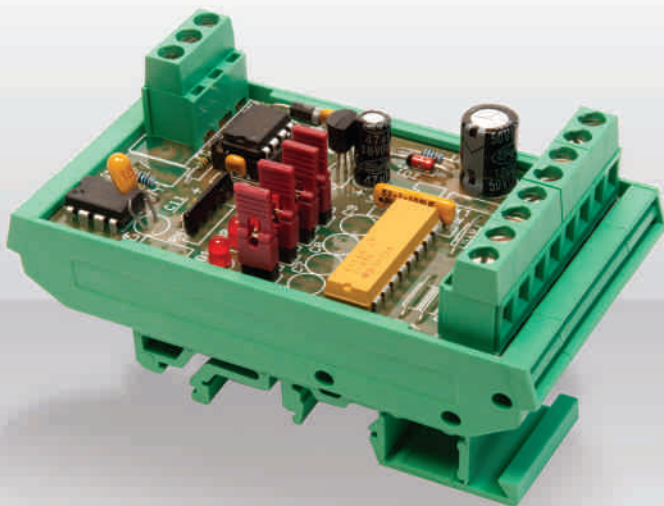
- 64 levels of output from DIM6 binary input mode
- Dual multiplexed signal of 2 x 4 inputs from DIM8 input mode
- 0-10V or 4-20mA output
- 24V AC or DC supply



**IO/DIM6-8/OI**

Converts 6 or 8 digital opto-isolated input signals into a multiplex 0-10V or 4-20mA output (Opto-Isolated)

- 64 levels of output from DIM6 binary input mode
- Dual multiplexed signal of 2 x 4 inputs from DIM8 input mode
- 0-10V or 4-20mA output
- 24V AC or DC supply
- Opto-Isolated inputs max. 50V AC



# Analogue Output Modules



## IO/PDV

Converts pulsed modulating control to 0-10V analogue output

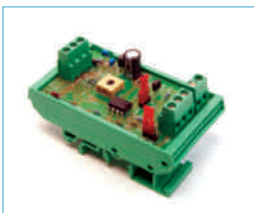
Adjustable time base output

Proportional linear 0-10V output to timed digital input

Voltfree or 24V triac switched digital inputs

Opto-Isolated inputs

24V AC or DC supply



## IO/RIM

Converts potentiometric 3 wire or resistance 2 wire input to 0-10V DC output signal

Provides a proportional 0-10V output to any resistance input values (135, 1000, 10,000 ohms)

Used for voltage reset/positioning from a resistive 2 or 3 wire input

24V AC or DC supply



## IO/AX4.1

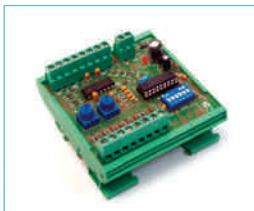
Converts a 0-10V input signal to 4 x 0-10V outputs in parallel or 3 x 0-10V outputs in sequence

Operation can be 0-10 or 2-10V

Outputs can operate 0-10 or 10-0V

Switch selectable options

24V AC or DC supply



## IO/AX4.1S

Converts a 0-10V input signal to 2, 3 or 4 x 0-10V outputs operating in sequence

Sequence multiple 0-10V outputs from a single 0-10V input

Output slopes can be overlapped by up to 2 Volts

Variable time delay on output signals

24V AC or DC Supply.



## IO/AX4.2

Converts 1 or 2 x 0-10V input signals to 2 or 4 x 0 10V outputs

Provides 2 stage heat / cool control from one input

Outputs can operate 0-10V or 10-0V

Dead band adjustment of 1 volts (between stages)

2 x 2 stage inputs and outputs can operate on 0-10V or 2-10V

24V AC or DC supply



## IO/AX4.3

Converts up to 4 x 0-10V inputs for Averaging, Differential or Priority signaling

0-10V outputs can be used for averaging, differential or priority signaling measurement

Inputs and outputs can operate on 0-10V or 2-10V

Averaging from 2, 3 or 4 inputs

24V AC or DC supply



**IO/RM3**

Converts a 0-10V control signal to 3 stage digital relay switching

Two selectable control options  
 - Fan / Cool / Heat  
 - 3 stage step control

Voltfree changeover contacts

Auto / Manual / Off link option

24V AC or DC supply

**IO/ATO2/PWM and IO/ATO2/TPC**

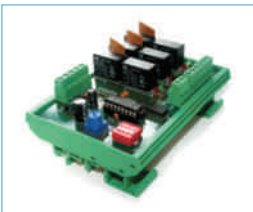
Converts a 0-10V control signal to pulsed width modulation (PWM) or time proportional control (TPC) outputs

