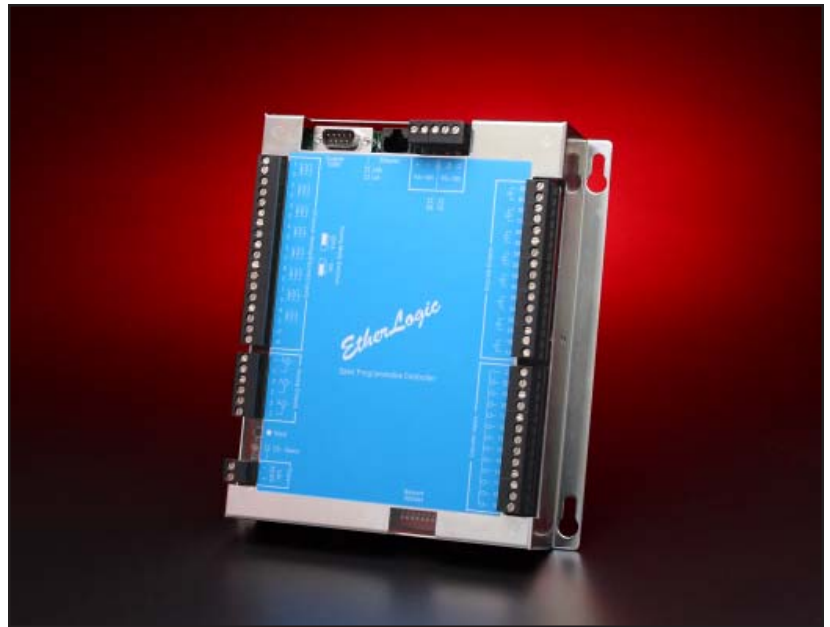




PROCESS CONTROL
REMOTE MONITORING
HVAC CONTROL
WATER & WASTEWATER
OIL & GAS

A unique “open architecture” controller that combines IEC 61131-3 programmable control, process monitoring and data logging, built-in Ethernet, Internet and high-speed serial and wireless communications, and voice, pager and e-mail alarm annunciation.



EtherLogic Controller

- **High-speed Ethernet**
- **2 Serial Ports**
- **Programmable Logic**
- **32-bit Math**
- **PID Control**
- **Built-in HMI/MMI**
- **Data Logging**
- **Alarm Logging and Paging**
- **Data Concentration**
- **Remote Program Updates**
- **E-mail w/file attachments**
- **Ethernet & Web Server**
- **Built-in Analog/Discrete I/O**
 - 8 Universal (AI/DI) Inputs
 - 3 Analog Outputs
 - 12 Discrete Inputs
 - 8 Relay Outputs
- **I/O Expansion to 8000 points**
- **3 Year Factory Warranty**

EtherLogic™ is an “open architecture” programmable controller with built-in Ethernet networking, wireless, hardwired and modem communications, and a large standard memory capacity for data logging and “over-the-link” program updates.

With 32-bit processing power and high level software tools that minimize programming time, EtherLogic™ bridges the gap between traditional PLCs, RTUs and the new generation of Ethernet and Web connected instruments.

Open Software

As an open architecture controller, EtherLogic™ includes an **IEC 61131-3** software kernel supporting six industrial control languages. EtherLogic™ also supports traditional text programming languages like **C**. With EtherLogic™, you can mix and match any of these tools to get the job done quickly and reliably.

In addition to powerful programming tools, EtherLogic™ is supported by ICL’s **ScadaBuilder** software. ScadaBuilder eliminates hours of programming time with point-and-click configuration of serial and network communications, data and alarm logging, alarm annunciation (including pager and e-mail support), and a simple but powerful MMI interface over hardwired, radio and Ethernet connections.

Open Communications

The open architecture design of EtherLogic™ extends to its communications capabilities. By supporting industry standard protocols like **Modbus** and **Modbus TCP/IP** as well as the standard suite of Ethernet and Internet protocols. EtherLogic™ is easily integrated into existing factory Local Area Networks and SCADA systems, including all of the top HMI software packages, without special drivers.



