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.

**APPLICATION EXAMPLE: INDUSTRIAL AUTOMATION**

HMI SYSTEM

**DIGI ONE® IA**

Ethernet

RS-232/422/485

Modbus PLC

**DigiOne® IAP**

**DigiOne® IAP HAZ**

**DigiOne® SP IA**

**PostServer® TS H MEI**

**Power Supply 76000786**

**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

**DIGI ONE® IA**

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

### Digi One® IA

#### FEATURES

**MANAGEMENT**  
HTTP configuration, Digi Port Authority - Remote management diagnostics and auto-discovery tool

**PROTOCOLS**  
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

**SOFTWARE**  
Patented RealPort for COM/TTY ports

**OPERATING SYSTEMS**  

**STATUS LEDS**  
Serial signals, Power, Ethernet, Diagnostics

**DIMENSIONS (L X W X D)**  
4.70 in x 0.90 in x 4.0 in (12.00 cm x 2.30 cm x 10.10 cm)

**WEIGHT**  
2.25 oz (64.00 g)

**OTHER**  
Full modem and hardware flow control, Flash upgradeable firmware, 35 mm DIN rail mounting

#### INTERFACES

**SERIAL PORTS**  
1 RS-232/422/485 (switch selectable)

**SERIAL CONNECTOR**  
DB-9M or screw terminal connectors

**SERIAL THROUGHPUT**  
Up to 230 Kbps

**ETHERNET PHYSICAL LAYER**  
10/100 Base-T

**POWER REQUIREMENTS**

**POWER INPUT**  
9-30 VDC @ .5 Amps max

**POWER CONNECTOR**  
Screw terminal block power jack for external supply

**PRODUCT SURGE PROTECTION (ESD)**  
2 kV isolation between power supply and serial ground

#### ENVIRONMENTAL

**OPERATING TEMPERATURE**  
0º C to 60º C (32º F to 140º F)

**RELATIVE HUMIDITY**  
5% to 90% (non-condensing)

**ETHERNET ISOLATION**  
1500 VAC min per IEEE 802.3/ANSI X3.263

**SERIAL PORT PROTECTION (ESD)**  
15 kV human body model

#### REGULATORY APPROVALS

**SAFETY**  
UL 60950, UL1604 (Class 1 Div 2), EN60950, CAN/CSA C22.2 No.60950

**EMISSIONS/IMMUNITY**  
FCC Part 15 Subpart B (Class A), EN55024, EN55022 (Class A), EN61000-6-2

#### PART NUMBERS

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<th>PART NUMBERS</th>
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