



INDUSTRIAL  
SERIAL SERVER



# DIGI ONE® IA

Easy, reliable serial-to-Ethernet and Modbus-to-Modbus/TCP connectivity for industrial automation applications

Digi One IA provides reliable, cost-effective network connectivity for serial devices. This unobtrusive and easy-to-use serial server delivers serial-to-Ethernet connectivity to Programmable Logic Controllers (PLCs), Remote Terminal Units (RTUs), bar-code readers and other industrial devices.

Digi One IA supports most industrial automation protocols through TCP/UDP connections, serial bridging or COM port redirection using Digi's patented RealPort® software. RealPort enables existing applications to communicate with serial devices over the Ethernet. By creating a Modbus bridge,

multiple Modbus/TCP masters can share Modbus serial slaves, or Modbus serial masters can access Modbus/TCP slaves.

Digi One IA is easy to install locally or remotely. The IP address can be configured using DHCP, ARP-Ping or Setup, an application included with the installation CD that detects Digi One devices on the network. Using the web interface, users can configure advanced functions into their application.

## BENEFITS

- Patented RealPort for COM/TTY port control and management
- TCP/UDP Socket Services for broad device connectivity and application use
- Modbus serial to Modbus/TCP protocol conversion
- Switch selectable RS-232/422/485 for simple interfacing to any type of serial device
- Industrial DIN rail mounting for use in space-prohibitive control cabinets
- Galvanic isolation (between power and serial)
- Tunable for low latency or optimized throughput

## RELATED PRODUCTS



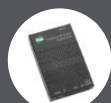
DigiOne® IAP



DigiOne® IAP HAZ



DigiOne® SP IA



PostServer® TS H MEI



Power Supply 76000736

## APPLICATION EXAMPLE: INDUSTRIAL AUTOMATION



## SPECIFICATIONS

## Digi One® IA

### FEATURES

<b>MANAGEMENT</b>	HTTP configuration, Digi Port Authority - Remote management diagnostics and auto-discovery tool
<b>PROTOCOLS</b>	Telnet, Reverse Telnet and extended Telnet RFC 2217; TCP/UDP Socket Services; UDP, support 32 concurrent socket connections; DHCP/RARP, ARP-Ping; 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
<b>SOFTWARE</b>	Patented RealPort for COM/TTY ports
<b>OPERATING SYSTEMS</b>	AIX, HP-UX, Solaris, Linux®, Windows® 2000, Windows® XP, Windows® 7, Windows® 8, Windows® 8.1, Windows® 10, Windows Server® 2003, Windows Server® 2008, Windows Server® 2012. Note: TCP/UDP socket services are operating system independent
<b>STATUS LEDS</b>	Serial signals, Power, Ethernet, Diagnostics
<b>DIMENSIONS (L X W X D)</b>	4.70 in x 0.90 in x 4.0 in (12.00 cm x 2.30 cm x 10.10 cm)
<b>WEIGHT</b>	2.25 oz (64.00 g)
<b>OTHER</b>	Full modem and hardware flow control, Flash upgradeable firmware, 35 mm DIN rail mounting

### INTERFACES

<b>SERIAL PORTS</b>	1 RS-232/422/485 (switch selectable)
<b>SERIAL CONNECTOR</b>	DB-9M or screw terminal connectors
<b>SERIAL THROUGHPUT</b>	Up to 230 Kbps
<b>ETHERNET PHYSICAL LAYER</b>	10/100 Base-T
<b>POWER REQUIREMENTS</b>	
<b>POWER INPUT</b>	9-30 VDC @ .5 Amps max
<b>POWER CONNECTOR</b>	Screw terminal block power jack for external supply
<b>PRODUCT SURGE PROTECTION (ESD)</b>	2 kV isolation between power supply and serial ground

### ENVIRONMENTAL

<b>OPERATING TEMPERATURE</b>	0° C to 60° C (32° F to 140° F)
<b>RELATIVE HUMIDITY</b>	5% to 90% (non-condensing)
<b>ETHERNET ISOLATION</b>	1500 VAC min per IEEE 802.3/ANSI X3.263
<b>SERIAL PORT PROTECTION (ESD)</b>	15 kV human body model

### REGULATORY APPROVALS

<b>SAFETY</b>	UL 60950, UL1604 (Class 1 Div 2), EN60950, CAN/CSA C22.2 No.60950
<b>EMISSIONS/IMMUNITY</b>	FCC Part 15 Subpart B (Class A), EN55024, EN55022 (Class A), EN61000-6-2

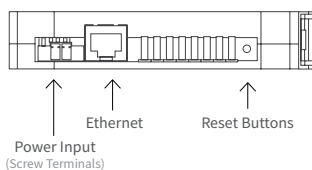
## PART NUMBERS

## DESCRIPTION

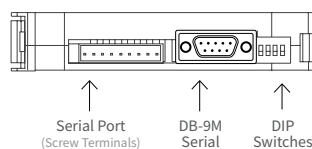
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Digi One IA

DigiOne® IA - TOP



DigiOne® IA - BOTTOM



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