Panasonic

NEW

Flexible Wire-saving System **S-LINK V**

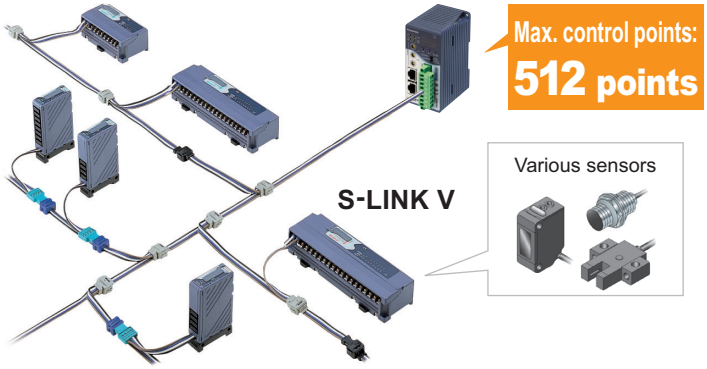
EtherCAT Gateway Controller

SL-VGU1-EC

CE Conforming to EMC Directive

The next-generation Wire-saving System S-LINK V pioneers new technological potential.

Because of the high degree of evolution of recent automation-unmanned technology, the number of sensors and actuators at work in the FA worksite is increasing evermore.
ON / OFF switching devices such as photoelectric sensors, inductive proximity sensors, electromagnetic valves, and the like, though simplistic in character, represent a huge burden on the workplace in the form of electricity layout design and wiring when used in large quantities.
The **S-LINK V** lets you wire together an increasingly large number of ON / OFF switching devices easily, quickly, and with a small footprint.



Ideal wire-saving system that meets the strict demands of the FA worksite

FREE

Design a layout with complete control and freedom

With no limit to the number of branches, layout design can be done simply without any wiring constraints thanks to the multiplication of control points (maximum of 512 points and 256 nodes, the largest in its class).

CONFIDENCE

Truly dependable features

All models are CE marking (EMC Directive) compliant.

Simple and dependable communication protocols enable fast communication speed. We've also realized an extended communication range of 800 m 2,624 ft maximum (when in C mode).

FLEXIBLE

Super adaptability to the worksite

Because there are 3 different communication modes to choose from, you never have to change models even if the worksite or the equipment changes.

NEW

EtherCAT
Gateway Controller
SL-VGU1-EC

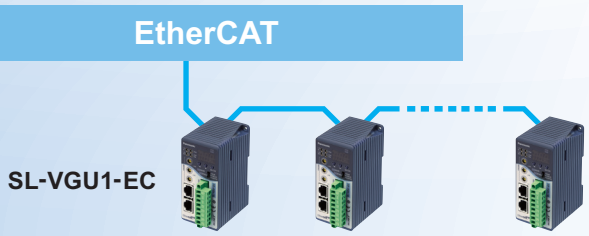
CE RoHS-compliant

New EtherCAT support

SL-VGU1-EC

The new **SL-VGU1-EC** Gateway Controller supports EtherCAT, a high-speed communications system that is rapidly gaining popularity.

Bit information of various sensors and switches is sent directly to the EtherCAT.



When set from master	**1** stations **512** points	**2** stations **512** points	···· Max. **65,535** stations **512** points
When set with hardware switches	**1** stations **512** points	**1** stations **512** points	···· Max. **4,095** stations **512** points

A bit level network is now possible without the need to specifying upper-level networks

The flexible wire-saving system **S-LINK V** can be connected to various foreign or domestic PLC. Also available are a computer control board and a bus direct connection controller and controllers supporting open network and serial communications. Any upper-level network connection is possible without specifying it.

For open network

NEW

EtherCAT

CC-Link

DeviceNet

S-LINK V gateway controller for open network
for EtherCAT **SL-VGU1-EC**
for CC-Link **SL-VGU1-C**
for DeviceNet **SL-VGU1-D**

For RS-485 / RS-232C

S-LINK V gateway controller
for RS-485 / RS-232C
SL-VGU1-485

For PLC I/O connectors

S-LINK V controller **SL-VCU1**
PLC I/O connectors **SL-VS□**, **SL-VP□**

PLC bus direct connection type

For **FP2 / FP2SH** series
PLC bus direct connection
controller **SL-VFP2**

Mitsubishi Electric Corp. MELSEC-Q
series PLC bus direct connection
controller **SL-VMEL-Q**

