



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

A unique "open architecture" controller that combines IEC 61131-3 programmable control, sensor conditioning, built-in Ethernet, Internet and high-speed serial and wireless communications, data logging, voice & pager alarm dialing and e-mail notification.



EtherLogic Integra

- **High-speed Ethernet**
- **3 Serial Ports + Built-in Modem**
- **Extra Serial Port/Radio options**
- **Programmable Logic**
- **8 MB Flash Disk**
- **32-bit Math and PID Control**
- **Built-in HMI/MMI**
- **Data Logging & Alarm Dialing**
- **Remote Program Updates**
- **E-mail w/file attachments**
- **Ethernet & Web Server**
- **Internal Battery Charger/UPS**
- **Integral sensor conditioning**
- **Built-in Analog/Discrete I/O**
 - 6 16-bit Analog Inputs
 - 3 12-bit Analog Outputs
 - 16 Discrete Inputs
 - 8 Relay Outputs
- **I/O Expansion to 8000 points**
- **3 Year Factory Warranty**

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

In addition to powerful programming tools, EtherLogic Integra™ is supported by **ScadaBuilder**, software that 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 Integra™ extends to its communications capabilities by supporting standard protocols like **Modbus (RTU, ASCII, TCP/IP), DF1, HART, NMEA-0183**, as well as the standard suite of Ethernet and Internet protocols. EtherLogic Integra™ is easily integrated into existing factory Local Area Networks and SCADA systems, including all of the top HMI software packages, without special drivers. Need radio or dial-up access/dial-out alarming including voice? Built-in wide temperature range radios, telephone modems, and cellular modems are available options.



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

EtherLogic Integra

ANALOG INPUTS

Quantity of Universal Inputs	6
Analog Input Signals	
Voltage	5Vdc, +/-300mV
Current	20mA
Resistance	0 to 65K ohms
Temperature Sensors	J, K, T, E, R, S thermocouple, 10K thermistor (Type II & III), 100 & 1000 ohm, type 385/392 RTD
Input Overload Clamping	Inputs limited to 50mA and 6Vdc
Overload / Transient Protection	Transorb/Self Resetting Polyfuse
Analog Resolution	16 bits (1 part in 65535)

ANALOG OUTPUTS

Quantity	3
Output Type	0 or 4 to 20mA
Resolution	12 bits (1 part in 4096)
Overload / Transient Protection	Transorb/Self Resetting Polyfuse

DISCRETE INPUTS

Quantity	16
Input type	Optically isolated with 2/14 split shared isolated commons, AC/DC
Input levels	9 to 50 Vac/Vdc (56-00xx) 80 to 150Vac/Vdc (56-01xx)
Max. DI Pulse Counting Rate	DI7 & DI8: 5KHz, all others: 40Hz

DISCRETE OUTPUTS

Quantity	8
Output Type	Relays, Form A
Output Rating	10A @125 Vac, 5A @ 30 Vdc

COMMUNICATIONS

Serial Port Interfaces	3 + 1 Int. Tel. Modem (option)
COM #1, #3	RS-232, 9 pin D Male
COM #4	RS-485, 2-pin Terminal Block
COM #5	Optional 56K Modem/voice, RJ-11
Ethernet Port	10Base-T (10 Mb/sec), RJ-45

COMMUNICATIONS OPTIONS (one only per controller)

Internal Spread Spectrum Radios	900MHz, 1W, up to 115Kbaud 2.4GHz, 0.5W, up to 115Kbaud
Cellular modem	GSM/GPRS Cellular
HART modem	Instrument comm - 20mA loops

ORDER PART NUMBERS: (includes ISaGRAF, ScadaBuilder, operating system and TCP/IP software licenses)

53-x002	EtherLogic Integra, 12/24V DIs, Std (no int. radio/modem)
53-x012	EtherLogic Integra, 12/24V DIs, 900MHz Freewave Radio
53-x022	EtherLogic Integra, 12/24V DIs, 2.4GHz Freewave Radio
53-x032	EtherLogic Integra, 12/24V DIs, 900MHz Aerocomm Radio
53-x042	EtherLogic Integra, 12/24V DIs, 900MHz Maxstream Radio
53-x062	EtherLogic Integra, 12/24V DIs, GSM/GPRS Cellular
53-x082	EtherLogic Integra, 12/24V DIs, HART Modem
53-x092	EtherLogic Integra, 12/24V DIs, extra RS-232/RS-485 port

x = 1 for built-in telephone modem w/voice, 0 for no built-in modem

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. 12/04 PN 60282001

CONTROL & COMMUNICATIONS PROCESSOR

CPU	32-bit Intel 386EX, 25MHz
Memory	8MB Flash, 1MB RAM
Real Time Clock	Dallas DS1689S (IBM/PC comp.)

GENERAL SPECIFICATIONS

Field I/O Wiring Terminations	Removable Terminal Blocks
Wire Size	#14 to #26 stranded/solid, #12 stranded only
Dimensions	7.0" W x 8.0" L x 2.5" D (178mm x 254mm x 64mm)
Power	8 to 26Vac, 10 to 36Vdc w/o battery charging 2W (10W max. w/int. modem/radio) (12Vac/15Vdc min for UPS battery charging, adds up to 500mA in),
Temperature	-40°C to 75°C (-40°F to 167°F)
Humidity	5 to 95% 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
C/C++	Borland v3.1 to 5.0 w/ctrl & comm

SCADABUILDER

Serial Communications	<i>Point-and-Click configuration of:</i> Modbus RTU/ASCII - Master/Slave, DF1 (Allen Bradley-Master/Slave), HART, PPP, NMEA-0183 (GPS) Bricknet (Peer-to-peer SCADA)
Ethernet Communications	Modbus TCP/IP, HTTP, FTP, TELNET
Simple MMI	ANSI/VT100 - serial data links, Telnet over Ethernet
Data and Alarm Logging	up to flash disk capacity (7MB typ)