

Long-distance transmission TOLINE-V,VJ for remote monitoring and control

TOLINE-V,VJ

Ethernet Interface (V-ENIF)

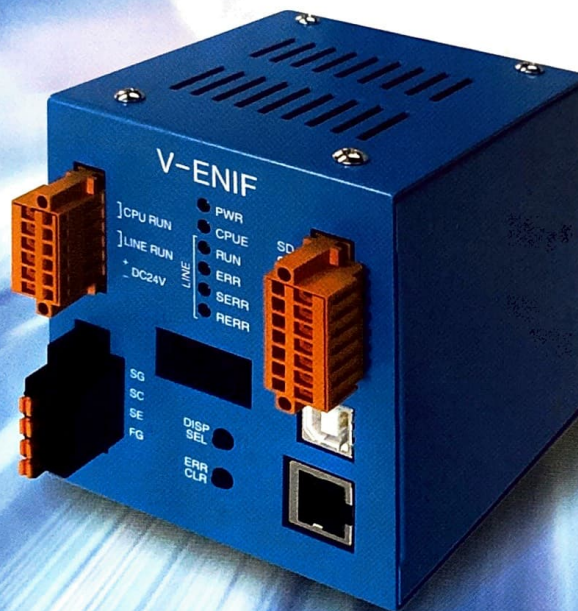
Features

Allows long-distance transmission (9 km using a twisted pair cable)

Simple signal line installation (easy to enhance the system). No hub (dedicated distributor is unnecessary)

Analog signals (up to 256 points) and digital signals (up to 4,096 points) can be transmitted simultaneously

Released Ethernet interface for sequencer connection (no dedicated software required)



Product Overview

- **Reduced size from the conventional interface (V-CIT) of TOLINE-V Series**

V-CIT size: 420 mm (W) x 50 mm (H) x 200 mm (D)

→ New model size: 85 mm (W) x 98 mm (H) x 102 mm (D)

- **Power supply is separated from the unit**

Conventional model: AC100V needs to be supplied.

→ New model: DC24V is supplied from a separate power supply unit.

- **Uses Euro-type detachable terminal blocks* 1**

This will substantially reduce the workload even in the unlikely event of replacing the unit.

- **Capable of handling both Ethernet and RS-422 communication**

Supports the sequencer communication protocol.

- **Built-in master control function**

Capable of communication without installing an external master control unit.

- **Various settings can be made on a PC**

Connection with the USB connectors on the main unit allows changes to various settings, downloads, and uploads.

