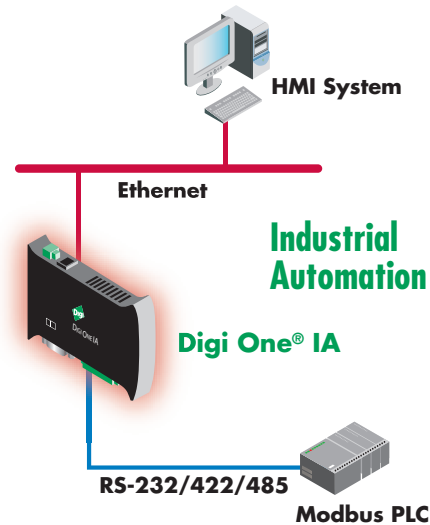


The Digi One IA device server delivers easy and reliable serial-to-Ethernet and Modbus-to-Modbus/TCP connectivity solutions for industrial automation applications.



## Features/Benefits

- Ethernet enable industrial serial devices
- Modbus serial to Modbus/TCP protocol conversion
- Industrial DIN rail mounting
- RS-232/422/485 switch selectable including DB-9 and screw terminal connectors
- Patented Digi RealPort<sup>®</sup> technology for COM or TTY port control and management
- TCP/UDP Socket Services for broad device connectivity and application use
- Galvanic isolation (from earth ground)
- Class 1, Div 2 certification
- Tunable for low latency or optimized throughput
- Easy configuration through web interface (HTTP)

## Overview

The Digi One IA device server allows virtually any industrial device with a serial port to be connected to Ethernet in minutes. Designed to meet the specific requirements of the industrial automation market, the Digi One IA offers an easy way to network-enable previously isolated RS-232/422/485 serial devices such as Programmable Logic Controllers (PLCs), Remote Terminal Units (RTUs), process and quality equipment, motors, drives, bar-code readers and operator displays. The Digi One IA delivers cost-effective performance in a compact and rugged DIN rail-mountable enclosure.

The Digi One IA supports most industrial automation protocols through TCP or UDP encapsulation, or Digi's patented RealPort software. RealPort makes it possible to establish a connection between the host and networked serial device by creating a local COM or TTY port on the host computer, allowing existing software applications to work without modification. Customers using Modbus can enable a Modbus bridge function allowing multiple Modbus/TCP masters to share Modbus serial slaves, or Modbus serial Masters to access Modbus/TCP slaves.

The Digi One IA is easy to install locally or remotely through a variety of interfaces. The installation CD includes a setup wizard that detects all Digi One IA devices on your network. The product can also be IP addressed using DHCP, RARP or ARP-Ping, and once an IP address is set up, additional configuration can be done with the user-friendly web browser interface.

# Features/Specifications

## FEATURES

- 10/100Base-T Ethernet support
- DB-9M and screw terminal block serial port
- RS-232/422/485 switch selectable serial port, including DB-9M and screw terminal connectors
- Modbus ASCII/RTU to Modbus TCP conversion
- Modbus Ethernet-to-Serial Bridge Function supporting Modbus/TCP, Modbus/UDP, Modbus/RTU, Modbus/ASCII
- Modbus bridge supports TCP and UDP Encapsulation of Modbus/RTU, Modbus/ASCII
- Supports serial master and serial slave modes
- Supports up to 10 Modbus masters
- Support for 10 concurrent socket connections
- TCP/UDP Socket Services
- UDP
- Telnet, Reverse Telnet and extended Telnet RFC 2217
- Web browser configurable
- DHCP/RARP, ARP-Ping for IP addressing assignment
- Flash upgradeable firmware
- Baud rates up to 230 Kbps
- Full modem and hardware flow control
- 35 mm DIN rail mounting
- Screw terminal block power jack
- LED status for serial signals, power, Ethernet and diagnostics
- Patented RealPort technology for COM and TTY ports
- SNMP (read/write)
- PPP
- Digi Port Authority-Remote management diagnostics and auto-discovery tool
- Removable screw terminal for power
- <6 ms serial over Ethernet latency

## ENVIRONMENTAL

- Operating temperature: 0° C to 60° C (32° F to 140° F)
- Relative humidity: 5% to 90% (non-condensing)
- Ethernet isolation: 1500VAC min per IEEE 802.3/ANSI X3.263
- Serial port protection (ESD): +15 kV air GAP and +8 kV contact discharge per IEC 1000-4-2

## POWER REQUIREMENTS

- 9-30VDC @ 0.5 Amps max
  - 2 kV isolation between power supply and serial ground
- No power supply ships with this product.