24V triac switching

Variable time base allowing control output to match actuator travel time

Option for two 0-10V control signals to operate a high or low priority control

24V AC Supply

**IO/AD3W**

Provides an interface between the 0-10V control signals to DC reverse operation / actuators

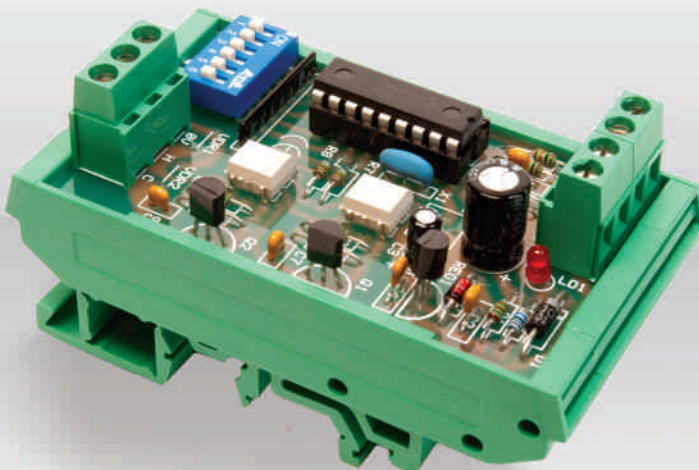
Converts 3 x 0-10V control signal to separate bi-directional DC output drives  
 3 x Forward / Reverse motor control outputs

Options for 5-75, 20-100 and 30-110 seconds operational run time

LED indication for relay status

24V AC or DC supply

Separate DC supply for actuator control



# Analogue or Digital in to Relay / Triac outputs



**IO/DOM2**

Converts a 0-10V control signal to 2 x Volt Free relay outputs

Microprocessor based technology

Raise / Lower control

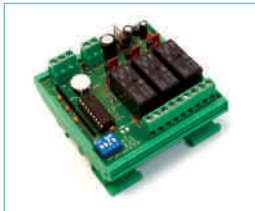
2 stage step / binary / sequence control

LED status indication

Time proportional control

Input range of 2-10V or 0-10V

24V AC or DC supply



**IO/DOM3**

Converts a 0-10V control signal to 3 x Volt Free relay outputs

Microprocessor based technology

3 stage sequence, step or heat / cool control

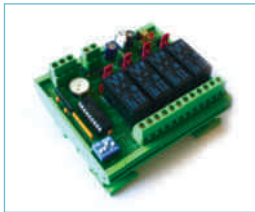
12 stage binary control

LED status indication

Time delay for sequence or step mode

Reverse sequence for step mode

24V AC or DC supply



**IO/DOM4**

Converts a 0-10V control signal to 4 x Volt Free relay outputs

Microprocessor based technology

4 stage sequence or step control

16 stage binary control

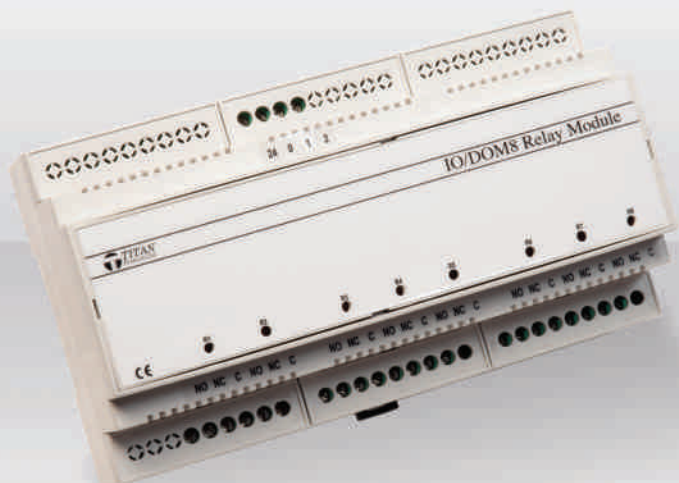
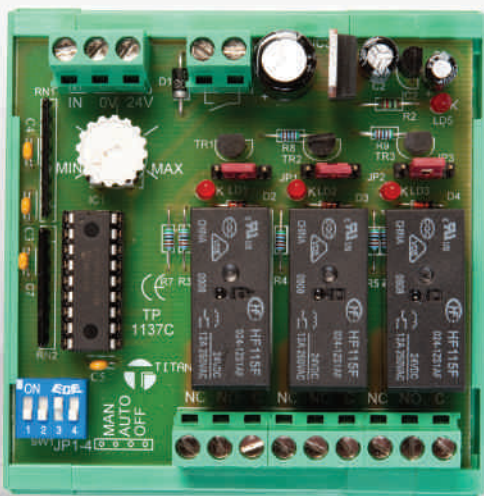
LED status indication

