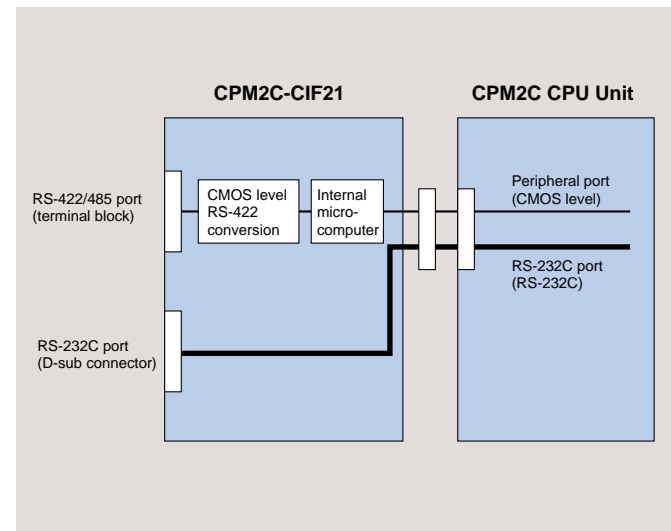


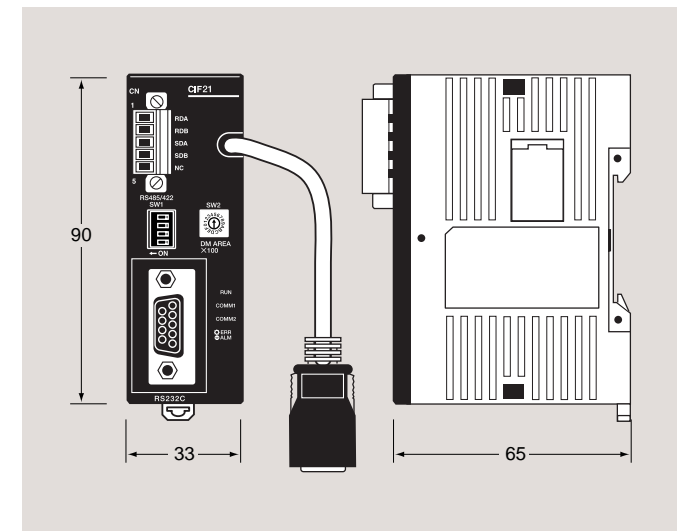
## CPM2C-CIF21 Specifications

Item		Specification
Applicable PLC		CPM2C
RS-485/422 (upper port)	Number of components connectable	32
	Component connection port	Connect to components via RS-485/422 (terminal block). Connects to CPM2C via peripheral port. (Refer to Outline of Internal Configuration below.)
	Baud rate for connection to components	9.6 kbps/19.2 kbps/38.4 kbps/57.6 kbps
	Baud rate for connection to CPU Unit	9.6 kbps/19.2 kbps
RS-232C (lower port)	Signal conversion	Output unconverted to the CPU Unit's RS-232C interface
	Communications functions	Host Link, no-protocol, 1:1 Link, or NT Link (1:1)
Power supply		Provided from the CPU Unit
Current consumption		1 W
Weight		150 g max.

### Outline of Internal Configuration



### Dimensions (mm)



### Available Models

Unit name	Model number	Applicable standards
Simple Communications Unit	CPM2C-CIF21	U, C, CE

**Note: Do not use this document to operate the Unit.**

**OMRON Corporation**  
 FA Systems Division H.Q.  
 66 Matsumoto  
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 Japan  
 Tel: (81)559-77-9181  
 Fax: (81)559-77-9045

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**OMRON ELECTRONICS, INC.**  
 1 East Commerce Drive, Schaumburg, IL 60173  
 U.S.A.  
 Tel: (1)847-843-7900/Fax: (1)847-843-8568

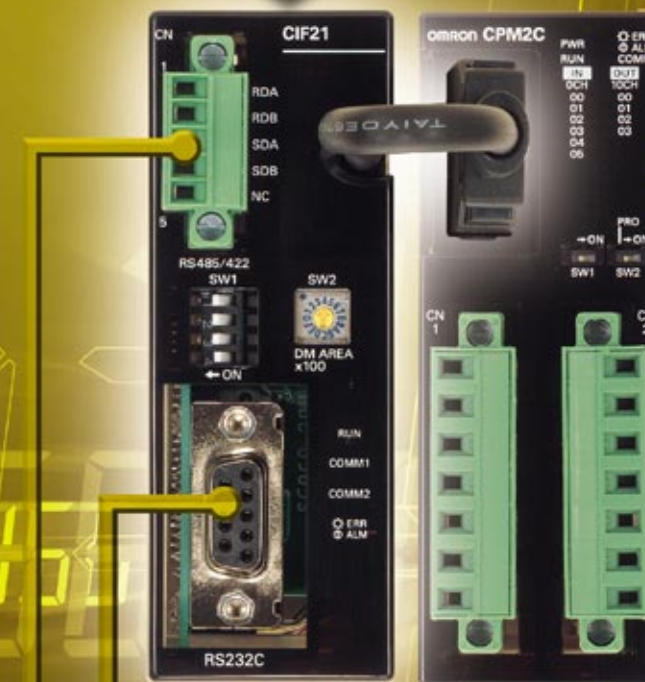
**OMRON ASIA PACIFIC PTE. LTD.**  
 83 Clemenceau Avenue,  
 #11-01, UE Square,  
 Singapore 239920  
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Authorized Distributor:

