



# 7793

## Micro Controller Interface

I/NET<sup>®</sup> Seven

The 7793 MicroController Interface

The 7793 MicroController Interface (MCI) serves a dual role. It can be a standalone network controller for a system of MicroControllers or it can function as a gateway between a network of MicroControllers and other controllers in a larger I/NET<sup>®</sup> distributed control system.

The MCI provides global functions for the MicroControllers. These global functions include: Access-initiated Control, Elevator Control, Event-initiated Control, Trending, Runtime Accumulation, Automatic Time Scheduling, Calculations, Anti-passback and periodic synchronization of the local clocks in the MicroControllers.

Recommended enclosure: ENCL1813  
(Refer to enclosures datasheet)

Recommended power supply: XFMR6  
(Refer to transformers data sheet)

Installation guide: TCON109



### TECHNICAL DATA

#### Communication Ports:

<b>Controller LAN</b>	
Baud Rate .....	9,600 or 19,200 baud
Protocol .....	Proprietary
Transport .....	RS 485 SDLC token passing
Connector .....	2-part screw terminal
<b>Sub-LAN Port (2 each)</b>	
Baud Rate .....	9,600
Protocol .....	Proprietary
Transport .....	RS 485 asynchronous, polling (open or closed loop)
Connector .....	2-part screw terminal
<b>Hand-held Console Port</b>	
Baud Rate .....	1,200 baud
Protocol .....	Proprietary
Transport .....	TTL
Connector .....	RJ-11
<b>Direct Serial Port</b>	
Baud Rate .....	1,200 to 9,600 baud
Protocol .....	Proprietary
Transport .....	RS 232 - 7801 tap or asynchronous modem
<b>Expansion Serial Port</b>	
Baud Rate .....	1,200 to 9,600 baud
Protocol .....	Proprietary

Transport .....	RS 232 synchronous or asynchronous modem, direct or 2-way dial SDLC (78061 or 78035 TAP)
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<b>Autodial</b>	
Stored Numbers .....	8
Digits per Number .....	31
Supports .....	Phone, beeper, pager

#### Network Wiring Requirements:

Length .....	5,000 feet per segment
Extended Length .....	25,000 feet with repeaters
Connector .....	2-part screw terminal
Cable Type .....	Belden 9184 or equivalent twisted pair shielded
Cable Size .....	<22AWG
Impedance .....	85 to 150 Ohm
Capacitance .....	>30pF/ft between conductors and >55pF/ft conductor to shield

#### Hardware Details:

Processor .....	Zilog Z181
EPROM .....	32KB
Static RAM .....	256KB
Non-volatile Memory .....	512Bytes
Battery support .....	Onboard Ni-cad, rechargeable, 300 hours

## TECHNICAL DATA

Firmware ..... Downloaded to battery-backed RAM  
 Clock/Calendar ..... Battery-backed

### Physical Details:

PCB Dimensions ..... 8.5"L x 8.5"W x 1.8"H  
 Baseplate ..... 10.0"L x 9.6"W  
 RS232 Expansion ..... 4.3"L x 3.4"W  
 Board  
 Weight ..... 2lbs  
 Operating ..... 32°F to 122°F  
 Temperature  
 Operating Humidity .... 10-90% RH, Non-condensing  
 Power ..... 24Vac, ±10%, 50/60Hz,  
 Requirements ..... 40VA (max)

### Controller Capacities:

#### General

Channels ..... 2 Sub-LANs per MCI  
 Number of Station ..... 2 per MCI, 1 per sub-LAN  
 Addresses  
 Controllers ..... 32  
 per Sub-LAN  
 Controllers ..... 64  
 per MCI  
 DPU Limit ..... 32 per MCI

#### Controller Types

Door Process ..... 32 per per MCI  
 Unit  
 Digital Input Unit ..... 64 per MCI  
 Digital Input/Output .... 64 per MCI  
 Unit  
 Micro Regulators ..... 64 per MCI  
 Units