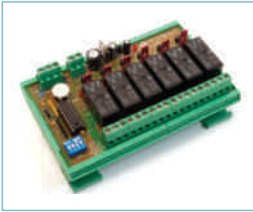
Time delay for sequence or step mode

Reverse sequence for step mode

Soft start delay mode option

24V AC or DC supply



**IO/DOM6**

Converts a 0-10V control signal to 6 x Volt Free relay outputs

Microprocessor based technology

6 stage sequence or step control

64 stage binary control

LED status indication

Time delay for sequence or step mode

Reverse sequence for step mode

Soft start delay mode option

24V AC or DC supply

**IO/DOM8**

Converts a 0-10V control signal to 8 x Volt Free relay outputs

Microprocessor based technology

8 stage sequence or step control

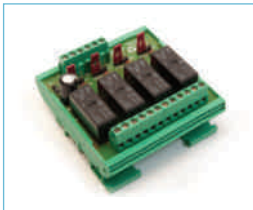
LED status indication

Time delay for sequence or step mode

Reverse sequence for step mode

Soft start delay mode option

24V AC or DC supply

**IO/R3M/R4M/R6M (10V)**

Converts a 0-10V control signal to individual switched relay outputs

Low current input signal

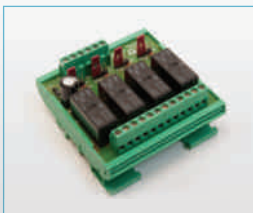
3, 4 or 6 relay options available

Voltfree change over contacts

Auto / Manual / Off selections

LED Status indication

24V AC or DC Supply

**IO/R3M/R4M/R6M (24V AC)**

Converts a 24V AC control signal to individual switched relay outputs

24V signal inputs

3, 4 or 6 relay options available

Voltfree change over contacts

Auto / Manual / Off selections

LED Status indication

24V AC or DC Supply

# Signal Converters and Phase Cut Modules



**IO/ROM/P  
Resistance Output Module**

Converts a 0-5V, 0-10V or 4-20mA control signal to a variable resistance output

Standard output ranges of 135, 200, 1000 and 10,000 ohms  
 Setting for min value / signal start / delay action  
 Suitable for 2 wire or 3 wire applications  
 24V AC or DC Supply



**IO/SCM and IO/SCM/I  
Signal Converter Modules**

Converts 0-5V, 0-10V, 0-20mA, 4-20mA or resistive inputs into 0-5V, 0-10V, 0-20mA or 4-20mA to match the application requirements

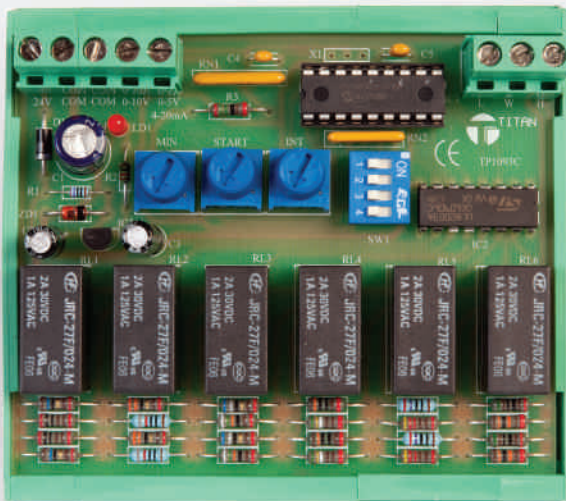
Inputs 0-10V, 4-20mA, 0-20mA, mV, Resistance, Volt free input pulses  
 Outputs 0-10V, 4-20mA, 0-20mA, mV, Resistance, Volt free input pulses  
 Converts resistive input to Volts or mA  
 Multiple input and output signals  
 Option for Galvanic Isolation (IO/SCM/I)  
 24V AC or DC Supply



**IO/RSM and RSM/I  
Re-scaler Module**

Rescales and converts analogue 0-5V, 0-10V, 0-20mA or 4-20mA to control signals of 0-5V, 0-10V, 0-20mA or 4-20mA

Input signals of 0-5V, 0-10V, 0-20mA, 1-5V, 2-10V, 4-20mA  
 Output signals of 0-5V, 0-10V, 0-20mA or 4-20mA  
 Signal Re – Scaler  
 Signal Inversion and Conversion  
 Multiple Input and Output signal options  
 Option for Galvanic Isolation (IO/RSM/I)  
 24V AC or DC Supply





