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

HMI SYSTEM
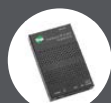
Ethernet

DIGI ONE® IA

RS-232/422/485

Modbus PLC

RELATED PRODUCTS

DigiOne® IAP

DigiOne® IAP HAZ

DigiOne® SP IA

PostServer® TS H MEI

Power Supply 76000736

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	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

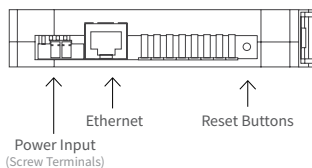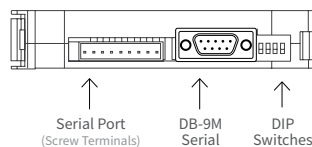|	
SAFETY	UL 60950, UL1604 (Class 1 Div 2), EN60950, CAN/CSA C22.2 No.60950
EMISSIONS/IMMUNITY	FCC Part 15 Subpart B (Class A), EN55024, EN55022 (Class A), EN61000-6-2

PART NUMBERS — DESCRIPTION

PART NUMBERS	DESCRIPTION
70001862	Digi One IA

DigiOne® IA - TOP
Power Input (Screw Terminals), Ethernet, Reset Buttons

DigiOne® IA - BOTTOM
Serial Port (Screw Terminals), DB-9M Serial, DIP Switches

0.9" 4.7" 4.0"

91001156
F3/618

DIGI