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## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# EtherNet/IP-DeviceNet Router

# NE1A-EDR01

CSM\_NE1A-EDR01\_DS\_E\_4\_2

## Allows a safety system to be monitored from Ethernet.

- The safety system can be remotely operated with a personal computer.
- The safety system can also be monitored by an Ethernet-compatible PLC of another brand.
- UDP packet messages supported.



## Ordering Information

Name	Model	Unit version
Ethernet/IP-DeviceNet Router	NE1A-EDR01	1.0

**Note:** The standard NE1A-EDR01 is equipped with spring-cage terminal blocks, but screw terminal blocks are available if desired, e.g., to replace previous terminals.

## Specifications

### Certified Standards

Certification body	Standard
UL	UL508, ANSI/ISA 12.12.01 CSA22.2 No.142, CSA22.2 No.213

### Specifications

<b>DeviceNet communications power supply voltage</b>		11 to 25 VDC (supplied via DeviceNet communications connector)
<b>Internal circuit power supply voltage</b>		20.4 to 26.4 VDC (24 VDC -15%/+10%)
<b>Current consumption</b>	<b>DeviceNet communications power supply</b>	24 VDC, 15 mA
	<b>Internal circuit power supply</b>	24 VDC, 230 mA
<b>Overvoltage category</b>		II
<b>Noise immunity</b>		Conforms to IEC 61131-2.
<b>Vibration resistance</b>		10 to 57 Hz: 0.35 mm, 57 to 150 Hz: 50 m/s <sup>2</sup>
<b>Shock resistance</b>		150 m/s <sup>2</sup> : 11 ms
<b>Mounting method</b>		35-mm DIN Track (IEC 60715 TH35-7.5/TH35-15)
<b>Ambient operating temperature</b>		-10 to 55°C
<b>Ambient operating humidity</b>		10 to 95% (with no condensation)
<b>Ambient storage temperature</b>		-40 to 70°C
<b>Degree of protection</b>		IP20
<b>Weight</b>		220 g max.

## DeviceNet Communications Specifications

Communications protocol	DeviceNet compliant			
Connection form	Multi-drop system and T-branch system can be combined (for trunk line and branch lines)			
Communications speed	500/250/125 kbps			
Communications media	Special cable, 5 conductors (2 for communications, 2 for power supply, 1 for shielding)			
Communications distance	<b>Communi-cations speed</b>	<b>Max. network length</b>	<b>Branch length</b>	<b>Total branch length</b>
	500 kbps	100 m max. (100 m max.)	6 m max.	39 m max.
	250 kbps	250 m max. (100 m max.)	6 m max.	78 m max.
	125 kbps	500 m max. (100 m max.)	6 m max.	156 m max.
	<b>Note:</b> Figures in parentheses ( ) indicate values when a thin cable is used.			
Communications power supply	11 to 25 VDC			
No. of connectable nodes	64 (including Master)			

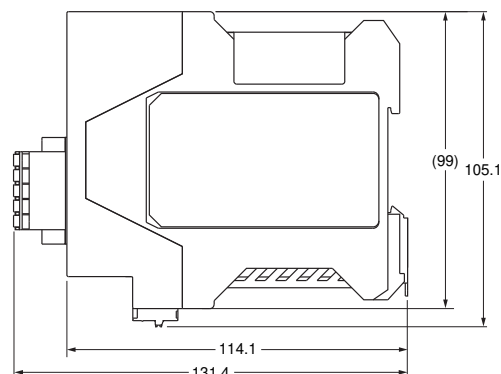
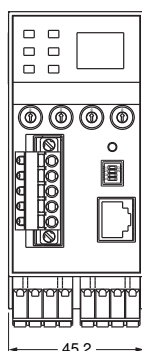
## Ethernet/IP Communications Specifications

Media access method	CSMA/CD
Modulation method	Baseband
Transmission path type	Star
Transmission speed	10 Mbps (10BASE-T) 100 Mbps (100BASE-TX)
Transmission media	Shielded twisted pair cable (STP) : Category 5, 5e
Transmission distance	100 m (distance between hub and node)
No. of cascade-connectable Units	No limit when a switching hub is used.

## Dimensions

(Unit: mm)

NE1A-EDR01



## Safety Precautions

Refer to the "Safety Precautions for All DeviceNet Safety Systems" for precautions.

Be sure to read the following user's manual for precautions and other details required for correct use of the Safety Network Controller.

Ethernet/IP-DeviceNet Router User's Manual (Cat. No. Z912)



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