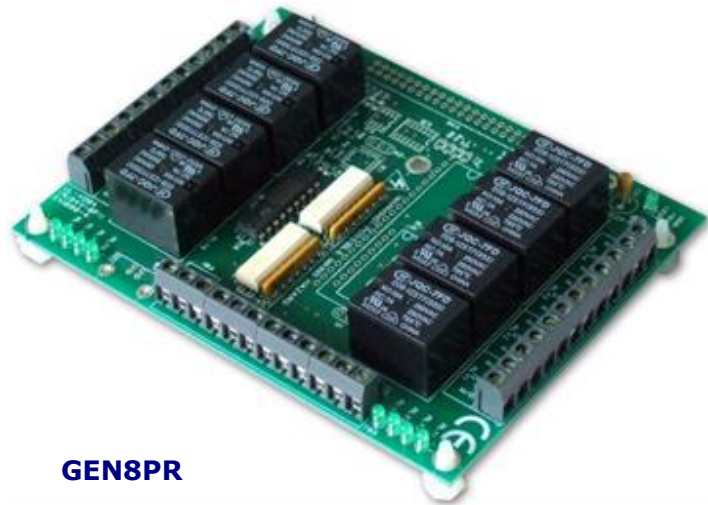


Product Datasheet 30

Features

- 8 channel, general purpose, opto isolated power relay card
- PCB tracking (& power relays) are designed to handle 10 amps @ 240V AC, or 8A @ 30V DC (switched or continuous). Detailed relay spec – see page 2
- Screw terminal blocks allow connection to all relay contacts, the digital control signals & PSU input connections
- Two types of screw terminal connector available: Fixed screw terminal blocks or two part (male/ female), quick disconnect type connectors
- Relays are SPDT, Form C, changeover type, with N/O, COM and N/C contacts. Edge mounted screw terminal block access to N/O COM & N/C relay contacts (8 onboard relays) via edge mounted screw terminal blocks
- Opto-isolation between control signal inputs & the eight onboard relays = 2500V (AC Vrms min). Uncommitted opto-isolated inputs allow complete electrical isolation if needed
- Opto-isolated DC control signal input voltage range (Logic High): 4V to 75V (max, current must be limited to 10mA max), Logic Low 0V to 1.5V. Suitable for driving from a low current signal source such as an 8255 programmable DIO type device
- LED status indicators for power and relay activation status
- Supplied with nylon feet. Clear Perspex cover & base option available. DIN rail base clip (with Perspex cover) mount option also available
- CE, RoHS & BS9001:2000 compliant



GEN8PR

Description

Low cost, general purpose, 8 channel, opto-isolated relay card with the option of fixed screw terminal blocks or 2 part (male/female) allowing rapid connect/disconnect.

Relays are single pole changeover type, capable of switching 240VAC @ 10Amps. PCB tracking is designed to handle 10 Amps. Fitted with PSU & relay LED status indicators.

The screw terminal blocks give access to N/O, COM & N/C relay contacts, the channel input control signals and the 0V/5V DC supply terminals.

The card requires an external DC supply (if relays are 6V operating then 350mA max, assuming all relays activated). Relays can be activated via any DC signal voltage input up to 75VDC (max). Control signal inputs are opto-isolated (2K2 input resistor). Current per input channel is approx. 2.5mA @ 5VDC. Control input current must be limited to 10mA max per channel.

Specifications

Digital control signals

Input Low, 0V to 1.5VDC (Typ.).

Input High, 4V to 75V DC (Max) per channel.

Inputs sink 2.5mA @5V.

Limit to 10mA max per channel.

Operating temp range

-20 to +80°C

Power

400mA @ 5V DC for

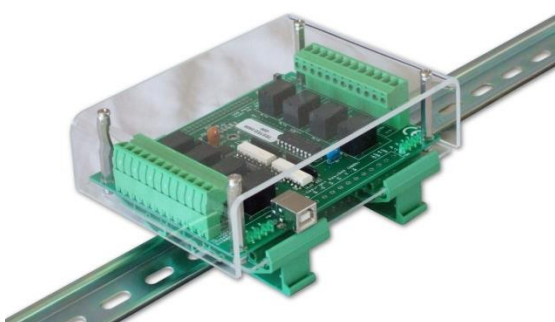
Relays

See page 2

Dimensions

100mm x 130mm x 30mm (inc. feet & 2 part connectors)

Weight 120g.



