



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

APPLICATION EXAMPLE: INDUSTRIAL AUTOMATION



RELATED PRODUCTS



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 | 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 |
| 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 | 0° C to 60° C (32° F to 140° 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 |

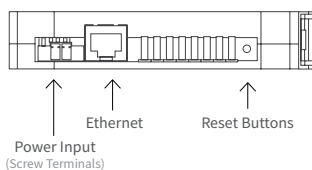
PART NUMBERS

DESCRIPTION

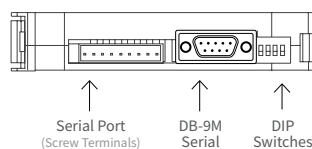
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Digi One IA

DigiOne® IA - TOP



DigiOne® IA - BOTTOM



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