

DeviceNet Master Unit

C200HW-DRM21-V1

Master Unit for CS1, C200HX, C200HG, C200HE, and C200HS

- The control of a maximum of 4,800 points (300 words) per Master is possible over remote I/O with the CS1, C200HX, C200HG, or C200HE.
- The Configurator is available for easy remote I/O allocation.
- The Configurator makes it possible for a single Programmable Controller to connect to up to 16 Master Units.
- Incorporating a remote I/O and message communications functions.



Ordering Information

Compatible PLCs	Max. number of I/O points			Model
	Configurator not in use	Configurator in use		
		No message communications	Message communications	
CS1H/G C200HX/HG/HE	1,600 points (800 inputs/ 800 outputs) (100 words)	Two-block inputs and two-block outputs (with a maximum of 1,600 points or 100 words per block) and a total of 4,800 points or 300 words.	Two-block inputs and two-block outputs (with a maximum of 1,600 points or 100 words per block) and a total of 1,600 points or 100 words.	C200HW-DRM21-V1
C200HS	1,024 points (512 inputs/ 512 outputs) (64 words)	Two-block inputs and two-block outputs (with a maximum of 1,280 points or 80 words per block) and a total of 1,280 points or 80 words.	--	

* The DeviceNet Configurator is required for the Master Unit to be in configuration control.

Unit Specifications

Communications power supply voltage		11 to 25 VDC *1
Current consumption		Communications: 45 mA max. Internal circuit: 250 mA max. at 5 VDC
Max. number of connectable Slaves	Remote I/O (explicit message service)	CS1H/CS1G/C200HX/C200HG/C200HE: 50 C200HS: 32
	Configurator not in use	63 *2
	Configurator in use	63 *2
	FINS message service	8 *3
Number of I/O points	Configurator not in use	CS1H/CS1G/C200HX/C200HG/C200HE: 1,600 points (800 input and 800 output points) C200HS: 1,024 points (512 input and 512 output points)
	Configurator in use	CS1H/CS1G/C200HX/C200HG/C200HE: 4,800 remote I/O points only, and 1,600 points with messages used C200HS: 1,280 points
Number of allocated words	Configurator not in use (fixed allocation)	CS1H/CS1G/C200HX/C200HG/C200HE: 50 input and 50 output words and 10 words for software switch/status area C200HS: 32 input and 32 output words with 10 words for software switch/status area
	Configurator in use (free allocation)	Input x 2 blocks, output x 2 blocks (with a maximum of 100 words per block) *4 Software switch/Status area: 10 words
	Max. message length (for FINS or explicit message)	160 bytes
Max. number of Units mountable to PLC	Configurator not in use	1
	Configurator in use	10 (any C200HS CPU Unit or CS1, or C200HX, C200HG, or C200HE CPU Unit with a maximum of 880 I/O Points) 16 (any SYSMAC CS1 or C200HX, C200HG, or C200HE CPU Unit with 880 I/O points or more)
Weight		250 g max.

- *1. Refer to the *DeviceNet Operation Manual (W267)* for the communications power supply specifications.
- *2. The Master Unit uses one node. Therefore 63 Slave Units can be connected.
- *3. C200HS Series are not connected.
- *4. A maximum of 80 words per block can be used if the Master Unit is mounted to the C200HS Series.

Limitations on Master Unit Installation

With CS1H/G PLCs, make sure that the output area allocated to slaves and the area used for actual I/O (e.g., for Basic I/O Units) do not overlap.

The Master Units for the CS1H/G, C200HX, C200HG, C200HE, and C200HS overlap with the SYSMAC BUS Master Unit in allocated area. Therefore, it will not be possible to mount the DeviceNet Master Unit and SYSMAC BUS Master Unit together to the same PLC unless the Configurator is used.

The Configurator cannot, however, be used with the C200H Series.

General Specifications

The specifications of the Unit are the same as those of the CS1H/G, C200HX, C200HG, C200HE, and C200HS. For specifications of CS1-series and C200HX/HG/HE PCs, refer to the respective catalogs (CS1 Series: P047; C200HX/HG/HE: P036).

Dimensions

35 x 130 x 101 mm (W x H x D)

Read and Understand This Catalog

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

Warranty and Limitations of Liability

WARRANTY

OMRON's exclusive warranty is that the products are free from defects in materials and workmanship for a period of one year (or other period if specified) from date of sale by OMRON.

OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, REGARDING NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR PARTICULAR PURPOSE OF THE PRODUCTS. ANY BUYER OR USER ACKNOWLEDGES THAT THE BUYER OR USER ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. OMRON DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED.

LIMITATIONS OF LIABILITY

OMRON SHALL NOT BE RESPONSIBLE FOR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY.

In no event shall the responsibility of OMRON for any act exceed the individual price of the product on which liability is asserted.

IN NO EVENT SHALL OMRON BE RESPONSIBLE FOR WARRANTY, REPAIR, OR OTHER CLAIMS REGARDING THE PRODUCTS UNLESS OMRON'S ANALYSIS CONFIRMS THAT THE PRODUCTS WERE PROPERLY HANDLED, STORED, INSTALLED, AND MAINTAINED AND NOT SUBJECT TO CONTAMINATION, ABUSE, MISUSE, OR INAPPROPRIATE MODIFICATION OR REPAIR.

Application Considerations

SUITABILITY FOR USE

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of products in the customer's application or use of the products.

At the customer's request, OMRON will provide applicable third party certification documents identifying ratings and limitations of use that apply to the products. This information by itself is not sufficient for a complete determination of the suitability of the products in combination with the end product, machine, system, or other application or use.

The following are some examples of applications for which particular attention must be given. This is not intended to be an exhaustive list of all possible uses of the products, nor is it intended to imply that the uses listed may be suitable for the products:

- Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this catalog.
- Nuclear energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations.
- Systems, machines, and equipment that could present a risk to life or property.

Please know and observe all prohibitions of use applicable to the products.

NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCTS ARE PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

PROGRAMMABLE PRODUCTS

OMRON shall not be responsible for the user's programming of a programmable product, or any consequence thereof.

Disclaimers

CHANGE IN SPECIFICATIONS

Product specifications and accessories may be changed at any time based on improvements and other reasons.

It is our practice to change model numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the products may be changed without any notice. When in doubt, special model numbers may be assigned to fix or establish key specifications for your application on your request. Please consult with your OMRON representative at any time to confirm actual specifications of purchased products.

DIMENSIONS AND WEIGHTS

Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

PERFORMANCE DATA

Performance data given in this catalog is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of OMRON's test conditions, and the users must correlate it to actual application requirements. Actual performance is subject to the OMRON Warranty and Limitations of Liability.

ERRORS AND OMISSIONS

The information in this document has been carefully checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical, or proofreading errors, or omissions.

2009.8

In the interest of product improvement, specifications are subject to change without notice.

OMRON Corporation
Industrial Automation Company

<http://www.ia.omron.com/>

(c)Copyright OMRON Corporation 2009 All Right Reserved.