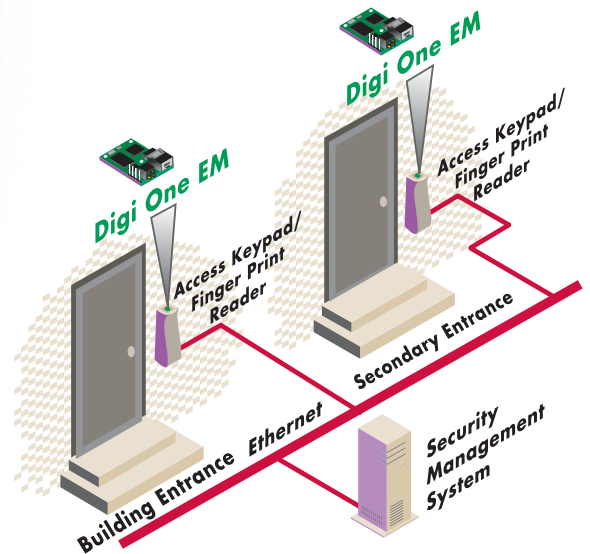# Digi One™ EM

Device Server

High performance, integrated Ethernet connectivity. The Digi One EM offers equipment manufacturers a quick, simple and cost-effective way to add network connectivity to their products.

Features/Benefits

> **Field-upgradeable single component solution for embedded applications**

> **4MB Flash and 8MB RAM on-board to support existing and future application requirements**

> **TTL Serial interface**

> **Robust on-board TCP/IP stack**

> **Flexible input power range**

> **Auto-sensing 10/100Base-T network interface**

> **Universal IP address assignment**

> **Easy configuration through web interface (HTTP)**

> **Includes Digi's patented RealPort COM/TTY port redirection software**

> **Custom population options available**

Overview

The Digi One EM is part of the Digi One Family of single port device servers that provide simple, reliable and cost-effective network connections for serial devices.

The Digi One EM allows both equipment manufacturers and systems integrators to network-enable products at a fraction of the time and cost required to develop a custom solution. It is a highly flexible and compact single component solution with a robust on-board TCP/IP stack and 10/100Base-T Ethernet support. Digi's unique and patented RealPort® COM/TTY port redirection software allows for seamless integration into existing application environments under Microsoft Windows, UNIX and Linux by making network-enabled serial devices available through the standard COM/TTY interfaces.

In virtually any application where embedded serial connectivity over Ethernet is needed, such as medical systems, building control and industrial automation, the Digi One EM is the ideal choice for delivering high-performance functionality.

A complete integration kit containing a development board, documentation, sample code, cables and accessories is available for evaluation and development use.

Digi International, the leader in Connectware, makes device networking easy by manufacturing products and technologies that are cost-effective and easy to use. With over 20 million ports shipped worldwide, Digi has been offering the highest levels of performance, flexibility, and quality since 1985.

Please contact Digi at **1-877-OEM-DIGI** for additional information or to discuss your application specific requirements.

Connectware™

www.digi.com

Making
DEVICE NETWORKING
easy

Features/Specifications

FEATURES

- TTL Serial Interface
  - Throughput up to 230,400 bps
  - Full signal support for TX, RX, RTS, CTS, DTR, DSR and DCD
  - Full hardware and software flow control
- 4MB Flash and 8MB RAM on-board
- Auto-sensing 10/100Base-T network interface with on-board RJ-45
- Flexible input power range
- Status LEDs for Link, Power, and Diagnostics
- Fully field-upgradeable
- Robust on-board TCP/IP stack, with support for
  - TCP/UDP
  - UDP Multicast
  - Telnet / Reverse Telnet
  - RFC 2217
- Patented RealPort COM port redirection for Microsoft Windows, UNIX, and Linux environments
- Universal IP address assignment using DHCP, RARP, and ARP-Ping
- Easy configuration through web browser interface (HTTP)
- Custom population options available

PINOUTS

Connector P4

Pin Number	Signal Name	Description
1	+5V DC	Power
2	GND	Ground
3	RXD	Receive Data (Input)
4	TXD	Transmit Data (Output)
5	RTS	Request to Send (Output)
6	DTR	Data Terminal Ready (Output)
7	CTS	Clear to Send (Input)
8	DCD	Data Carrier Detect (Input)
9	DSR	Data Set Ready
10	RST~	RESET
11	RES	Reserved
12	RES	Reserved

POWER REQUIREMENTS

- +5 VDC @ 370mA to +9 VDC @ 230mA Typical

DIMENSIONS

- Length: 1.93 in. (4.9 cm)
- Depth: .974 in (2.47 cm)
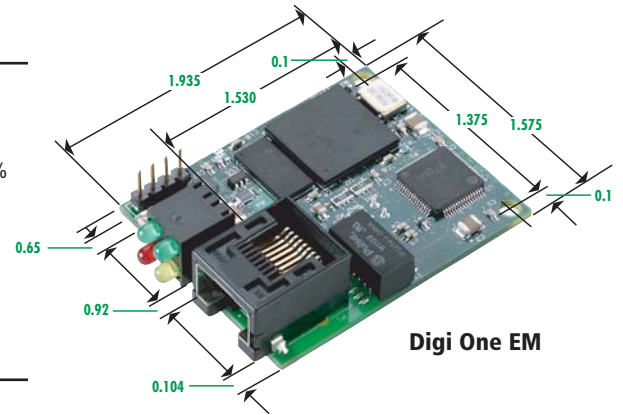- Width: 1.57 in. (4 cm)

ENVIRONMENTAL

- Ambient temperature: 10ºC to 55ºC (50ºF to 131ºF)
- Relative humidity: 5% to 90% (non-condensing)
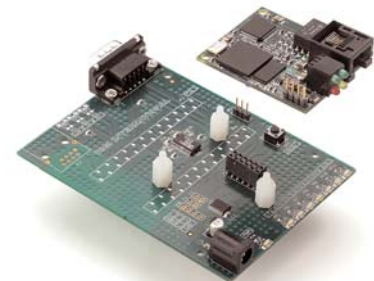- Altitude: 12,000 Feet (3658 Meters)

Digi One EM

REGULATORY APPROVALS

- FCC Part 15, Class A
- EN55022 1998 Class A
- UL 60950
- EN 60950
- CSA 22.2 No. 60950

LEDS

- Link, Diagnostics, Activity

MODEL......................PART NUMBERS

Model	North America	International
Digi One EM	700001861	700001861
Digi One EM Integration Kit	700001874	700001896

Please contact us at **1-877-OEM-DIGI** for additional information or to discuss your application specific requirements.

Integration kit contains the Digi One EM module, development board, power supply, cables, sample code and documentation.

DIGI SERVICE AND SUPPORT

You can purchase with confidence knowing that Digi is here to support you with expert technical support and a strong five-year warranty.   http://support.digi.com

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