ENODE®
Distributed I/O Controller

The ENODE controller is an open architecture, modular Ethernet device that can be integrated directly into Facility Net software. This controller monitors modules of isolated digital and analog inputs, and monitors alarm output contacts (digital or relay).

FEATURES

- Modular I/O components allow for flexible system designs
- Ethernet 10BaseT/100BaseT connectivity to local networks
- Data buffer stores samples when connection to software is lost
- 16 analog channels per module; 4-20 mA and 0 – 10 V signal compatible with an overall accuracy of 0.25%
- 16 digital input channels per module
- 12 relay output contacts
- 12 digital outputs

BENEFITS

Cost Effective
- Modular design allows for up to 48 signal inputs and 24 relay outputs per monitoring device, reducing cost per point
- Sample interval is configured per channel, reducing the number of modules required for different applications
- 4-20 mA and 0 – 10 V analog input types are configured per channel, not per module, also reducing the number of modules

Easy to Use
- Plug and play modules allow for ease of system expansion
- Auto recognition through Facility Net software speeds up system configuration
- DIN rail mounting and removable screw terminals allow for simple installation
- Distributed architecture allows for modules to be installed anywhere throughout the facility

Superior Performance
- High accuracy, 12-bit analog converter gives 0.25% full scale overall accuracy
- 10,000 sample data buffer stores data when offline from Facility Net software; data is exported on reconnection
- TCP/IP Ethernet communication ensures reliability of data transmission
- One-second sample interval for fast data-logging

APPLICATIONS
- Environmental monitoring and control
  - Differential pressure, temperature, humidity, air velocity, and other sensor signals
  - Alarm lamp or traffic light control
  - Flashing modes
- Process monitoring and control
  - Doors and switches monitored at each stage of process
- Networked data-logging
- Remote data acquisition

PARTICLE MEASURING SYSTEMS®

ENODE®

Distributed I/O Controller

specifications

Processor Unit	
Operating system	Windows® CE 3.0
Processor	AMD Elan SC400, 32-bit, 66 MHz
Ethernet	10/100BaseT (RJ-45)
RAM	64 MB
Non-volatile storage	32 MB
Serial ports	One, RS-232 (Up to 115 K Baud)
Power	5 VDC @ 1 A max.
Dimensions (l, w, h)	4.6 x 3.4 x 6 in (11.6 x 8.5 x 15.0 cm)
Power Module	
Input connector	90 – 260 VAC, 50-60 Hz IDE
Output	5 V, 10 A max.
Dimensions (l, w, h)	4.5 x 3.4 x 6 in (11.6 x 15.0 x 8.5 cm)
Analog Input Module	
Inputs	16 single-ended, 8 differential
Resolution	12-bits (1 in 4096)
Input ranges	0 – 10 V or 0 – 20 mA
Over voltage protection	Power on or off, - 40 V to + 55 V
Overall accuracy	± 0.25% full scale
Dimensions (l, w, h)	4.6 x 1.7 x 6 in (11.6 x 4.2 x 15.0 cm)
Digital Input Module	
Digital input	Opto isolators 16 inputs
Turn-on time	6 msec min.
Turn-off time	35 msec max.

Isolation
  Channel to channel
  Input to output
	
	  500 V
	1500 V

Current consumption	5 VDC 500 mA max.
Dimensions (l, w, h)	4.6 x 1.7 x 6 in (11.6 x 4.2 x 15.0 cm)

Outputs	Relay Outputs	Digital Outputs
Single pole/single throw	12 channels	Open drain 24 VDC
DC	2 A @ 30 VDC	
Isolation	Channel to channel 500 V Input to output 1500 V	Channel to channel 500 V Input to output 1500 V
Current consumption	5 VDC 200 mA max.	Current consumption 5 VDC 160 mA max.
Dimensions (l, w, h)	4.6 x 1.7 x in (11.6 x 4.2 x 15.0 cm)	Dimensions (l, w, h) 4.6 x 1.7 x 6 in (11.6 x 4.2 x 15.0 cm)

AUTHORIZED REPRESENTATIVE

® **PARTICLE MEASURING SYSTEMS**

www.pmeasuring.com
info@pmeasuring.com

Particle Measuring Systems Headquarters
5475 Airport Blvd., Boulder, CO 80301, USA
(303) 443-7100 1-800-238-1801 FAX: (303) 449-6870
Instrument Service & Support: 1-800-557-6363
Customer Response Center: 1-877-475-3317

Particle Measuring Systems China
Tel: (86) 21-6113-3688
Email: PMSChina@pmeasuring.com

Particle Measuring Systems Europe
Tel: 44-1684-581000
Email: PMSEurope@pmeasuring.com

Particle Measuring Systems Italia
Tel: 39 06 90530130
Email: PMSSRL@pmeasuring.com

Particle Measuring Systems Japan
Tel: 813-5298-8175
Email: PMSJapan@pmeasuring.com

Particle Measuring Systems Mexico
Tel: 52-55-2271-5106
Email: PMSMexico@pmeasuring.com

Particle Measuring Systems Nordic
Tel: +45 70702855
Email: PMSNordic@pmeasuring.com

Particle Measuring Systems Puerto Rico
Tel: 972-306-1040
Email: PMSPuertoRico@pmeasuring.com

Particle Measuring Systems Singapore
Tel: 65-6496-0330
Email: PMSSingapore@pmeasuring.com