Note: Specifications subject to change without notice.

Cat.No.R086-E1-1  
 Printed in Japan  
 1200-3M

## Programmable Controllers SYSMAC CPM2C Slim Micro PLC Simple Communications Unit



Data exchange possible between CPM2C and components with just a few simple initial settings.



## G-series Components



**E5GN**  
 Digital Temperature Controller



**K3GN**  
 Digital Panel Meter

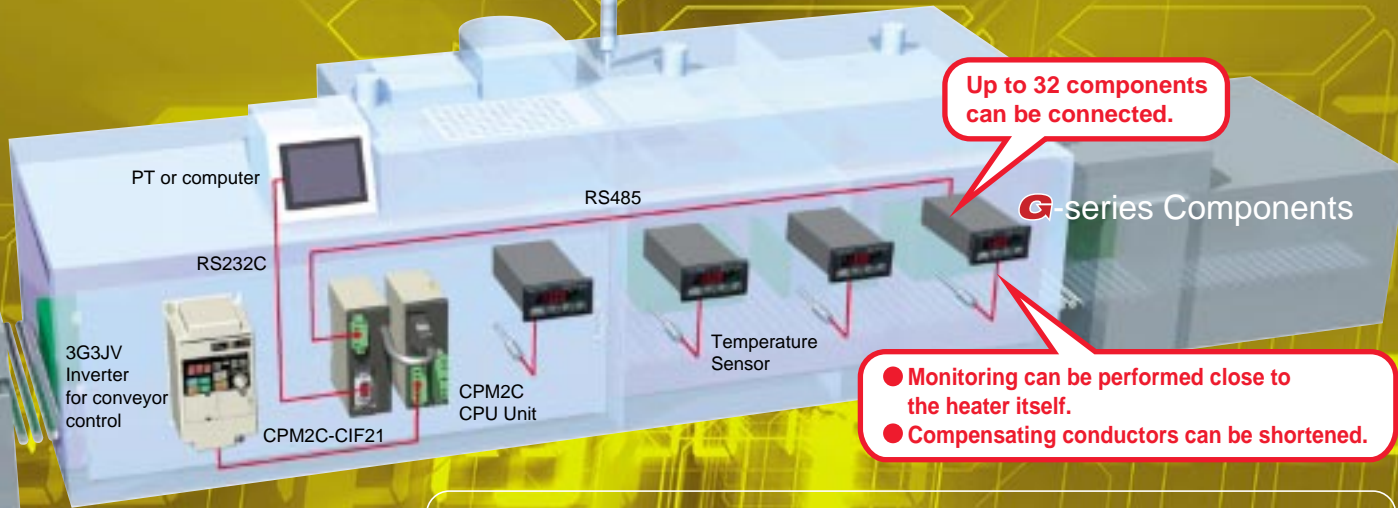


**H8GN**  
 Preset Counter/Timer

## Applications

### Miniature Reflow Furnace

- Settings for different products (e.g., Temperature Controller temperature settings and Inverter line speed settings) can be made in one operation from a PT.
- Not only can settings be changed, the present temperature can also be monitored.



### Food Packaging Equipment

In response to HACCP demands, food and sealing temperatures can now be easily monitored.

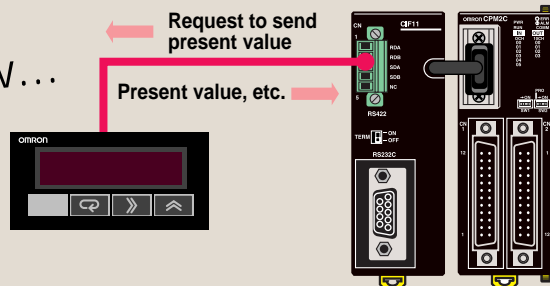
### Test Equipment

Changes in set values for temperatures can be made according to specified times (in conjunction with the CPM2C's clock function). Monitoring of present temperature possible.