Windows® 7-compliant

PCI bus
S-LINK V control board **SL-VPCI**

VME bus
S-LINK V control board **SL-VVMES2**

SPECIFICATIONS

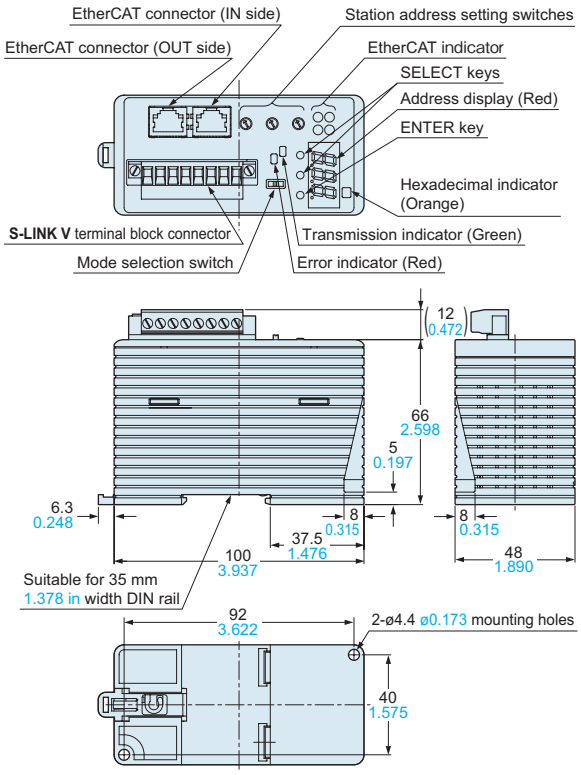
Item \ Model No.		SL-VGU1-EC
Supply voltage		24 V DC$^{+10}_{-5}$ %
Current consumption		300 mA or less (excluding error output load and power supply for driving I/O units) (Note 1)
Allowable through current		7A (Note 2)
S-LINK V side	Transmission speed	A mode: 110 kbps, B mode: 27.5 kbps, C mode: 6.9 kbps
	Refresh time	A mode: 0.29 to 10.32 ms, B mode: 1.18 to 41.29 ms, C mode: 4.70 to 165.15 ms
	I/O points	Max. 512 points
	Connected node No.	Max. 256 nodes
	Transmission distance	A mode: 50 m 164 ft max., B mode: 200 m 656 ft max., C mode: 800 m 2,625 ft max.
	Total wiring length	A mode: 100 m 328 ft or less, B mode: 400 m 1,312 ft or less, C mode: 1,600 m 5,249 ft or less
	Transmission cable	Exclusive 4-core flat cable (0.5 mm^2) or conductor cross-section area 0.3 to 2.0 mm^2 4-core VCTF cable (without shield) (Note 3)
	I/O combination	I/O settable in increments of 32 points
	Error output	NPN open-collector transistor
RS-485 / RS-232C communication side	Protocol	CoE PDO communication, SDO communication
	Compliance	IEEE802.3u (100BASE-TX)
	Transmission speed	100 Mbps (100BASE-TX)
	Transmission connector	RJ-45 × 2
	Distance between nodes	100 m 328 ft or less
	Max. number of station connections	4,095 stations (65,535 stations when set from master side)
	Transmission cable	Category 5e or more
Ambient temperature		0 to +55 °C +32 to +131 °F (No dew condensation), Storage: -20 to +70 °C -4 to +158 °F
Ambient humidity		10 to 90 % RH, Storage: 10 to 90 % RH
Material		Enclosure: ABS
Weight		140 g approx.

Notes: 1) The current consumption value shown here is the total of the maximum current (D-G line only) supplied to the **S-LINK V** I/O units and the current consumption of the **S-LINK V** gateway controller.
2) This product is not equipped with any short-circuit protective function. For this reason, select a power supply unit having short-circuit protective function (fuse, etc.).
3) The VCTF cable is the vinyl cabtyre cable that conforms to the requirements of JIS C 3306 "Polyvinyl chloride insulated flexible cords."
4) In case connecting to commercially offered product, be sure to check with this product. Station No., transmission distance, transmission speed depend on the connected product.

DIMENSIONS (Unit: mm in)

The CAD data in the dimensions can be downloaded from our website.

SL-VGU1-EC EtherCAT Gateway controller



Panasonic Industrial Devices SUNX Co., Ltd.
Global Sales Department
2431-1 Ushiyama-cho, Kasugai-shi, Aichi, 486-0901, Japan
■Telephone: +81-568-33-7861 ■Facsimile: +81-568-33-8591

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