## TECHNICAL DATA SHEET

## P529 Analog Isolation Module



## FEATURES

High reliability screened relays
Ruthenium sputtered Contacts

### 7.5V to 28V Coil Driver Circuit

6 Isolated switching channels

## DESCRIPTION

## Wide Input Range PSU

A diode protected high efficiency input stage powers the relay coil on the 6 sealed relays. All relays are guaranteed OFF between 0 V to 4 V . Minimum guaranteed ON 7.5 V to 28 V . Typical current consumption is 45 mA at $8 \mathrm{~V}, 30 \mathrm{~mA}$ at 12 V and 18 mA at 24 V . With a slowly rising input voltage, maximum current may peak at 60 mA momentarily during turn on.

## Relay Outputs

The Pickering Electronics relays chosen are the highest quality instrumentation grade devices, and the contact types chosen have been specially selected for very low level voltage and current switching, known as cold switching. These contacts are NOT intended for switching power signals, highly capacitive or highly inductive loads. They are ideal for Isolating the $0-5 \mathrm{~V}$ analog voltage developed across a 250 Ohm precision shunt. Some measurement devices when powered off can present a load, and any other measurement device connected in parallel, may see an error. Using the P529 AIM allows this unintentional load to be disconnected. The relays contacts are known as normally open, which means that the contacts are open when no power is applied.

## P529 ANALOG ISOLATION MODULE SPECIFICATION

## Physical

The P529 AIM fits standard 35mm symmetrical top hat rail to EN50022, and requires 23.2mm length of rail. The Module is 122 mm tall and 90 mm wide. It has a mass of 125 gms including the demountable connectors. It is designed for control room or cubicle use, $0^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$.

## Contact Ratings

All 6 contacts should be limited to 50 VDC, 100 mA with low parallel capacitance and low series inductance. Isolation impedance between channels and contact when open far exceeds 1 G $\Omega$.

Newflow Ltd George House, Derwent Road, Malton, W: www.newflow.co.uk North Yorkshire

