

MICRO RACK

1 to 8 Channel Controller



The MircoRack™ is the latest in controllers released by Gastech. The heart of the MircoRack 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.

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.

KEY FEATURES

- 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

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SPECIFICATIONS

Specifications subject to change without notice

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.
Operating Voltage	Each relay rated at 1A/24 VDC
Power Supply	Common relay low AL1, high AL2, and Fault. Each relay rated at 5A/24 VDC
Low Alarms	18 to 30 VDC, 24 VDC nominal
High Alarms	240/110VAC 100W
Buzzer	Independently adjustable from below zero to full scale. Audible/visual indication. Can be acknowledged. Can be activated on a rising/falling level.
Channel Isolate	Independently adjustable from below zero to full scale. Audible/visual indication. Can be acknowledged. Can be activated on a rising/falling level.
Operating Temperature	Internal Buzzer
Operating Humidity	Individual channel indicated by inverted display and 1.5mA output on the analogue output.
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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