

MicroRack™

1 to 8 channel controller



1 to 8 channels

User upgradeable to 8 channels

One processor per channel

Universal inputs

2 individual alarms per channel

1 fault alarm per channel

Analogue output per channel

Individual Channel isolate

Local or global Accept/Reset

Common alarms

Internal amplifier

Back lit graphical display per channel

Constant individual channel indication

High speed response

Simple set-up

Hot swap compliant

The MicroRack™ is the latest in controllers released by GasTech Australia. The heart of the MicroRack is the field proven 4100R controller card which can be used in either the MicroRack format or a standard 19" rack format. Having the one format for the 4100R card and two simple housing options makes these products the most versatile on the market. As the customer needs change in the future the system can be upgraded by adding 4100R cards as required.

Our engineers have developed a highly reliable dual channel dual processor card. This card has two separate circuits with only the High-Resolution display being shared. The display is a non-critical component, which does not influence the operation of the system. Both channels will still continue to operate correctly independently of the display.

What our engineers have developed is a dual channel dual processor card. This card has two separate circuit with only a High-resolution display being shared. The display is a non-critical component, which does not influence the operation of the system. Basically if the display fails both channels will still operate correctly.

High Resolution Graphical LCD. This component has been selected due to its unique dual write feature. This allows both processors to write to the display at the same time. The top half dedicated to the top channel and the bottom half dedicated to the bottom channel. If one channel is off line, the display will continue to operate still displaying the working channel.

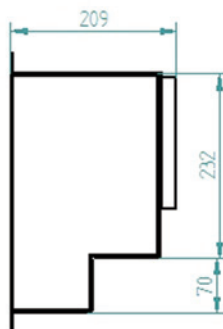
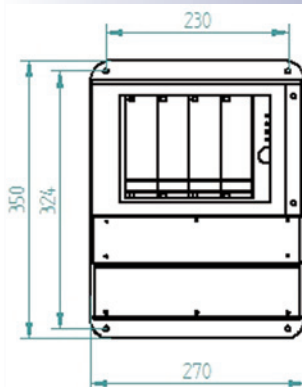
Card layout has been set up so the user can easily identify each channels circuitry and adjustment points. Switches, allow the user to set up the card to suit a number of different applications and field devices. Basic labeling on the PCB indicates the different settings, allowing minimal if any documentation for set-up, making the card the most user friendly on the market.

The "Isolate" feature allows a channel to be easily taken off line for calibration or modification, without actuating alarms or shutdown. The analogue output drops to 1.5mA while the channel is in isolate mode. The operator is alerted to a channel being in isolate mode by the inverted LCD, but still indicating the current reading. We have provided for a no "time out" option on this system. Being designed capable for "critical action" (Shutdowns), if a channel times out half way through a calibration procedure, an unwanted shutdown or deluge system could be activated. Also, a channel under maintenance for a long period, will continue to indicate to the operator that channel is off line. Simply turning off the channel is not acceptable, as the fault might never be rectified if there is no indication on the panel.

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1 to 8 channel controller specifications

Standard specifications	Range	Adjustable to 2000 Reads %LEL, ppm, % Vol, PPMm, LELm and blank
	Inputs	1.4 to 24 VDC 4 to 20 mA analogue signal inputs, source or sink type, two or three-wire. 3 wire catalytic, 0-1V, 0-5V, 0-10V, 0-24V. 24V Digital, and resistance.
	Analogue Outputs	One 4 to 20mA source for each channel 1000 OHM maximum impedance @ 24 VDC input
	Relay Outputs	Individual low AL1, high AL2, and Fault for each channel: Programmable for latching/non-latching. Each relay rated at 1A/24 VDC Common relay low AL1, high AL2, and Fault. Each relay rated at 5A/24 VDC
	Operating Voltage	18 to 30 VDC, 24 VDC nominal
	Power Supply	240/110VAC 100W
	Low Alarms	Independently adjustable from below zero to full scale. Audible/visual indication. Can be acknowledged. Can be activated on a rising/falling level.
	High Alarms	Independently adjustable from below zero to full scale. Audible/visual indication. Can be acknowledged. Can be activated on a rising/falling level.
	Buzzer	Internal Buzzer
	Channel Isolate	Individual channel indicated by inverted display and 1.5mA output on the analogue output.
	Operating Temperature	-20°C to +55°C
	Operating Humidity	0 to 95% non condensing
	Housing	IP65 powder coated aluminum
	Overall Dimensions	270 x 350 x 209mm
	Weight	4.2kg with one card and 100W power supply
	Area Classification	General purpose
	Warranty	Two year materials & workmanship



Part Number:

73-4100-02	MicroRack 2 channel PS 100w 240/110VAC relays + 4-20MA
73-4100-04	MicroRack 4 channel PS 100w 240/110VAC relays + 4-20MA
73-4100-06	MicroRack 6 channel PS 100w 240/110VAC relays + 4-20MA
73-4100-08	MicroRack 8 channel PS 100w 240/110VAC relays + 4-20MA
73-4100	GTA-4100R dual processor dual input card

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