CS1W-DRM21-V1

DeviceNet Unit

Multivendor Field Network

- Control of up to 32,000 points (2,000 words) per master.
- Remote I/O communications can be allocated in any area using DM settings.
- 16 DeviceNet Units can be mounted for each CPU Unit (3 max. for fixed allocations).
- When using the Configurator (see note), remote I/O can be allocated in an order independent of node address.

Note: The Configurator is allocating a node-address if connected to DeviceNet using a DeviceNet communication card. It is not doing this if connected through the serial communications interface of the CPU.

- DeviceNet Units can be used as a master and a slave, and this functionality can be used simultaneously.

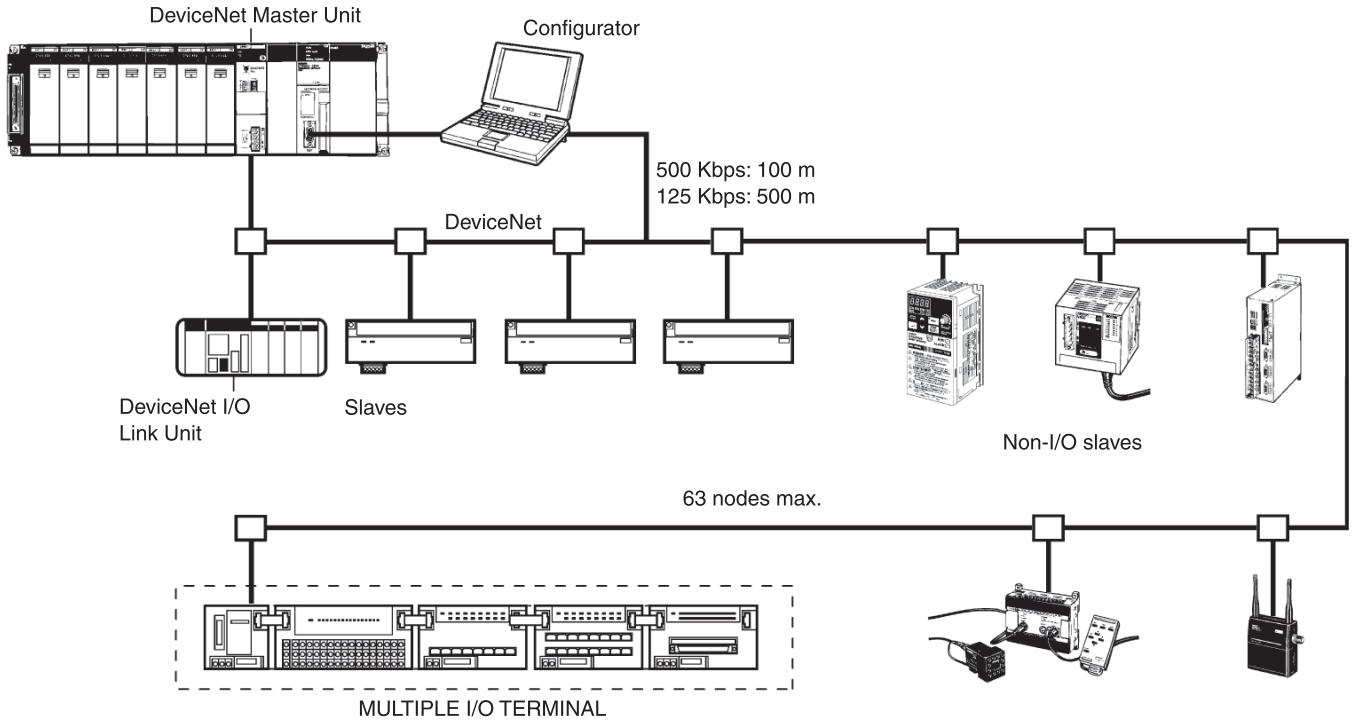
Note: DeviceNet Units allow DeviceNet networks to be treated exactly like Controller Link, Ethernet, or other networks for message communications or remote programming and monitoring by a CX-Programmer.