## REGULATORY APPROVALS

- FCC Part 15, Class A
- CE
- Class 1, Div 2 – UL 1604
- ICES-003, A
- EN55022, A
- EN 6100-6-2 + EN55024
- UL 1950
- CSA 22.2 No. 950
- EN 60950
- AS3548

## OPERATING SYSTEMS

### RealPort drivers for COM/TTY support

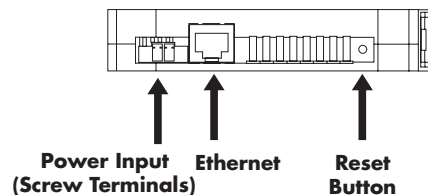
- AIX
- Compaq Tru64
- HP-UX
- Linux
- Windows® XP
- Windows 2000
- Windows NT®
- Windows 98/ME
- Windows Server™ 2003
- SCO® OpenServer™
- SCO UnixWare™
- Solaris™ (Intel)
- Solaris (SPARC)

## DIMENSIONS

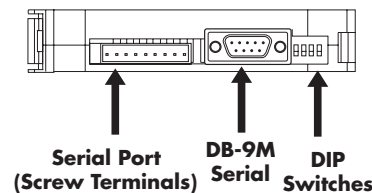
- Length: 4.70 in (12.00 cm)
- Depth: 4.00 in (10.10 cm)
- Width: 0.90 in (2.30 cm)
- Weight: 2.25 oz (64.00 g)



### Digi One IA - Top



### Digi One IA - Bottom



## MODEL.....PART NUMBERS

Model	North America	International
Digi One IA	70001862	70001862
48VDC to 12VDC Power Supply	76000696	76000696

**DIGI SERVICE AND SUPPORT** - You can purchase with confidence knowing that Digi is here to support you with expert technical support and a strong five-year warranty. [www.digi.com/support](http://www.digi.com/support)



### Digi International

11001 Bren Road E.  
 Minnetonka, MN 55343  
 U.S.A.  
 PH: 877-912-3444  
 952-912-3444  
 FX: 952-912-4952  
 email: [info@digi.com](mailto:info@digi.com)

### Digi International France

31 rue des Poissonniers  
 92200 Neuilly sur Seine  
 PH: +33-1-55-61-98-98  
 FX: +33-1-55-61-98-99  
[www.digi.fr](http://www.digi.fr)

### Digi International KK

NES Building South 8F  
 22-14 Sakuragaoka-cho,  
 Shibuya-ku  
 Tokyo 150-0031, Japan  
 PH: +81-3-5428-0261  
 FX: +81-3-5428-0262  
[www.digi-intl.co.jp](http://www.digi-intl.co.jp)

### Digi International (HK) Limited

Suite 1703-05, 17/F.,  
 K Wah Centre  
 191 Java Road  
 North Point, Hong Kong  
 PH: +852-2833-1008  
 FX: +852-2572-9989  
[www.digi.cn](http://www.digi.cn)

Digi International, the leader in device networking for business, develops reliable products and technologies to connect and securely manage local or remote electronic devices over the network or via the web. With over 20 million ports shipped worldwide since 1985, Digi offers the highest levels of performance, flexibility and quality.

[www.digi.com](http://www.digi.com)

© 1999-2008 Digi International Inc.

All rights reserved. Digi, Digi International, the Digi logo, the When Reliability Matters logo, Digi One and RealPort are either trademarks or registered trademarks of Digi International Inc. in the United States and other countries worldwide. All other trademarks are the property of their respective holders.

91001156  
 D1/208

