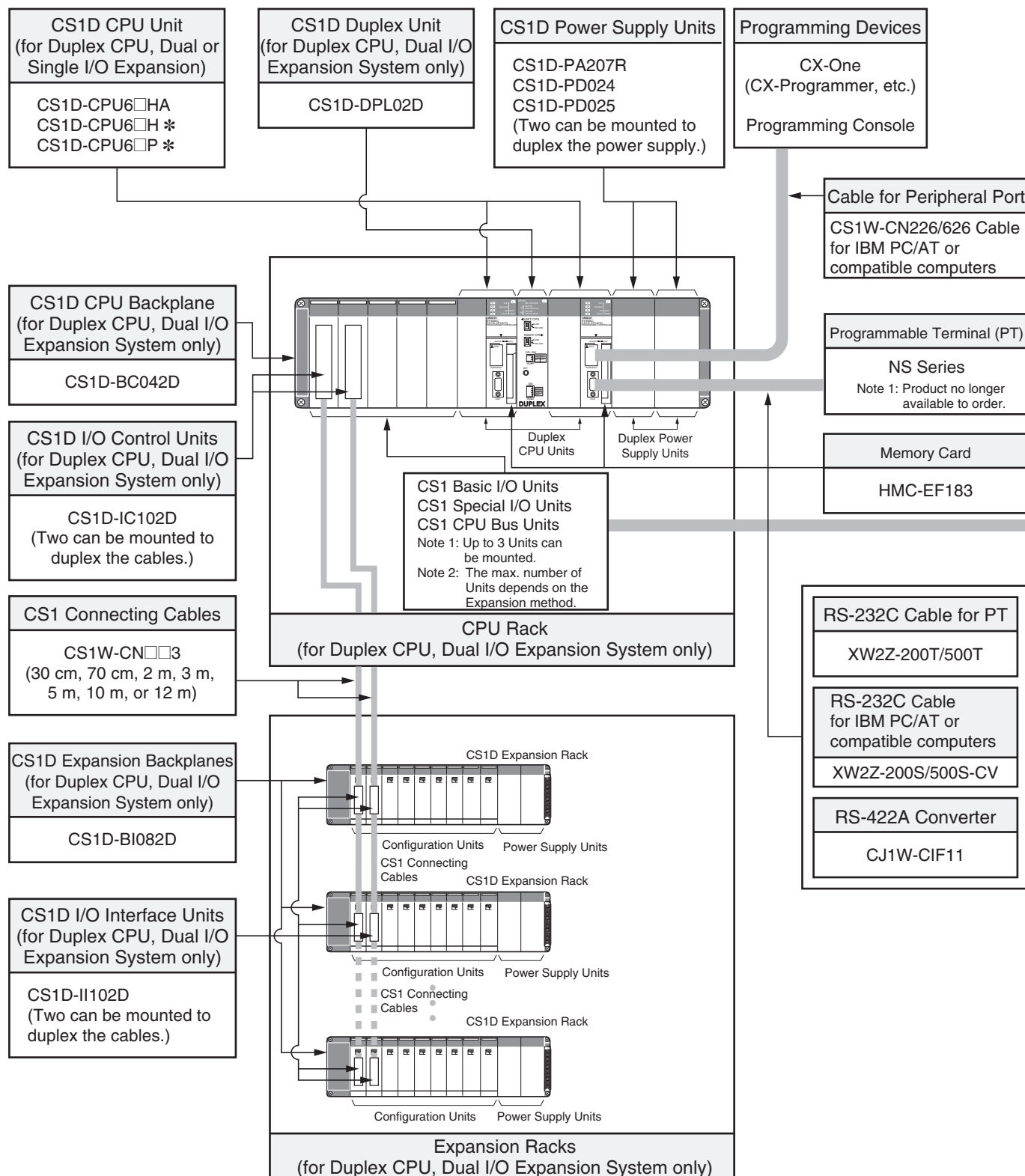


System Configuration

Basic System

SYSTEM 1 CS1D Duplex CPU, Dual I/O Expansion System



* The CS1D-CPU6□H/CS1D-CPU6□P CPU Unit version 1.3 or later is required.