**IO/CRS  
Counter Re-scaling Module**

Converts fast input pulses to a slower output pulse rate

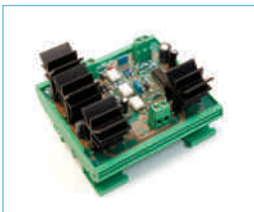
Voltfree input pulses

Minimum input pulse length of 10 milliseconds

Counter buffer of 65000 (input pulses)

Variable output pulses (voltfree changeover)

24V AC or DC Supply



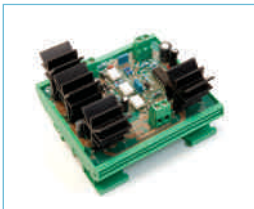
**IO/PCM2/40  
Phase Cut Module**

Converts 2 x 0-10V control signal into 2 x 40VA Phase Cut outputs

2 x 0-10V Inputs

2 x 20V AC phase cut output rated at 40VA each

24V AC supply



**IO/PCM1/80  
Phase Cut Module**

Converts 1 x 0-10V control signal into 1 x 80VA Phase Cut output

1 x 0-10V input

1 x 20V AC phase cut output rated at 80VA

24V AC supply



**IO/PCM1/140  
Phase Cut Module**

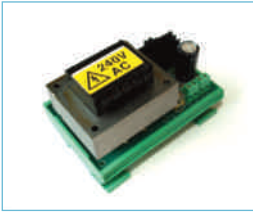
Converts 1 x 0-10V control signal into 1 x 140VA Phase Cut output

1 x 0-10V input

1 x 20V AC phase cut output rated at 140VA

24V AC supply

# Power Supplies



### 240AC/24AC Power Supply

240V AC supply to a 24V AC output for low voltage applications (24VA)

Output short circuit fuse protection

Din Rail Mounting

LED indication

1 amp 24VA rated



### 240AC/24DC Power Supply

240V AC supply to a 24V DC output for low voltage applications (24VA)

Output short circuit fuse protection

Din Rail Mounting

LED indication

1 amp 24VA rated



### 240AC/24AC/12VA Power Supply

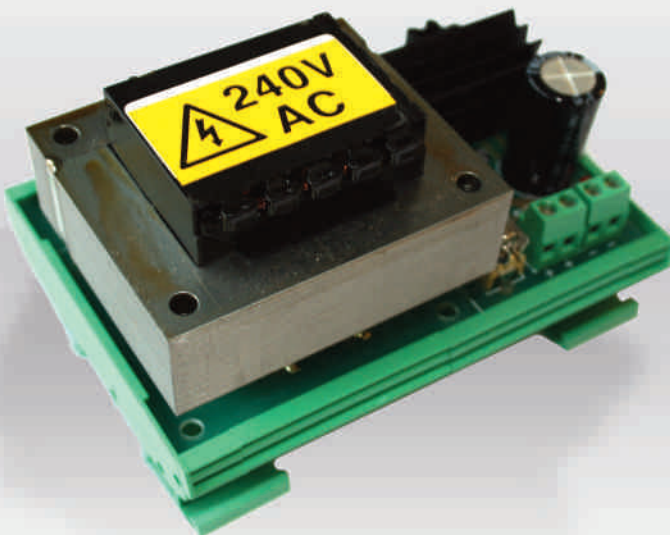
240V AC supply to a 24V AC output for low voltage applications (12VA)

Output short circuit fuse protection

Din Rail Mounting

LED indication

0.5 amp 12VA rated





#### 240AC/24DC/12VA Power Supply

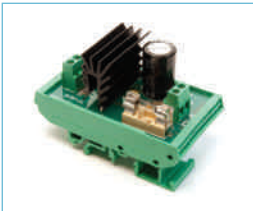
240V AC supply to a 24V DC output for low voltage applications (12VA)

Output short circuit fuse protection

Din Rail Mounting

LED indication

0.5 amp 12VA rated



#### T24AC/DC/CG Power Supply

Converts a 24V AC input to a 24V DC output for common ground applications. Options for 10V or 12V output are available

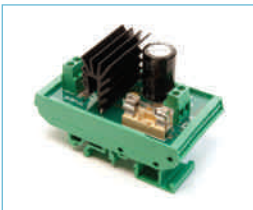
Regulated DC output (options for 24V, 12V or 10V)

LED Indication

Fused Output

Din Rail Mounting

24V AC inputs



#### T24AC/DC/FC Power Supply

Converts a 24V AC input to a 24V DC output for floating ground applications. Options for 10V or 12V output are available

