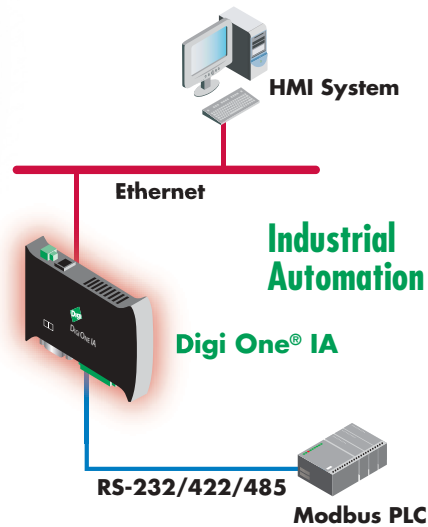


# Digi One<sup>®</sup> IA

Device Server

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.

Digi International makes device networking easy by developing products and technologies that are cost-effective and easy to use. With over 20 million ports shipped worldwide, Digi has been offering the highest levels of performance, flexibility, and quality since 1985.



# 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

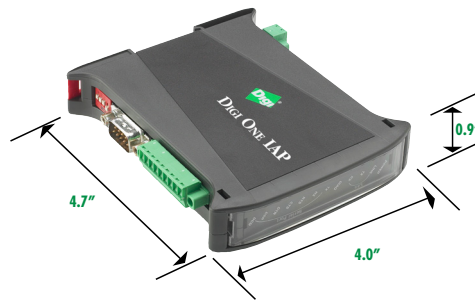
## OPERATING SYSTEMS

### RealPort drivers for COM/TTY support

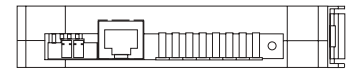
- AIX
- Compaq Tru64
- HP-UX
- Linux
- Windows® XP
- Windows 2000
- Windows NT®
- Windows 98/ME
- Windows Server™ 2003
- SCO® OpenServer™
- SCO UnixWare™
- Solaris™ (Intel)
- Solaris (SPARC)

## 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)

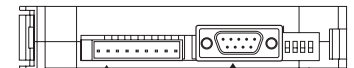


### Digi One IA - Top



Power Input (Screw Terminals) Ethernet Reset Button

### Digi One IA - Bottom



Serial Port (Screw Terminals) DB-9M Serial DIP Switches

## 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. <http://support.digi.com>

### Digi International

11001 Bren Road E.  
Minnetonka, MN 55344  
U.S.A.  
PH: 877-912-3444  
952-912-3444  
FX: 952-912-4952  
[www.digi.com](http://www.digi.com)

### Digi International GmbH

Joseph-von-Fraunhofer Str. 23  
D-44227 Dortmund  
Germany  
PH: +49-231-9747-0  
FX: +49-231-9747-111  
[www.digi.de](http://www.digi.de)

### 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)

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

email:  
[info@digi.com](mailto:info@digi.com)



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