Function

OMRON supports the DeviceNet open field network, a multivendor network for machine/line control and information. The following types of communications are possible.

1. Remote I/O communications for automatic data transfers between the CPU Unit and Slaves (with no programming in the CPU Unit).
2. Explicit message communications. This can be programmed from the CPU unit (IOWR and CMND instructions) and read from/write to other DeviceNet units.
3. With explict message communication FINS commands can be send to other devices that support FINS messaging.

System Configuration



Ordering Information

Compatible PLCs		Maximum number of I/O points			Model
		Fixed allocations	User-set allocations		
			Using allocated DM Area words	Using Configurator	
CS1 Series	When used as a master	Input: 1,024 points Output: 1,024 points Total: 2,048 points (128 words)	Input: 8,000 points Output: 8,000 points Total: 16,000 points (1,000 words)	Input: 8,000 points x 2 blocks Output: 8,000 points x 2 blocks Total: 32,000 points (2,000 words)	CS1W-DRM21
	When used as a slave	Input: 16 points Output: 16 points Total: 32 points (2 words)	Input: 1,600 points Output: 1,600 points Total: 3,200 points (200 words)	Input: 1,600 points x 1 block Output: 1,600 points x 2 blocks Total: 4,800 points (300 words)	

Specifications

Master/Slave Specifications

Communications power supply voltage				11 to 25 V DC (supplied from the communications connector) (See note 1.)
Current consumption				Communications:30 mA max. Internal circuit:290 mA max.
Max. number of connectable slaves	Remote I/O, explicit message service			63 (See note 2.)
Max. number of I/O points	Fixed allocations		When used as a master	2,048 points
			When used as a slave	32 points
	User-set allocations	Using allocated DM Area words	When used as a master	16,000 points
			When used as a slave	3,200 points
		Using Configurator	When used as a master	32,000 points
			When used as a slave	4,800 points
Number of allocated words	Fixed allocations		When used as a master	64 input and 64 output words Software switch/status area: 25 words
			When used as a slave	1 input word, 1 output word (See note 3.)
	User-set allocations	Using allocated DM Area words	When used as a master	500 input and 500 output words Software switch/status area: 25 words
			When used as a slave	100 input and 100 output words (See note 3.) Software switch/status area: 25 words
		Using Configurator	When used as a master	500 input words x 2 blocks, 500 output words x 2 blocks Software switch/Status area: 25 words
			When used as a slave	100 input words x 1 blocks, 100 output words x 2 blocks Software switch/Status area: 25 words
Max. message length				542 bytes (See note 4.)
Max. number of Units mountable to PLC	Fixed allocations			3
	User-set allocations			16
Weight				172 g max.

Note: 1. Refer to the *DeviceNet (CompoBus/D) Operation Manual (W267)* for the communications power supply specifications.

2. The DeviceNet unit uses a node of the 64 supported by DeviceNet, leaves connection is possible to 63 slaves.

3. When the DeviceNet is used a slave, “input” and “output” respectively refer to input from the master to the slave and output from the slave to the master.

4. The maximum message length includes the command code when using the CMND instruction.

5. The CS1W–DRM21 cannot perform message communications with the E5ZE-8□D1□B. Use the E5ZE-8□D1□B-V2, which is a later version. For details on the E5ZE-8□D1□B-V2, refer to the catalog for the product itself (SGTD-017).

DeviceNet Unit

Classification	Types of communications	Specifications	Unit numbers	Model
CS1 CPU Bus Unit	Remote I/O communications master (fixed or user-set allocations) Remote I/O communications slave (fixed or user-set allocations) Message communications	Up to 16 Units can be mounted when a Configurator is used.	0 to F (Configurator required to mount 16 Units.)	CS1W-DRM21
C200H Special I/O Unit	Remote I/O communications master			C200HW-DRM21-V1
	Remote I/O communications slave			C200HW-DRT21

DeviceNet Configurator

Model number	Specifications
WS02-CFDC1-E	Software only (Windows 95, 98, NT 4.0, 2000, or XP)
3G8E2-DRM21-E-V1	PC card with software (Windows 95 or 98)