EP1000 A
E-Port Communications Gateway

- Micro-DCI Datalink to Ethernet Gateway supports DataLink on TCP/IP
- Supports all Micro-DCI controllers and auxiliary devices
- Supports redundant gateways
- Allows physical distribution DataLink nodes over multiple RS-485 networks for improved performance or true distributed control
- Stand-alone network or DCHP Servers
- Software setup in Micro-DCI Communication Services
- Ideal for upgrading Supervisor-PC with DataLink to Micro-PWC for Windows

EP1000A E-Port

Specification Sheet
S-DCI-EP1000

PRODUCT DESCRIPTION

The MicroMod Automation EP1000A E-Port provides an interface between a single Micro-DCI DataLink network and an Ethernet TCP/IP network. The E-Port is used exclusively with the Micro-DCI Communication Services software. The Communication Services software provides the network interface between the PC and the individual E-Ports. The software is included with the LoopMaster configuration software for MicroMite 53SL6000 controllers, with the MicroTools configuration software for 53MC5000 controllers and the Micro-PWC personal workstation software. It is also available as a standalone package for use with third-party OPC clients such as HMI software.

All Micro-DCI controllers and auxiliary units using DataLink are compatible with the E-Port, making it ideal for upgrading aging DOS-based Supervisor-PC systems to MicroMod's MicroPWC software running under Windows XP or 2000.

The E-Port can be connected to single instruments using their RS-232 front communication port and the corresponding cable, or to the standard RS-485 DataLink network on the rear of the controller. It is available in wall-mount, DIN rail mount or Snap Track mounting verisons.

When ordered with the RS-485 DataLink Network Interface, the EP1000 comes with an RS-485 Interface Terminal Board and cable, and an external power supply. (If the E-Port is being added to a system that is already using the RS-232/RS-485 interface board, it should be ordered with no Network Interface).

Configuration and setup of the EP1000 E-Port is done through the Micro-DCI Communication Services software. Each E-Port is assigned an IP address either manually or using a DHCP server. Each E-Port is then linked to its corresponding host PC using the menus in the Communication Services software. (NOTE: E-Port can ONLY be used on systems with Micro-DCI Communications Services).

FUNCTIONALITY

The EP1000 E-Port provide communication access and support for all generations of the Micro-DCI product line including the 53MC1000, 53MC2000, 53MC4000, 50KM1000, 50KM2000, 53SL6000, 53ML5100, 53IT5100, 53SL5100, 53MC5000A and the 53MC5000B via the Micro-DCI Communication Services software. Supported functions over the Ethernet network include database upload/download from the Micro-Tools configuration software, and operation, supervisory control and data collection from HMI packages such as MicroMod's MicroPWC workstation or popular third-party OPC client packages from Iconics, Intellution, WonderWare and others.

SYSTEM ARCHITECTURE

Using RS-485 DataLink, the E-Port supports several different Micro-DCI network architectures including redundant PCs and distributed networks.

Up to eight individual DataLink networks each with up to 32 Micro-DCI instruments are supported by the Micro-DCI Communications Services software. Each E-Port supports one RS-485 DataLink connection. A feature of the E-Port is to allow Micro-DCI controllers or groups of controllers to be physically distributed across multiple RS-485 networks while still being addressed as a single DataLink network; these distributed groups are referred to as "segments". For redundancy purposes, up to two E-Ports may reside on one DataLink network or network segment. This provides greater flexibility for optimizing system performance, creating redundant architectures, or locating control devices in distributed locations.

The diagrams on the following pages illustrate some common network architectures.

Specifications

Power Requirements

7-30 V dc
200 mA @ 12 V dc
100 mA @ 24 V dc

Physical Characteristics

Dimensions: 4.2 " x 3 " x 1"
Weight: 5 oz.