Configuration Units

Basic I/O Units				
8 I/O points	16 I/O points	32 I/O points	64 I/O points	96 I/O points
Input Units				
---	- DC Input Units CS1W-ID211 - AC Input Units CS1W-IA111 CS1W-IA211	DC Input Units CS1W-ID231	DC Input Units CS1W-ID261	DC Input Units CS1W-ID291
Output Units				
- Triac Output Units CS1W-OA201 - Relay Output Units (independent commons) CS1W-OC201	- Transistor Output Units CS1W-OD21□ - Triac Output Units CS1W-OA211 - Relay Output Units CS1W-OC211	Transistor Output Units CS1W-OD23□	Transistor Output Units CS1W-OD26□	Transistor Output Units CS1W-OD29□
I/O Units				
---	---	---	32 inputs and 32 outputs - DC Input/Transistor Output Units CS1W-MD26□ - TTL I/O Units CS1W-MD561	48 inputs and 48 outputs DC Input/Transistor Output Units CS1W-MD29□
Other Units				
---	- Interrupt Input Units CS1W-INT01 - High-speed Input Units CS1W-IDP01	B7A Interface Units 32 inputs CS1W-B7A12 32 outputs CS1W-B7A02 16 inputs and 16 outputs CS1W-B7A21	B7A Interface Units 32 inputs and 32 outputs CS1W-B7A22	---

Special I/O Units and CPU Bus Units			
Temperature Sensor Input Units (Process Analog I/O Units) - CS1W-PTS□□ Analog Input Units - Analog Input Units CS1W-AD041-V1 CS1W-AD081-V1 CS1W-AD161 - Process Analog Input Units such as Isolated-type DC Input Units CS1W-PDC□□ CS1W-PTW01 CS1W-PTR0□ - Analog Output Units - Analog Output Units CS1W-DA041 CS1W-DA08V CS1W-DA08C - Isolated-type Analog Output Units (Process Analog I/O Units) CS1W-PMV01 CS1W-PMV02 - Analog I/O Units - CS1W-MAD44 - Isolated-type Pulse Input Unit (Process Analog I/O Unit) - CS1W-PPS01	- High-speed Counter Units CS1W-CT021 CS1W-CT041 - Customizable Counter Units CS1W-HCP22-V1 CS1W-HCA□2-V1 CS1W-HIO01-V1 - Position Control Units CS1W-NC1□3 CS1W-NC2□3 CS1W-NC4□3 - MECHATROLINK-II-compatible Position Control Units CS1W-NC271 CS1W-NC471 CS1W-NCF71 - Motion Control Units CS1W-MC221-V1 CS1W-MC421-V1	- Serial Communications Units CS1W-SCU21-V1 CS1W-SCU31-V1 - EtherNet/IP Units CS1W-EIP21 CS1W-EIP21S - Ethernet Units CS1W-ETN21 CS1D-ETN21D - Controller Link Units CS1W-CLK23 CS1W-CLK13 CS1W-CLK53 - SYSMAC LINK Units CS1W-SLK11 CS1W-SLK21 - FL-Net Units CS1W-FLN22 - DeviceNet Units CS1W-DRM21-V1 - CompoNet Master Units CS1W-CRM21	- ID Sensor U Units CS1W-V680C11 CS1W-V680C12 CS1W-V600C11 CS1W-V600C12 - GPIB Interface Units CS1W-GPI01 - High-speed Data Storage Units CS1W-SPU01-V2 CS1W-SPU02-V2

Note: Including models no longer available to order.

Basic System

SYSTEM 1 CS1D Duplex CPU, Dual I/O Expansion System

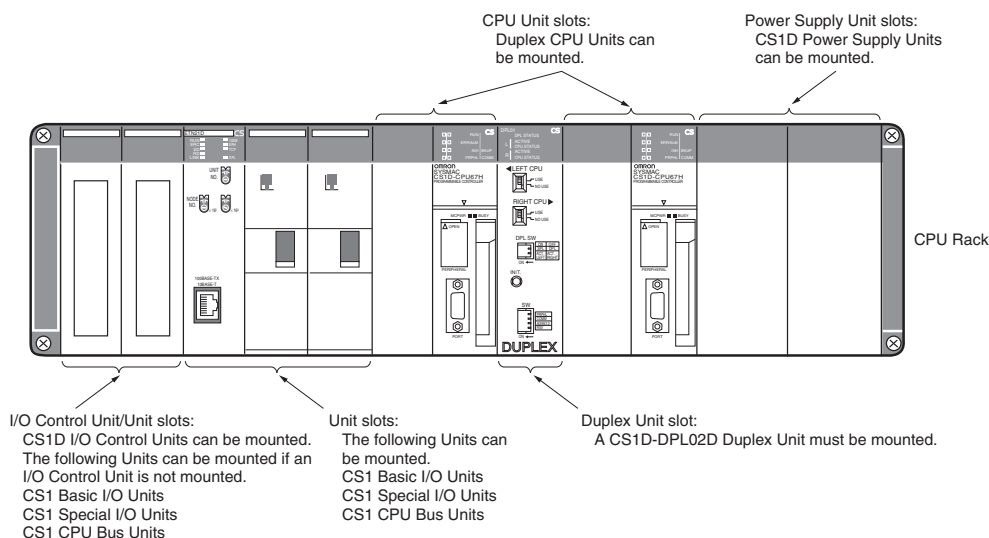
The entire system, including the expansion cables, can be duplexed for the most advanced redundancy and maintenance functions.