### Options:

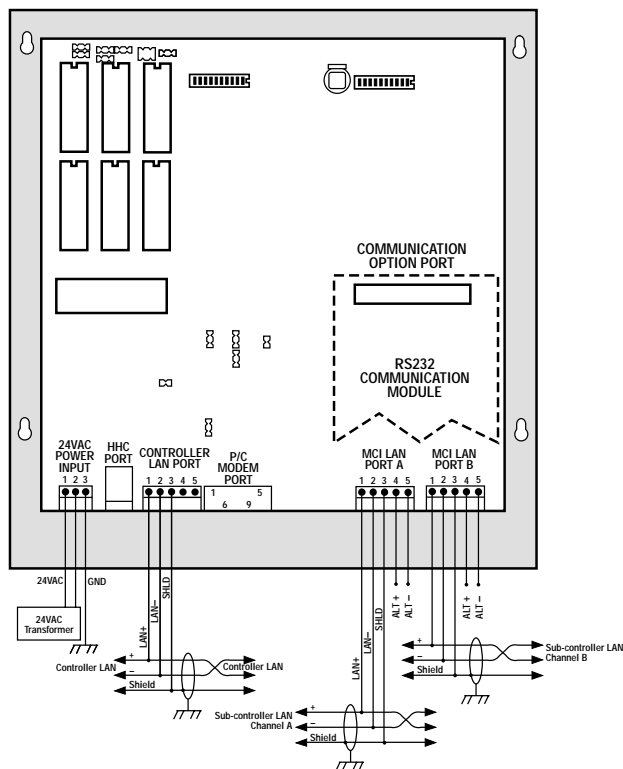
Communications .....  
 RS232EXP ..... Additional serial connection with synchronous and asynchronous communication capability

### LED Details:

LAN TX  
 LAN RX  
 RS232TX  
 RS232RX  
 Sub-LAN A TX  
 Sub-LAN A RX  
 Sub-LAN B TX  
 Sub-LAN B RX  
 Hand-held TX  
 Hand-held RX  
 LAN Reconfig  
 Alarm  
 Low Power

### Listings:

UL294 ..... Access control system units  
 UL916 ..... Energy management equipment  
 UL864 UUKL ..... Smoke control and smoke management  
 CE Marking ..... Available  
 EN61000-4-2 ..... Electro static discharge  
 EN61000-4-3 ..... Radiated RF  
 EN61000-4-4 ..... EFT  
 EN61000-4-5 ..... Surge Tested  
 EN61000-4-6 ..... Conducted RF  
 EN61000-4-8 ..... Magnetic field  
 EN61000-4-11 ..... Power quality



# TECHNICAL DATA

## Part numbers:

Standard

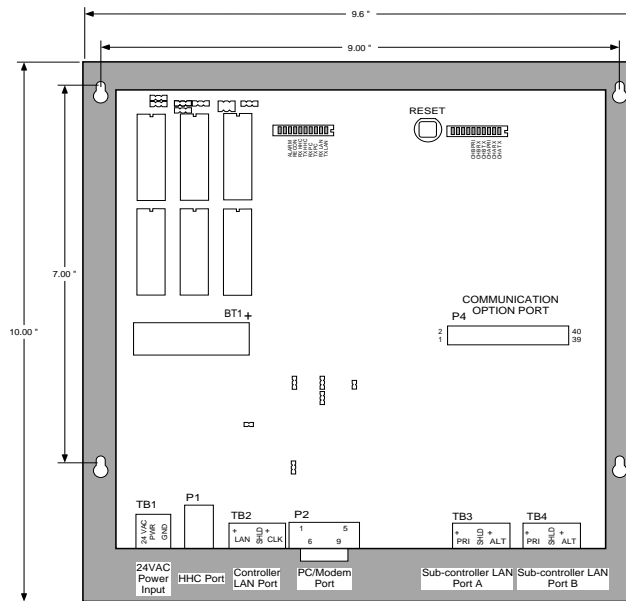
7793A ..... Micro Control Unit (MCI)  
 RS232EXP ..... Expansion card, additional  
 synchronous/asynchronous  
 communication capability

UL864 UUKL Listed

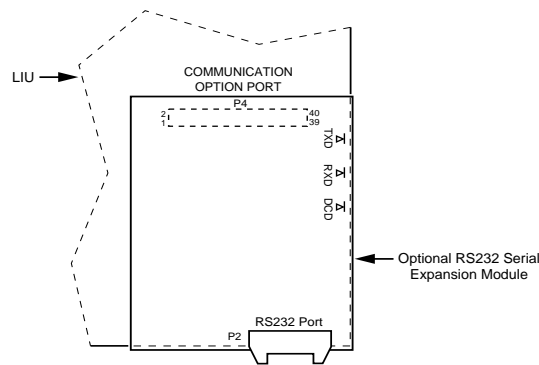
7793A-U8 ..... Micro Control Unit (MCI)  
 24Vac, UL864 UUKL -marked  
 RS232EXP-U8 ..... Expansion card, additional  
 synchronous communication  
 capability

CE Marked

7793A-C ..... Micro Control Unit (MCI)  
 RS232EXP-C ..... Expansion card, additional  
 synchronous/asynchronous  
 communication capability



**LIU Controller Board**



**PRS232 Serial Expansion Module**

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