Industrial Control Links
(800) 888-1893 www.iclinks.com

EtherLogic Controller

UNIVERSAL (ANALOG/DISCRETE) INPUTS

Quantity of Universal Inputs	8
Analog Input Signals	
Voltage	0 or 1 to 5Vdc
Current	0 or 4 to 20mA
Resistance	0 to 65K ohms
Temperature Sensor	10K thermistor (Type I & II)
Discrete Input Signals	Dry Contact Closure
Discrete In Wetting Current	0.5mA (10K resistor to +5Vdc)
Input Overload Tolerance	Input current limited to 50mA Input Voltage limiting at 6Vdc
Overload / Transient Protection	Transorb/Self Resetting Polyfuse
Analog Resolution	10 bits (1 part in 1024)
Analog Non-linearity	0.5 LSB (0.05%)
Temperature Coefficient	
5Vdc	100ppm (0.1 LSB) per °C
20mA and Thermistor	125ppm (0.125 LSB) per °C
DI Pulse Counting Rate	up to 500Hz (50% DC), all 8 ins

ANALOG OUTPUTS

Quantity	3
Output Type	0 to 10Vdc (model 52-0001) 0 or 4 to 20mA (model 52-0002)
Resolution	
Analog Outputs 1 & 2	10 bits (1 part in 1024)
Analog Output 3	8 bits (1 part in 256)
Overload / Transient Protection	Transorb/Self Resetting Polyfuse

DISCRETE INPUTS

Quantity	12
Input type	Optically isolated with shared isolated common, AC or DC
ON/OFF Input levels	9Vac/Vdc (min) / 6Vac/Vdc (max)
Maximum input level	50 Vac/Vdc
DI Pulse Counting Rate	up to 40Hz (50% DC), 8 inputs

DISCRETE OUTPUTS

Quantity	8
Output Type	Relays, Form A (normally open)
Output Rating	
AC	250 Vac; 10A load @125 Vac
DC	30 Vdc; 5A load @ 30 Vdc

COMMUNICATIONS

Serial Port Interfaces	
COM #1	RS-232, 9 pin D Male
COM #2	RS-232/485 Terminal Block
Ethernet Port	10Base-T (10 Mb/sec), RJ-45

CONTROL & COMMUNICATIONS PROCESSOR

CPU	Intel 386EX, 25MHz
Memory	2MB Flash, 1MB RAM
Real Time Clock	Dallas DS1689S (IBM/PC comp.)

INPUT / OUTPUT (I/O) RISC PROCESSOR

CPU	Atmel ATMEGA163
Memory	16KB Flash, 1KB RAM

GENERAL SPECIFICATIONS

Field I/O Wiring Terminations	Removable Terminal Blocks
Wire Size	#14 to #26 stranded, #12 solid
Dimensions	7.0" W x 7.75" L x 2.5" D (178mm x 197mm x 64mm)
Power	24Vac/Vdc +/-15%, 6 VA max.
Temperature	-40°C to 75°C (-40°F to 167°F)
Humidity	5 to 85% RH (non-condensing)

SOFTWARE

IEC 61131-3 (ISaGRAF)	Ladder Diagram (LD) Structured Text (ST) Sequential Function Chart (SFC) Function Block Diagram (FBD) Instruction List (IL) Flow Chart
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C/C++	Supports Borland v3.1 through 5.0 with control & communication
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SCADABUILDER	Point-and-Click configuration of: Modbus RTU, Master or Slave
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Serial Communications	Bricknet (Peer-to-peer SCADA)
Ethernet Communications	Modbus TCP/IP, HTTP, FTP, TELNET

Simple MMI	ANSI/VT100 - serial data links, Telnet over Ethernet
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Data and Alarm Logging	up to flash memory capacity
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ORDER PART NUMBERS:

HARDWARE (hardware includes ISaGRAF, ScadaBuilder, operating system and TCP/IP software licenses)

52-0001 Std I/O, 0 - 10Vdc Analog Outputs

52-0002 Std I/O, 0/4 to 20mA Analog Outputs

SOFTWARE (Starter kits include software and documentation on CDROM and PC-to-Controller data cable)

91-3001 ScadaWorks Starter Kit SCADA System Development Software with [ISaGRAF](#) and [ScadaBuilder](#)

91-3002 C Starter Kit Borland C/C++ Compiler Version 5.0, Multitasking Kernel and API Library

Industrial Control Links www.iclinks.com (800) 888-1893 (530) 888-1800 fax (530) 888-7017

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All specifications subject to change without notice. 10/02 PN 60255001