

# Digi One® IAP Haz

Serial Server for Hazardous Locations

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



## Overview

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.

### Related Products



Digi One® IA



Digi One® IAP



Digi One® SP IA

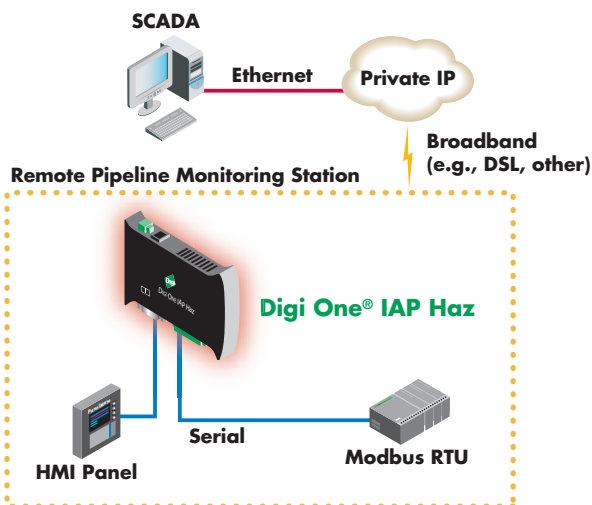


PortServer® TS H MEI Haz



Power Supply  
76000736

### Application Highlight



### Features/Benefits

- Hardened design with extended operating temperature (-35° C to +74° C) for hazardous locations
- Conformal coated circuit board
- Class 1, Division 2 certified
- Multi-master/Multi-protocol concurrent support for Allen-Bradley and 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



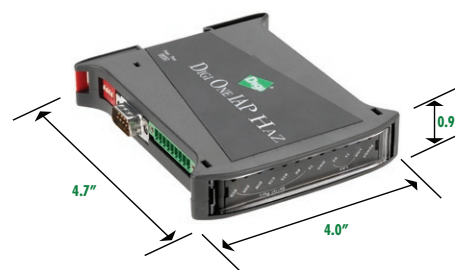
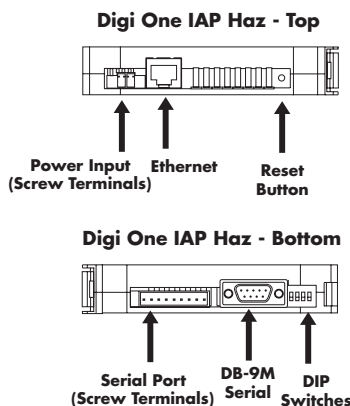
# Specifications

# Digi One® 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, Linux®, SCO® OpenServer™ 5, SCO® OpenServer™ 6, Solaris™ Intel, Solaris™ SPARC, Windows XP®, Windows Server® 2003, Windows Server® 2008, Windows Vista®
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	9-30VDC @ 0.5Amps max
Power Supply	Removable screw terminal for power (power supply not included)
Surge Protection	2 kV isolation between power supply and serial ground product
Environmental	
Operating Temperature	-35° C to +74° C (-31° F to +165° F)
Relative Humidity	5% to 90% (non-condensing)
Ethernet Isolation	1500VAC min per IEEE 802.3/ANSI X3.263
Serial Port Protection (ESD)	+15 kV air GAP and +8 kV contact discharge per IEC 1000-4-2
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)

Slave	MB /RTU	MB Serial	MB/TCP	DF1	A-B Eth	ENet/IP *	ASCII
Master	MB Serial	–	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
ASCII	No	No	No	No	No	No	–

\* PCCC encapsulated under CIP only for EtherNet/IP



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