The CS1D-CPU6□HA CPU Unit supports FB, ST and SFC programming.

The CS1D-CPU6□H CPU Unit must be version 1.3 or later.

CPU Rack

System Configuration



List of Required Devices

Rack	Unit name		Number required
CPU Rack	CS1D-BC042D CPU Backplane (for Duplex CPU Dual I/O Expansion Systems)		1 Backplane
	CS1D-PA207R/CS1D-PD02□ Power Supply Unit		2 Units (Just 1 Unit can also be used.)
	CS1D-CPU6□HA/CS1D-CPU6□H/CS1D-CPU6□P CPU Unit		2 Units
	CS1D-DPL02D Duplex Unit (for Duplex CPU Dual I/O Expansion Systems)		1 Unit
	CS1D-IC102D I/O Control Unit (for Duplex CPU Dual I/O Expansion Systems)		Required only when there is an I/O Expansion System. Two Units are required for a Dual I/O Expansion System, and just one Unit is required for a Single I/O Expansion System.
	Maximum number of I/O Units	Dual I/O Expansion System	3 Units
		Single I/O Expansion System	4 Units
		No I/O Expansion	5 Units

Ordering Information

Basic System

SYSTEM 1 CPU Rack (Duplex CPU, Dual I/O Expansion System)

The CPU Rack requires a CS1D CPU Backplane (for a Duplex CPU, Dual I/O Expansion System), one or two CS1D Power Supply Units, and two CS1D CPU Units (for a Duplex CPU, Dual I/O Expansion System or Single I/O Expansion System). When an Expansion Rack is connected, two I/O Control Units are required.

CS1D CPU Units

Name	Specifications						Current consumption (A)		Model
	Number of I/O points	Program capacity	Data Memory	Programming	Duplex CPUs	Interrupt functions	5 V system	26 V system	
CS1D CPU Unit for Duplex CPU Systems 	5,120 points (7 Racks)	400 Ksteps	832 Kwords (DM: 32 Kwords, EM: 32 Kwords × 25 banks)	Ladder, FB, ST, SFC	OK	---	0.82 *	---	CS1D-CPU68HA
		250 Ksteps	448 Kwords (DM: 32 Kwords, EM: 32 Kwords × 13 banks)				0.82 *	---	CS1D-CPU67HA
	5,120 points (7 Racks)	250 Ksteps	448 Kwords (DM: 32 Kwords, EM: 32 Kwords × 13 banks)	Ladder	OK	---	0.82 *	---	CS1D-CPU67H
		60 Ksteps	128 Kwords (DM: 32 Kwords, EM: 32 Kwords × 3 banks)				0.82 *	---	CS1D-CPU65H

Note: The interrupt functions cannot be used in a Duplex CPU, Dual I/O Expansion System.

* NT-AL001 Link Adapters consume an additional 0.15 A each when used.

CS1D Process-control CPU Units

Name	Specifications		Current consumption (A)		Model
	CPU section	Loop control section	5 V system	26 V system	
CS1D Process-control CPU Unit 	Equivalent to the CS1D-CPU67H	LCB05D Operation method: Function block method Number of function blocks: 500 blocks max. Minimum operation cycle: 100 ms	1.04	---	CS1D-CPU67P
	Equivalent to the CS1D-CPU65H	PID control method: PID with two degrees of freedom (with autotuning function)	1.04	---	CS1D-CPU65P

Note: 1. The CS1W-LCB01/05 Loop Control Boards cannot be used in a CS1D-CPU□□H for Duplex CPU, Dual I/O Expansion Systems. If the system requires duplex Loop Control Boards, use the CS1D-CPU□□P Process-control CPU Units. For details, refer to the CS Series PLC-based Process Control Catalog (Cat. No. P051).

2. The interrupt functions cannot be used in a Duplex CPU, Dual I/O Expansion System or Duplex CPU, Single I/O Expansion System.

CS1D Duplex Unit

Name	Specifications			Current consumption (A)		Model
	Applicable systems	Basic functions	Online Replacement	5 V system	26 V system	
CS1D Duplex Unit 	Duplex CPU, Dual I/O Expansion System only	Duplex CPU Unit processing, error monitoring, and CPU Unit switching when error occurs	Supported	0.41	---	CS1D-DPL02D