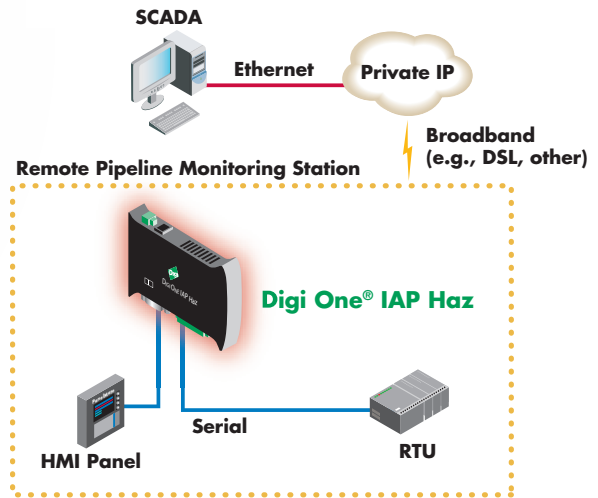


Digi One[®] IAP Haz

Serial Server for Hazardous Locations

Designed to withstand harsh operating environments, the Digi One IAP Haz provides serial-to-Ethernet connectivity and intelligent protocol bridging. Its hardened design ensures reliable performance in extreme conditions, reducing operating risk and the costs associated with application failure.



Features/Benefits

- Hardened design for hazardous locations
- Extended operating temperature (-35° C to 74° C)
- Conformal coated circuit board
- Class 1, Division 2 certified
- Industrial serial-to-Ethernet converter and protocol bridge
- 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
- Integrated DIN rail mounting
- DB-9M and screw terminal block serial ports
- RS-232/422/485 switch selectable in field

Overview

The Digi One IAP Haz provides a means of connectivity and interoperability for serial and Industrial Ethernet devices such as Programmable Logic Controllers (PLCs) motors, drives, bar-code readers, displays and other types of devices deployed in harsh environments where exposure to extreme temperatures and volatile liquids and gases is common. Applications for the Digi One IAP Haz will be found in many manufacturing environments, power or natural resource distribution and water/wastewater management.

The Digi One IAP Haz is a serial server and a protocol bridge rolled into one. The serial server functionality allows virtually any device with a serial port to be connected to a TCP, UDP, network. Applications may communicate with the serial device using TCP/UDP or Digi's patented RealPort[®] COM port redirector for remote native COM port access.

Its protocol conversion capability enables the Digi One IAP Haz to actually bridge multiple industrial devices, whether serial, Ethernet or both, as long as they speak any of the supported serial (DF1, Modbus, ASCII) or Ethernet (Modbus/TCP, A-B/Ethernet, EtherNet/IP) protocols. It also allows for multi-master access, which means that many masters can simultaneously communicate with a single slave, even if they are using different protocols. In addition, the Digi One IAP Haz is able to convert ASCII data from scales, bar-code readers, RFID devices, cameras and other devices to Industrial Ethernet protocols.

The second serial port (DB-9M) on the Digi One IAP Haz acts as a pass-through port. This means a local serial device like an HMI panel can communicate through the Digi One IAP Haz to a PLC slave, without disrupting the serial-to-Ethernet connection to its master application across the network.

Features/Specifications

FEATURES

- 10/100Base-T Ethernet support
- DB-9M and screw terminal block serial ports; RS-232/422/485 switch-selectable
- DB-9M can be enabled as a second RS-232 only serial port (pass-through mode)
- TCP/UDP Socket Services
- Support for 64 concurrent socket connections
- Web browser configurable
- Patented RealPort technology for COM and TTY ports
- SNMP (read/write)
- PPP
- DHCP/RARP, ARP-Ping, Static IP for IP address assignment
- Digi-provided and supported remote management diagnostics and discovery tools
- Flash upgradeable firmware
- Baud rates up to 230 Kbps
- Protocol bridge support
 - Ethernet protocols: Modbus/TCP, EtherNet/IP, Allen-Bradley Ethernet
 - Serial protocols: ASCII, DF1, Modbus RTU/ASCII
- Multi-master support for above plus Omron and user-defined serial protocols
- 35 mm DIN rail mounting
- Removable screw terminal for power
- LED status for serial signals, power, Ethernet and diagnostics
- Full modem and hardware flow control
- <6 ms serial over Ethernet latency

ENVIRONMENTAL

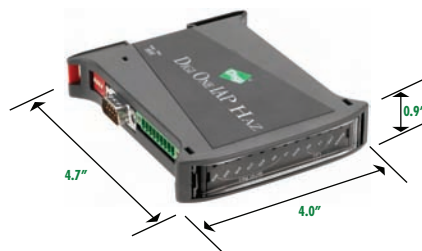
- Operating temperature: -35°C to 74°C (-31°F to 165°F)
- Relative humidity: 5% to 90% (non-condensing)
- Ethernet isolation: 1500VAC min per IEEE 802.3/ANSI X3.263
- Serial port protection (ESD): +15 kV air GAP and +8 kV contact discharge per IEC 1000-4-2
- Conformal coated PCB

REGULATORY APPROVALS

- FCC Part 15, Class A
- CE
- Class 1, Div 2 – UL 1604
- ICES-003, A
- EN55022, A
- EN 6100-6-2 + EN55024
- UL 1950
- CSA 22.2 No. 950
- EN 60950
- AS3548

DIMENSIONS

- Length: 4.7 in. (12.0 cm)
- Depth: 4.0 in. (10.1 cm)
- Width: 0.9 in. (2.3 cm)
- Weight: 2.5 oz (64.0 g)



POWER REQUIREMENTS

- 9-30VDC @ 0.5 Amps max
- 2 kV isolation between power supply and serial ground

No power supply ships with this product.

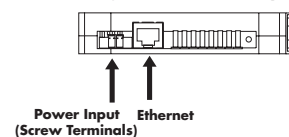
OPERATING SYSTEMS

RealPort drivers for COM/TTY support

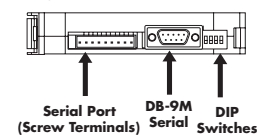
- AIX
- Compaq Tru64
- HP-UX
- Linux
- Windows® XP
- Windows 2000
- Windows NT®
- Windows 98/ME
- Windows Server™ 2003
- SCO® OpenServer™
- SCO UnixWare™
- Solaris™ (Intel)
- Solaris (SPARC)



Digi One IAP Haz - Top



Digi One IAP Haz - Bottom



MODEL.....PART NUMBERS

Model	Worldwide
Digi One IAP Haz	70002326
12VDC Extended Temperature Power Supply, no Plug	76000736

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

* PCCC encapsulated under CIP only for EtherNet/IP