Environmental Characteristics

Temperature: 0 - 50°C (32 - 122°F)

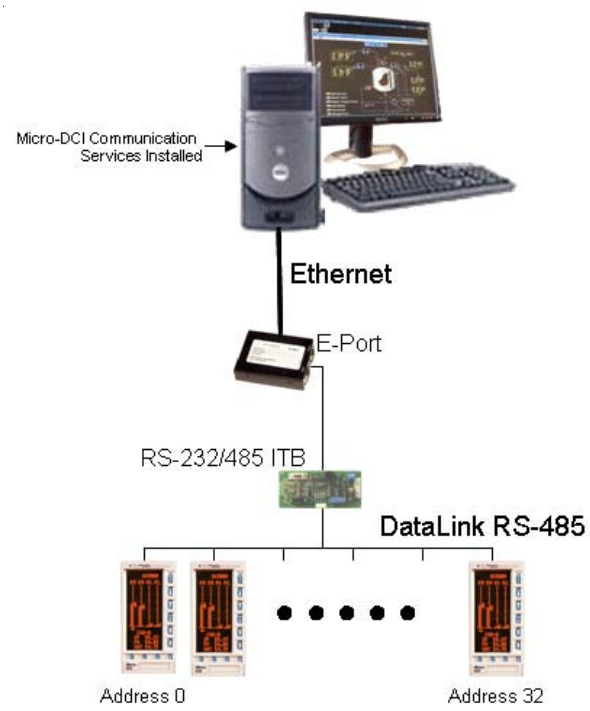

Figure 1 - EP1000 E-Port connected to a single-segment DataLink network

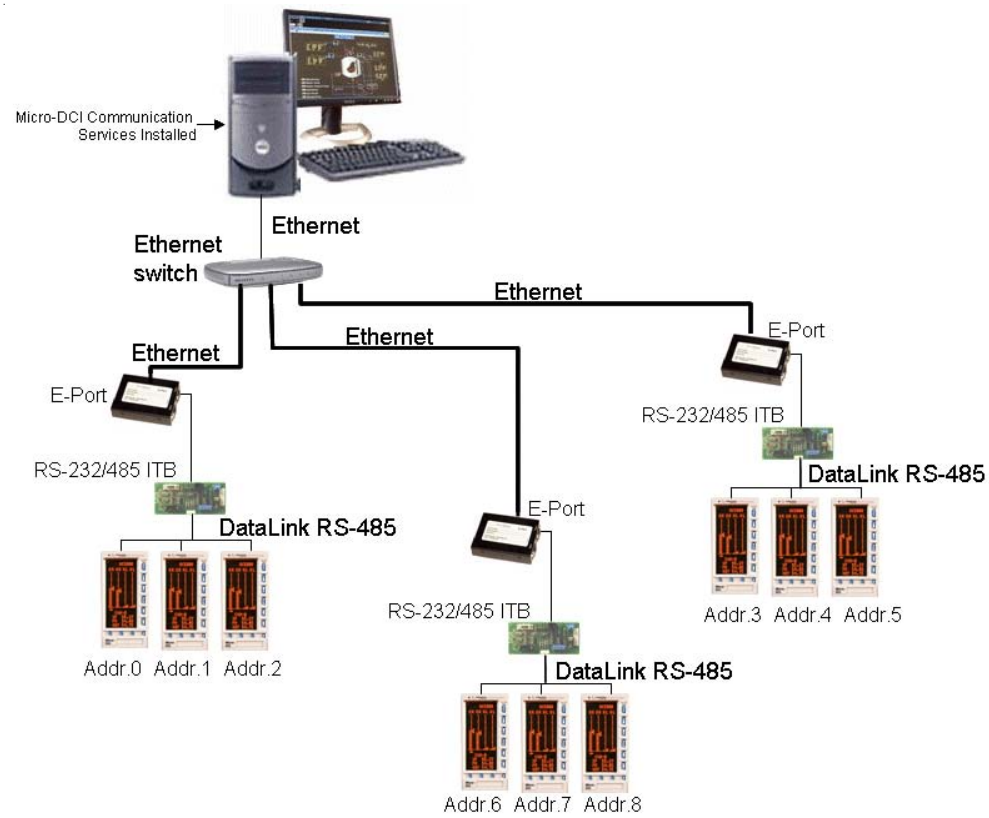

Figure 2 - Single DataLink network divided into multiple segments

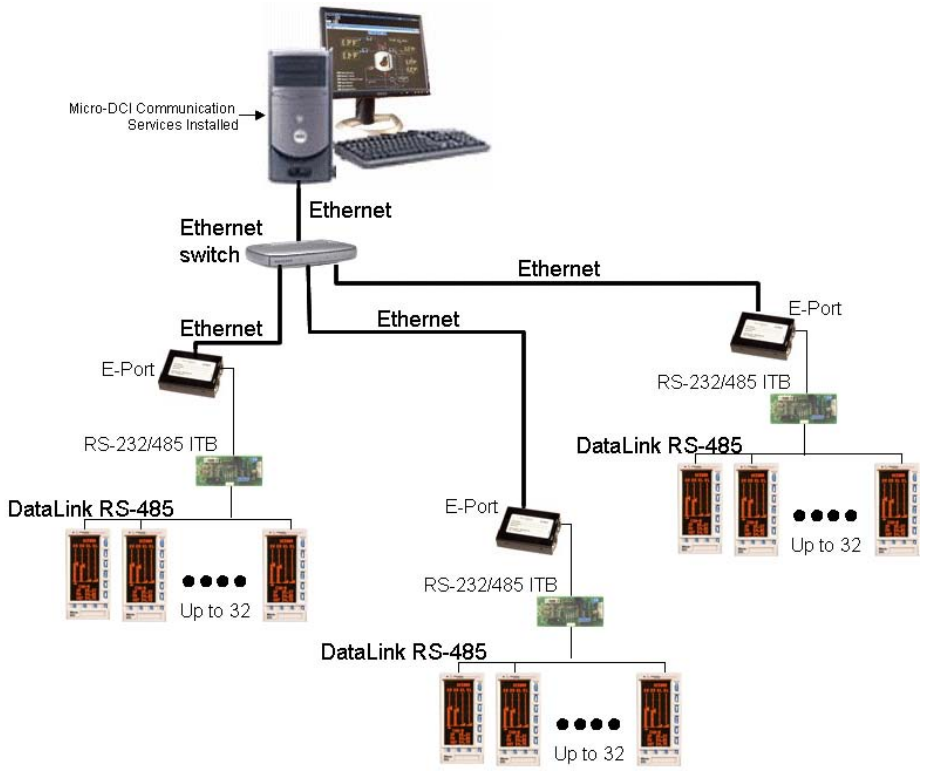

Figure 3 - Independent DataLink networks

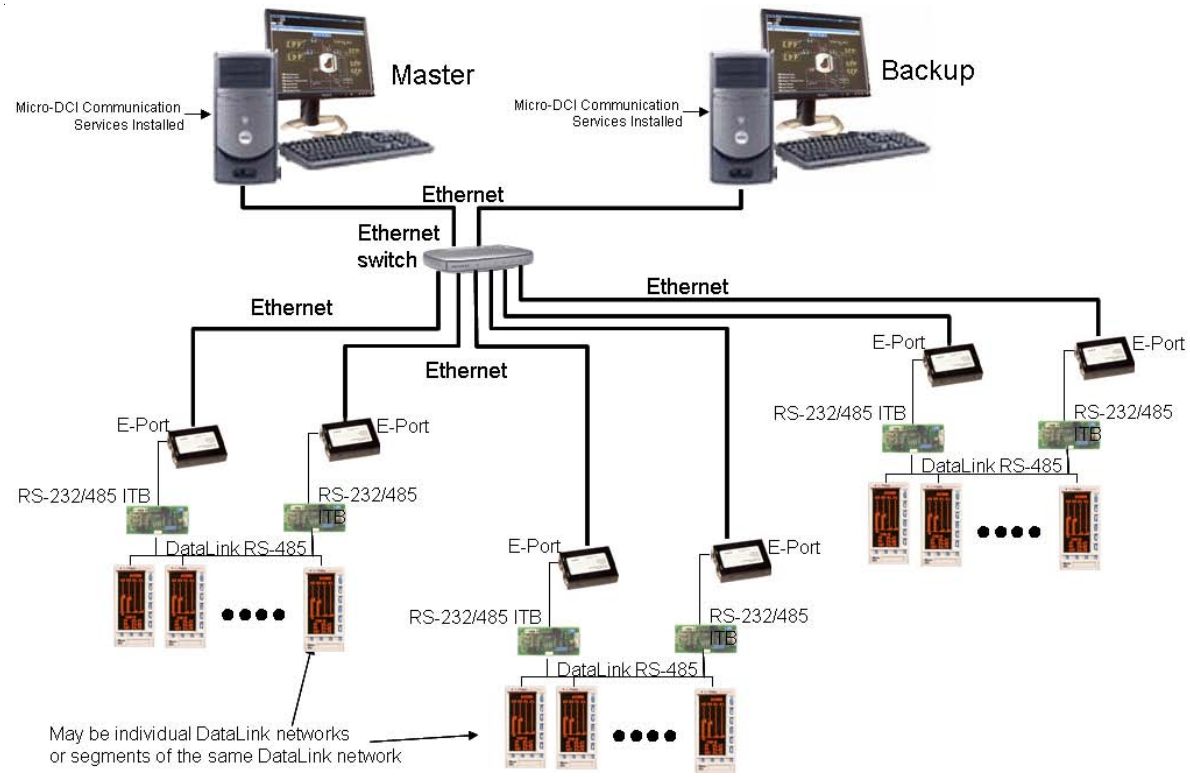

Figure 4 - Redundant E-Port and PC architecture

ORDERING INFORMATION

Model Code	EP1 00 - 02	___ 03	___ 04	___ 05	A 06
E-Port	EP1				
Power Input					
100-240 VAC		1			
Mounting Brackets					
None			0		
DIN Rail			1		
SNAP Track			2		
Network Interface (see notes)					
None				0	
53SL6000 RS-232 Cable				1	
53MC5000 RS-232 Cable				2	
RS-485 DataLink				3	
Design Level					A

Use of the Ethernet Communications Port (E-Port) requires the Micro-DCI Communications Services (53SU6000) software to be installed on the PC.

Network Interface Notes