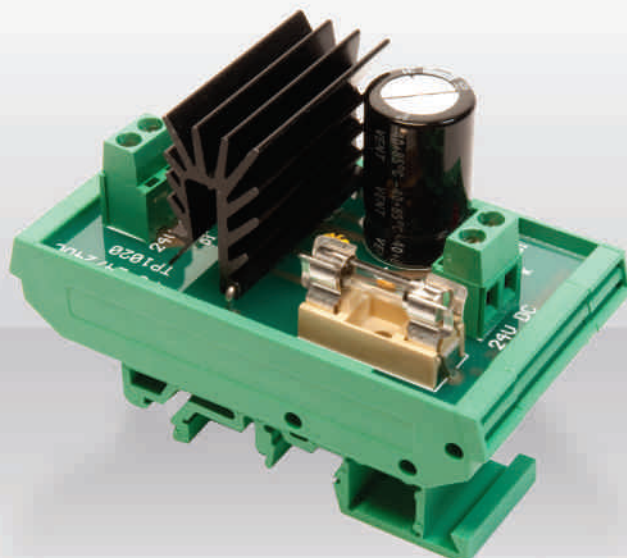
Regulated DC output (options for 24V, 12V or 10V)

LED Indication

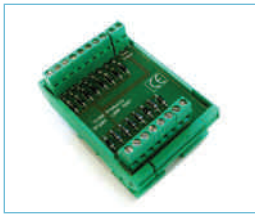
Fused Output

Din Rail Mounting

24V AC inputs



# Lamp Test Modules and Alarm Management



### IO/LT16 Lamp Test Module

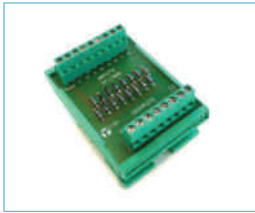
Provides for up to 16 diode isolated outputs from one common input

24V AC / DC or 240V AC inputs (options for 110V inputs)

Designed for use with transformer lamps

Hazard cover on 240V and 110V versions

Din Rail Mounting



### IO/LTB8 Lamp Test Module

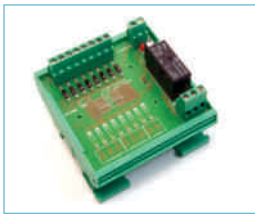
Provide a test interface for up to 8 circuits with back feed prevention

8 x AC or DC inputs (50V max)

8 x DC outputs (24V max)

Back feed prevention

Din Rail Mounting



### AIM8 and AIM16 Alarm Intergrators

8 or 16 inputs energise one common relay with voltfree changeover contacts

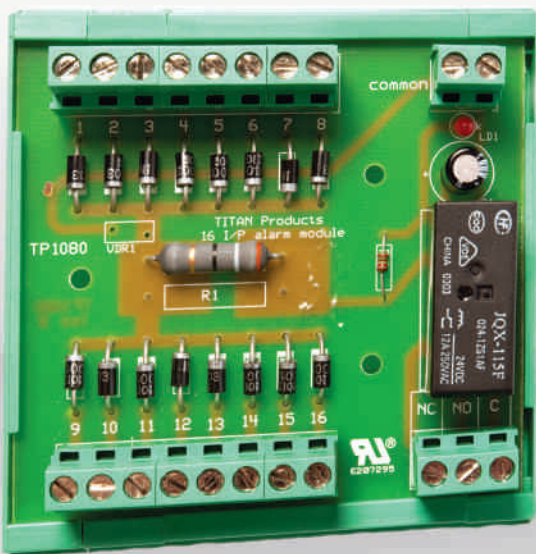
Inputs 24V AC / DC or 240V AC

Hazard cover on 240V versions

Common voltfree changeover relay

LED relay status indication

Din Rail Mounting





#### RMP Remote Alarm Interface

A remote alarm unit interface can be used with Titan alarm integrators and alarm repeaters

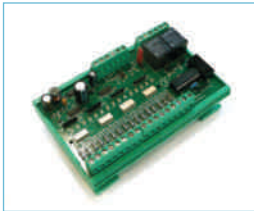
Audible alarm

LED indication of alarm present

Optional delay timer adjustable 0 to 30 seconds

Flush or surface mounting

24AC / DC or 240AC inputs



#### MAR16 Alarm Repeater

Provides alarm indication for up to 16 inputs

16 24V AC / DC or 240V AC inputs

Multiplexed Output for Interface to BMS

Hazard cover on 240 Volts versions

2 x relays for alarm and mute

Optional input delay timers

LED status indication

Compatible with SAR15 to provide from 16 to 31 inputs



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