## Highlights

- NEW! 8-channel 0-10V DC/4-20mA input module
- NEW! 2-channel -10 to +10VDC/4-20mA output module
- NEW! 16-bit resolution
- NEW! Configure up to 56 analog I/Os
- NEW! Fast conversion times
- NEW! Competitive pricing
- See back page for pricing and competitor comparisons
- Datasheet and manual are available on the IDEC website at www.idec. com/usa/microsmart



## NEW Analog modules with 16-bit resolution leave competitors' lacking

IDEC Corporation now offers two new analog expansion I/O modules with fast conversion times and 16-bit resolution. Combined with the MicroSmart or MicroSmart Pentra PLCs, customers get the power and flexibility they need for the most demanding control systems.

In the past, sales opportunities were limited because we only offered a PLC system with a maximum of 14 analog inputs and 7 analog outputs. Well that was then and this is now! With the addition of these new analog expansion modules, IDEC can aggressively compete with other manufacturers even when applications require as many as 56 analog I/Os for their control systems (with a maximum of 7 analog modules).

With the addition of these high density modules, IDEC is able to offer better features for
less money. Most competitors can only offer 12-bit resolution. IDEC not only offers a 16-bit resolution, but is also one of the only companies offering an 8 -channel input module at such a competitive price (see Comparison Chart on back of announcement).

An 8-channel 0-10V DC/4-20mA input module, as well as a 2 -channel -10 to $+10 \mathrm{VDC} / 4-$ 20 mA output module are available to give systems the accuracy and precision customers want. We are confident these new analog modules will meet customer demand for increased system throughput, while opening up new and exciting opportunities for IDEC in the PLC market.

For complete specifications or additional information, please contact IDEC Corporation at 1-800-262-IDEC (4332) or visit www.idec.com/usa.

## IDEC Analog Module Part Numbers

| Part Number | Description | List Price (MSRP) |
| :--- | :---: | :---: |
| FC4A-J8C1 | 8-channel 0-10V DC, 4-20mA analog input module | $\$ 325.00$ |
| FC4A-K2C1 | 2-channel -10 to 10V DC, 4-20mA analog output module | $\$ 195.00$ |

## Input Module Competitor Comparison

| Manufacturer | Part Number | List Price (MSRP) | Cost/Pt. | Signal Type | I/0 Points | Digital Resolution | Maximum Error |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IDEC | FC4A-J8C1 | \$325.00 | \$40.63 | 0-10V, 4-20mA | 8 | 16-bit | $\pm 1 \%$ |
| Allen Bradley (1500) | 1769-IF4 | \$504.00 | \$126.00 | $0-10 \mathrm{~V}, 0-20 \mathrm{~mA}$ | 4 | 14-bit | $\pm 0.3 \%$ |
| Allen Bradley (1200) | 1762-IF20F2 | \$319.00 | \$159.50 | 0-10V, 4-20mA | 2 | 12-bit | $\pm 0.1 \%$ |
|  | 1762-IF4 | \$319.00 | \$79.75 | $0-10 \mathrm{~V},-20$ to 20 mA | 4 | 15-bit | $\pm 0.1 \%$ |
| Telemecanique | TWDAMI8HT | \$200.00 | \$25.00 | 0-10V, 0-20mA | 8 | 10-bit | $\pm 1 \%$ |
| Mitsubishi | FX2N-2AD | \$195.00 | \$97.50 | 0-10V, 4-20mA | 2 | 11-bit | $\pm 1 \%$ |
|  | FX2N-4AD | \$315.00 | \$78.75 | -10 to 10V, -20 to 20 mA | 4 | 11-bit | $\pm 1 \%$ |
| Siemens | EM231 | \$195.00 | \$48.75 | $0-10 \mathrm{~V}, 0-20 \mathrm{~mA}$ | 4 | 12-bit | $\pm 1.5 \%$ |
| Panasonic | FPO-A80-A | \$290.00 | \$36.25 | 0-10V, $0-20 \mathrm{~mA}$ | 8 | 12-bit | $\pm 1 \%$ |
| Automation Direct | F2-04AD-1 | \$199.00 | \$49.75 | 4-20mA | 4 | 12-bit | $\pm 0.65 \%$ |
|  | F2-04AD-2 | \$219.00 | \$54.75 | 0-10V | 4 | 12-bit | $\pm 0.3 \%$ |
|  | F2-08AD-1 | \$245.00 | \$30.63 | 4-20mA | 8 | 12-bit | $\pm 0.25 \%$ |
|  | F2-08AD-2 | \$264.00 | \$33.00 | 0-10V | 8 | 12-bit | $\pm 0.3 \%$ |

## Output Module Competitor Comparison

| Manufacturer | Part Number | List Price (MSRP) | Cost/Pt. | Signal Type | I/O Points | Digital Resolution | Maximum Error |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IDEC | FC4A-K2C1 | \$195.00 | \$97.50 | -10 to 10V, 4-20mA | 2 | 16-bit | $\pm 1 \%$ |
| Allen Bradley (1500) | 1769-0F2 | \$504.00 | \$252.00 | 0-10V, $4-20 \mathrm{~mA}$ | 2 | 14-bit | $\pm 0.3 \%$ |
| Allen Bradley (1200) | 1762-0F4 | \$291.00 | \$72.75 | 0-10V, $0-20 \mathrm{~mA}$ | 4 | 12-bit | $\pm 0.1 \%$ |
| Telemecanique | TWDAVO2HT | \$142.00 | \$71.00 | -10 to 10 V | 2 | 10-bit | $\pm 1 \%$ |
| Mitsubishi | FX2N-2DA | \$225.00 | \$112.50 | 0-10V, 4-20mA | 2 | 11-bit | $\pm 2 \%$ |
|  | FX2N-4DA | \$445.00 | \$111.25 | -10 to $10 \mathrm{~V}, 4-20 \mathrm{~mA}$ | 4 | 11-bit | $\pm 1 \%$ |
| Siemens | EM232 | \$185.00 | \$92.50 | -10 to $10 \mathrm{~V}, 0-20 \mathrm{~mA}$ | 2 | 12-bit | $\pm 1.5 \%$ |
| Panasonic | FPO-A04I | \$285.00 | \$71.25 | $0-20 \mathrm{~mA}$ | 4 | 12-bit | $\pm 1 \%$ |
|  | FP0-A04V | \$285.00 | \$71.25 | -10 to 10V | 4 | 12-bit | $\pm 1 \%$ |
| Automation Direct | F2-02DA-1 | \$156.00 | \$78.00 | 4-20mA | 2 | 12-bit | $\pm 0.3 \%$ |
|  | F2-02DA-2 | \$163.00 | \$81.50 | 0-10V | 2 | 12-bit | $\pm 0.55 \%$ |