Even with the kind of communications shown below, the user had to make parameter and memory settings, resulting in complicated ladder programs and using up DM capacity.

#### ● No-protocol Communications

Request to send present value  
 Present value, etc.



#### ● Send/Receive Commands

[STX010000102C100030000011234ETX+BCC]  
 ● Data not sent if there is a syntax error.  
 ● Data not sent if there is a BCC error.  
 ● Changing command data is difficult.

#### ● Communications Instructions in Ladder Programs



- Communications timing is difficult.

With just a few simple initial settings, component data is read to specified areas in DM. (PV, SV, AT, alarm values, PID values, etc.)

With the CPM2C-CIF21 Simple Communications Unit...

**Reduced cost of system construction**

## Connectable Components

In addition to G-series components, other components equipped with CompoWay/F and SYSWAY communications functions can be connected to the Simple Communications Unit. These are shown in the following table.

Product name	Series name	Model number	SYSWAY	Segment information	CompoWay/F	Comments
Temperature Controllers	Temperature Controllers	E5GN <b>G</b>	○	1	○	—
		E5CN	○	1	○	—
		E5EN	○	1	○	—
		E5AN	○	1	○	—
	Modular Temperature Controller	E5ZN	×	—	○	—
	Digital Controllers (standard models)	E5CK	○	1	×	—
		E5EK	○	1	×	—
		E5AK	○	1	×	—
	Digital Controllers (valve control)	E5EK	○	1	×	Valve system communications are not supported.
		E5AK	○	1	×	
	Digital Controllers (programmable)	E5CK-T	×	—	×	—
		E5EK-T	×	—	×	—
		E5AK-T	×	—	×	—
		E5EK-T	×	—	×	—
	Digital Controllers (programmable, valve control)	E5EK-T	×	—	×	—
E5AK-T		×	—	×	—	
Temperature Controllers	E5EJ	○	1	×	—	
	E5AJ	○	1	×	—	
Fuzzy Temperature Controller	E5AF	○	1	×	—	
Timers	Electronic Timer/Counter	H8GN <b>G</b>	×	—	○	—
	Digital Panel Meter	K3GN <b>G</b>	×	—	○	—
	Process Meter	K3NX	○	2	△	Some commands cannot be used with some models (options). Only the CompoWay/F variable area can be read.
	Weighing Meter	K3NV	○	2	△	
	Frequency/Rate Meter	K3NR	○	2	△	
	Period meter	K3NP	○	2	△	
	Up/Down Counting Meter	K3NC	○	2	△	
	Temperature Meter	K3NH	○	2	△	SYSWAY communications only (See note.)
	Intelligent Signal Processor	K3TS	○	2	×	

A mixture of CompoWay/F, **G**: G-series Components; ○: Connection possible; △: Connection possible for limited functions; ×: Communications impossible or not supported. SYSWAY (segment information 1), and SYSWAY (segment information 2) is also possible. Note: When a K3TS is connected, connect the other components via SYSWAY as well.

## Component Parameters for which Communications is Possible

The communications protocol (either CompoWay/F or SYSWAY) can be set in the CPM2C's DM area. The data that can be read/written is different for the two protocols.

#### ● CompoWay/F

Reading and writing is possible for all component data (except for some Digital Panel Meters). The amount of data that can be read/written in one operation per component is limited to 12 data items for reading and 12 data items for writing. Reading and writing is enabled by setting the address for each parameter in DM.

#### ● SYSWAY

Reading and writing is possible for the data shown in the following table:

Segment information	Read/Write	Data	Command group				
			1	2	3	4	5
1. Temperature Controller	Read	Present temperature	○	○	○	○	○
		Status	○	○	○	○	○
		Target temperature	○	○	○	○	○
		Alarm 1 SV			○	○	○
		Alarm 2 SV			○	○	○
		Proportional band				○	○
		Reset time					○
	Write	Derivative time					○
		Heater current					○
		Heater current status					○
		Target temperature	○	○	○	○	○
		Operation command		○	○	○	○
		Alarm 1 SV			○	○	○
		Alarm 2 SV			○	○	○
2. Digital Panel Meter	Read	Proportional band				○	○
		Reset time					○
		Derivative time					○
		Heater burnout detection value					○
		Display value	○	○	○	○	○
		Display value status	○	○	○	○	○
		Peak hold		○	○	○	○
	Write	Peak hold status		○	○	○	○
		Bottom hold		○	○		○
		Bottom hold status		○	○		○
		Comparison value (HH)				○	○
		Comparison value (H)				○	○
		Comparison value (L)				○	○
		Comparison value (LL)				○	○

The command groups for which reading or writing is performed are determined by settings in the DM area.