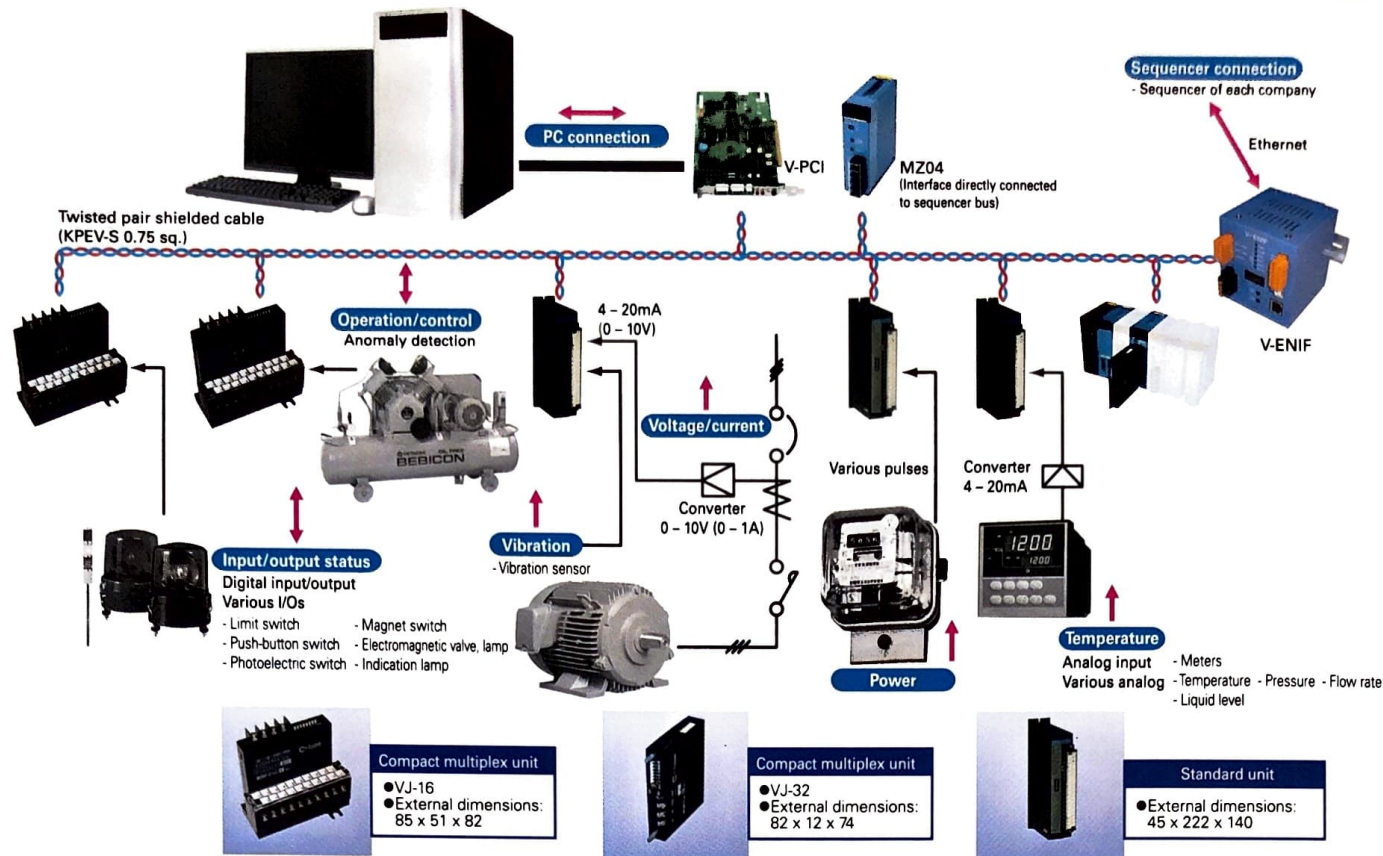
- **Can be mounted to DIN rails**

The main unit can be fixed by mounting it on a DIN rail, which can be detached in a single step.

*1 Terminal blocks that can be attached and detached (with the function to prevent falling)



Example of Network Composition



V-ENIF Specifications

Power supply	DC24V 0.3A
Dimensions (mm)	85 (W) x 98 (H) x 93 (D) DIN rail can be mounted.
Ethernet communication protocol	Mitsubishi Sequencer Q Series MC Protocol 3E Frame
USB I/F	Support tool (PC software) for connection * Downloaded from our website
	Unit settings: Information is saved in files.
	Monitors multiplex data and error detection status.
	Allows multiplex online simulation (can be used for system debugging)
Master function	Available (On/off switch of the function can be set using the support tool)

TOLINE-V,VJ Specifications

Transmission line	Twisted pair shielded cable *1
Signal points	4,096 digital points (256 sets of 16-point units)
	256 analog points (12-bit resolution)
Transmission distance	2.048 ms/16 points (C-type)
	16,384 ms/16 points (L-type)
Transmission speed	4 km (C-type) *1 When using specified electric wires
	9 km (L-type)

*1 Hitachi Cable: KPEV (-S) 0.75 Sq. or higher (C-type requires a shield) or the equivalent

TOLINE-V,VJ Unit Types

Model	Unit Specifications		
V-M	Master control (with 2 V-R terminators)		
V-16SN	16-point no-voltage contact input		
V-16RR	16-point contact output 1A		
V-32SE	32-point DC24V 10 mA input (connector connection)		
V32RT	32-point Tr open collector output 0.1A (connector connection)		
V-4S	J	4-channel analog input	4 - 20 mA
	K		0 - 10 V
	L		1 - 5 V
V-4R	J	4-channel analog output	4 - 20 mA
	K		0 - 10 V
	L		1 - 5 V
VJ-16SCY	Compact multiplex 16-point DC24V input		
VJ-16RCY	Compact multiplex 16-point Tr open collector output 0.1A		
VJ-32SC*2	Compact multiplex 32-point input (for sequencer 32-point connector output card)		
VJ-32RC*2	Compact multiplex 32-point (for sequencer 32-point connector input card)		
V-PCI	Able to switch master functions for PC PCI bus interface		
MZ-04	Yokogawa FA-M3 bus directly connected interface		

*2 Specify the sequencer manufacture when placing the order.
Mitsubishi (-M), Omron Hitachi (-O), Yokogawa (-Y), Sharp (-S)

• The information in this catalog is subject to change without notice.

Toho Technology Corporation

Head Office: 3-10-22 Sakae, Naka-ku, Nagoya-city, Aichi 460-0008 Japan

Inazawa Factory: 5-1 Orizushimomachi-higashi, (Operational Headquarters) Inazawa-city, Aichi 492-8501 Japan

Phone: +81 587 24 1214 Fax: +81 587 24 1221

<http://www.toho-tec.co.jp>

• For orders, contact