MIC

MIC-2718 *16-Channel Analog Input Module*
MIC-2728 *4-Channel Isolated Analog Output Module*
**MIC-2730** *16-Channel Isolated Digital Input Module*

MIC-2718
16-Channel Analog Input Module

The MIC-2718 offers multiple, high-speed data acquisition functions. It is a cost effective solution for industrial measurement and monitoring.

- **Channels:** 16 single-ended or 8 differential, switch selectable
- **A/D converter:**
  12-bit, 8 µsec. max. conversion time
- **On-board FIFO:** 1 K words
- **Input range** (software programmable):
  Bipolar: ±0.005, ±0.01, ±0.05, ±0.1, ±0.5, ±1, ±5, ±10 V
  Unipolar: 0 to 0.01, 0 to 0.1, 0 to 1,0 to 10 V
- **Overvoltage:** ±30 V max.
- **Maximum data throughput:** 100 kHz (depends on input amplifier settling time and slew rate)

Gain	Speed
0.5, 1	100 kHz
5, 10	35 kHz
50, 100	7 kHz
500,1000	0.8 kHz

- **Accuracy:**

Gain=0.5, 1	0.01% of FSR ±1LSB
Gain=5, 10	0.02% of FSR ±1LSB
Gain=50,100	0.04% of FSR ±1LSB
Gain=500,1000	0.08% of FSR ±1LSB

- **Linearity:** ±1-bit
- **Trigger mode:**
  Software, pacer or external
- **Ext. trigger:** TTL compatible
- **Data transfer:**
  Program, interrupt or DMA
- **Signal conditioning circuit:** Space for RC filter and 250 Ω current shunt
- **Power consumption:** +5 V @ 0.5 A max.; +12 V @ 0.2 A max.
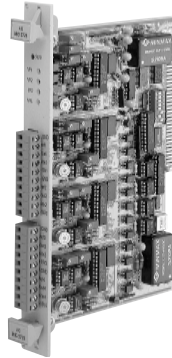
MIC-2728
4-Channel Isolated Analog Output Module

The MIC-2728 provides four double-buffered 12-bit D/A outputs. Over 500 V_{DC} of bus isolation protect your PC and peripherals from dangerous output voltages.

- **Channels:** 4 isolated D/A channels
- **Resolution:** 12-bits, double buffered
- **Output range:**
  Unipolar: 0 to +5 V, 0 to +10 V
  Bipolar: ±5 V, ±10 V
  Current loop (sink);
  0 to 20 mA, 4 to 20 mA
- **Settling time:** ≤ 60 µseconds
- **Accuracy:** ±0.012% FS
- **Isolation voltage:**
  > 500 V_{DC} bus isolation
- **Reference voltage:**
  Internal: -5 V or -10 V
  External: ±10 V max. AC or DC
- **Voltage output drive:** ±10 mA max.
- **Current loop excitation:** 8 V to 36 V
- **Power consumption:**
  +5 V @ 0.5 A max.;
  +12 V @ 0.2 A max.
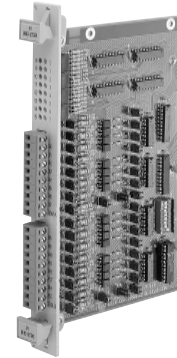
MIC-2730
16-Channel Isolated Digital Input Module

The MIC-2730 features a limit switch, alarms and/or sensors for noisy environments, and 16 optically isolated digital input channels for monitoring device On/Off status.

- **Number of inputs:** 16
- **Input mode:** isolated or non-isolated (jumper selection)

Isolated Inputs

- **Number of commons:** 2 (isolated)
- **Input voltage:** 0 ~ 30 V
- **Threshold voltage:**
  Logic "0" : < 1 V
  Logic "1" : > 4 V
- **Input impedance:** 2 kΩ
- **Isolation voltage:** 2500 V_{DC}
- **Throughput:** 10 kHz

Non-isolated Inputs (TTL-level)

- **Input voltage:**
  Low: 0.8 V max.
  High: 2.0 V min.
- **Input load:**
  Low: 0.4 mA max @ 0.5 V
  High: 0.05 mA max @ 2.7 V
- **Pull-up resistor:**
  10 kΩ for dry contact
- **Throughput:** 30 kHz typical
- **Number of indicator LEDs:** 16
- **Indication mode:**
  Logic "1" : LED On
  Logic "0" : LED Off
- **Power consumption:** +5 V @ 2 A

MIC-2000 Series

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