SERIAL SERVER FOR HAZARDOUS LOCATIONS

# **DIGIONE® IAP HAZ**

Serial-to-Ethernet connectivity, protocol conversion and interoperability for industrial applications in harsh and extreme conditions

Digi One IAP Haz combines reliable serial-to-Ethernet connectivity with protocol conversion and interoperability. Users can IP enable a broad range of serial devices, as well as link two industrial devices. Designed for use in harsh environments, this rugged serial server is ideal for device management applications where exposure to extreme temperatures, volatile liquids and gases are common.

Digi One IAP Haz is a serial server and a protocol bridge rolled into one. Applications may communicate with the serial device using TCP/UDP or Digi's patented RealPort® COM port redirection for remote native COM port access.

Digi One IAP Haz supports a variety of serial and Ethernet protocols, allowing users to bridge serial and Ethernet devices, or both. Multi-master access allows multiple masters to communicate with a single slave across protocols. An additional serial port allows local devices to communicate with a slave unit, without disrupting the serial-to-Ethernet connection.

## **BENEFITS**

- Hardened design with extended operating temperature (-35° C to +74° C) for hazardous locations
- Conformal coated circuit board
- Class 1, Division 2 certified

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- Multi-master/Multi-protocol concurrent support for Allen-Bradleyand Modbus protocols
- Serial and Ethernet protocol bridging support for Allen-Bradley and Modbus protocols promotes interoperability
- ASCII to protocol translation for Allen-Bradley and Modbus
- Switch selectable RS-232/422/485 serial port

## **RELATED PRODUCTS**



DigiOne® IA



DigiOne® IAP







**APPLICATION EXAMPLE** 

DigiOne® SP IA

76000736

PostServer® TS H MEI Haz

CDECIFICATIONS				
SPECIFICATIONS	DigiOne <sup>®</sup> IAP Haz			
FEATURES				
MANAGEMENT	HTTP configuration, Digi Port Authority - Remote management diagnostics and auto-discovery tool, SNMP (read/write)			
PROTOCOLS	Telnet, Reverse Telnet, RFC2217, TCP/UDP Socket Services, PPP, DHCP/RARP, ARP-Ping, Static IP for IP address assignment, Support for 64 concurrent socket connections, ASCII, DF1, Modbus RTU/ASCII, Modbus/TCP, EtherNet/IP, Allen-Bradley Ethernet			
SOFTWARE	Patented RealPort® for COM/TTY ports			
SECURITY	SSHv2, SSL, TLS, HTTPS			
OPERATING SYSTEMS	AIX, HP-UX, Solaris, Linux <sup>®</sup> , Windows <sup>®</sup> 2000, Windows <sup>®</sup> XP, Windows <sup>®</sup> 7, Windows <sup>®</sup> 8, Windows <sup>®</sup> 8.1, Windows <sup>®</sup> 10, Windows Server <sup>®</sup> 20 Windows Server <sup>®</sup> 2008, Windows Server <sup>®</sup> 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	2.5 oz (64.0 g)			
OTHER	Full modem and hardware flow control, Flash upgradeable firmware, 6 ms serial over Ethernet latency, Conformal coated PCB, 35 mm DIN rail mounting			
INTERFACES				
SERIAL PORTS	1 RS-232/422/485 (switch selectable)			
SERIAL CONNECTOR	Screw terminal connectors or DB-9M; DB-9M can act as a second direct RS-232 port connection when used as the second port			
SERIAL THROUGHPUT	Up to 230 Kbps			
ETHERNET PHYSICAL LAYER	10/100Base-T			
POWER REQUIREMENTS				
POWER INPUT	9-30 VDC @ 0.5Amps max			
POWER SUPPLY	Removable screw terminal for power (power supply not included)			
PRODUCT SURGE PROTECTION (ESD)	2 kV isolation between power supply and serial ground			
ENVIRONMENTAL				
OPERATING TEMPERATURE	-35° C to +74° C (-31° F to +165° 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 1950, UL 1604 (Class 1, Div. 2), CSA 22.2 No 950, EN60950			
EMISSIONS / IMMUNITY	FCC Part 15 (Class A), ICES-003 (Class A), CE, AS3548, EN6100-6-2 + EN55024, EN55022 (Class A)			

PART NUMBERS	DESCRIPTION		
70002326	Digi One IAP Haz		

SLAVE MASTER	MB /RTU	MB SERIAL	MB/TCP	DF1	A-B ETH	ENET/IP*	ASC11
MB SERIAL	-	YES	YES	YES	YES	YES	YES
MB/TCP	YES	YES	-	YES	YES	YES	YES
DF1	YES	YES	YES	-	YES	YES	YES
A-B ETH	YES	YES	YES	YES	-	YES	YES
ENET/IP	YES	YES	YES	YES	YES	-	YES
ASC11	NO	NO	NO	NO	NO	NO	-

\*PCCC encapsulated under CIP only for EtherNet/IP

**DIGI SERVICE AND SUPPORT** / You can purchase with confidence knowing that Digi is always available to serve you with expert technical support and our industry leading warranty. For detailed information visit www.digi.com/support.

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#### DigiOne® IAP HAZ - TOP



### DigiOne® IAP HAZ - BOTTOM



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