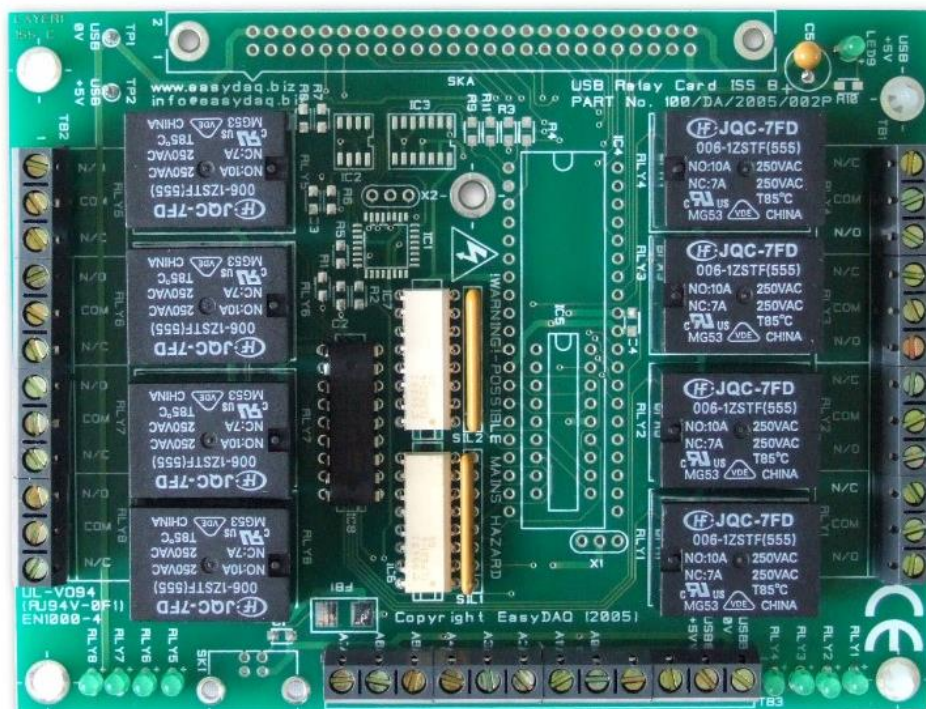
COVERDIN8 (Acrylic cover and DIN rail mount base plate – fitted to a USB8PR2 relay card)

Product Datasheet 30
Specifications: Relays

Parameter	5V Power relays	6V Power relays	12V Power relays
Rated voltage/current	5VDC/71mA each	6VDC/60mA each (50mA at 5V)	12VDC/30mA each
Must operate/release voltage	75%/10% of rated voltage		
Contact ratings	10A/240VAC or 8A 30VDC		
Contact resistance	100mΩ max		
Operate/release time	10mS/5mS		
Contact bounce period	0.6mS operate/ 7.2mS release		
Contact material	AgSnO ₂		
Operational life (min)	Mechanical 10 ⁷ / Electrical 10 ⁵		
Contact arrangement	SPDT, Form C		

Order codes

GEN8PR	8 sequentially operated power relays (10A), Single part connectors. 6V relays as standard. Operates well at 5V DC and reduced current over 5V relays version.	
GEN8PR-5V	As above except using 5V relays. Use this version with a 5V supply in environments requiring reliable operation in mechanically noisy situations	
GEN8PR-12V	As above except using 12V relays.	
GEN8PR2	6V relays and 2 part vertical connectors	
GEN8PR2-5V	As above except using 5V relays. Use this version with a 5V supply in environments requiring reliable operation in mechanically noisy situations.	
GEN8PR2-12V	As above except using 12V relays.	
Optional accessories	COVER8PR	Clear Acrylic protective cover.
	COVER8PRDIN	Clear Acrylic protective cover and DIN rail adaptors.


GEN8PR Top view



Product Datasheet 30

NOTE.

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Document versions

Version number	Date	Notes
V1.x	Various	
V2.0	21 st May 2021	Added relay voltage options for power relays.