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
- 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

**APPLICATION EXAMPLE**

**RELATED PRODUCTS**
- DigiOne® IA
- DigiOne® IAP
- DigiOne® SP IA
- PostServer® TS H MEI Haz
- Power Supply 76000736
- DIGI ONE® IAP HAZ
- Serial-to-Ethernet connectivity, protocol conversion and interoperability for industrial applications in harsh and extreme conditions
**SPECIFICATIONS**

**DigiOne® 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**

**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 upgradable 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**

<table>
<thead>
<tr>
<th>SLAVE</th>
<th>MASTER</th>
<th>MB SERIAL</th>
<th>MB TCP</th>
<th>DF1</th>
<th>A-B ETH</th>
<th>ENET/IP</th>
<th>ASC11</th>
</tr>
</thead>
<tbody>
<tr>
<td>MB SERIAL</td>
<td>–</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>MB/TCP</td>
<td>YES</td>
<td>YES</td>
<td>–</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>DF1</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>–</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>A-B ETH</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>–</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>ENET/IP</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>–</td>
</tr>
<tr>
<td>ASC11</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>–</td>
</tr>
</tbody>
</table>

*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.

© 1996-2018 Digi International Inc. All rights reserved.

All trademarks are the property of their respective owners.

DigiOne® IAP Haz - TOP

DigiOne® IAP Haz - BOTTOM