1. Communications between Micro-DCI controllers (e.g. 53MC5000, 53IT5100, 53SL5100, 53ML5100 and 53SL6000) using DataLink Commmuications and the EP1000 E-Port may be done either through a point-to-point connection via RS-232 or though a Micro-DCI Multidrop DataLink Communication Network over RS-485. The 53MC5000 controller provides RS-485 DataLink as standard. The 53SL6000 Communication requires that an RS-232 or RS-485 communication module be installed on the controller. The communication modulemay be ordered with the controller or as a part from the Spare Parts Price List P-DCI-Spares.

2. The Ethernet cable is NOT supplied with this product. Any Category 5, 10/100 Ethernet cable may be used.

3. Option 0 (None) - this option is only selected if the existing system already incorporates an RS232/RS485 ITB.

4. Option 1 (53SL6000 RS-232) - This option includes a 7 ft. serial communications cable (only) to be supplied for use with 53SL6000 controllers that already have RS-232 communications modules installed.

5. Option 2 (53MC5000 RS-232) - This option includes a 7 ft. serial communications cable to be supplied for use with a 53MC5000 controller front configuration port.

6. Option 3 (DataLink RS-485) - This option includes a 12-inch RS-232 serial communications cable, one RS-232 to RS-485 Interface Terminal Board (converter) and Power Adapter Cable to be supplied for use with one or more Micro-DCI controllers that have RS-485 multi-drop communications capability.

MINIMUM SYSTEM REQUIREMENTS:

Hardware:

- A Personal computer (PC) capable of running Windows 2000 or Windows XP Professional
- 100 MB free hard disk space
- CD ROM drive (software provided on CD)
- IBM AT Comatible 101 key keyboard
- Cursor pointing device such as a mouse or trackball
- VGA 1024 x 768 display (256-color minimum)
- One or more serial communications ports
- One or more Parallel or USB ports
- 10/100 Ethernet communications port

Software:

- Microsoft Windows™ 2000 Professional Workstation or Windows™ XP Professional operating system
- Micro-DCI Communications Services software 53SU6000

www.micromodautomation.com

Printed in USA (June 2006)

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