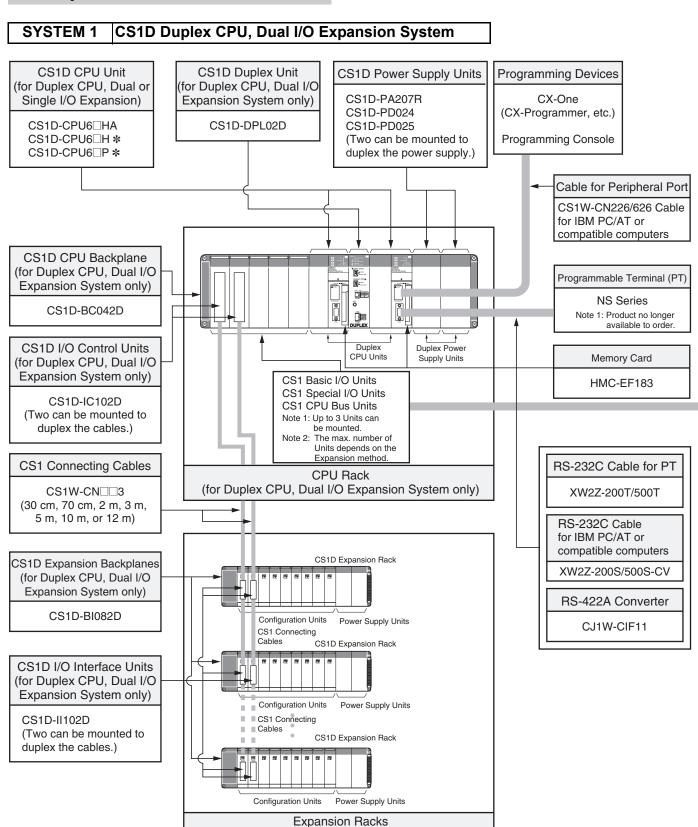
# **System Configuration**

#### **Basic System**



(for Duplex CPU, Dual I/O Expansion System only)

<sup>\*</sup> 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	8 I/O points 16 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									
				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								

Note: Including models no longer available to order.

#### **Basic System**

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

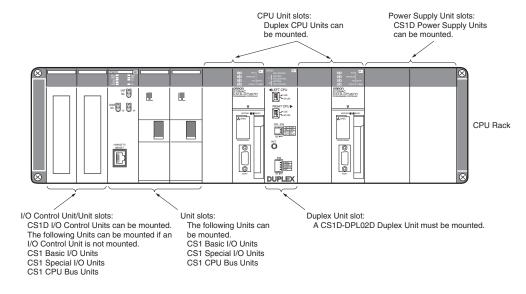
The entire system, including the expansion cables, can be duplexed for the most advanced redundancy and maintenance functions.

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**



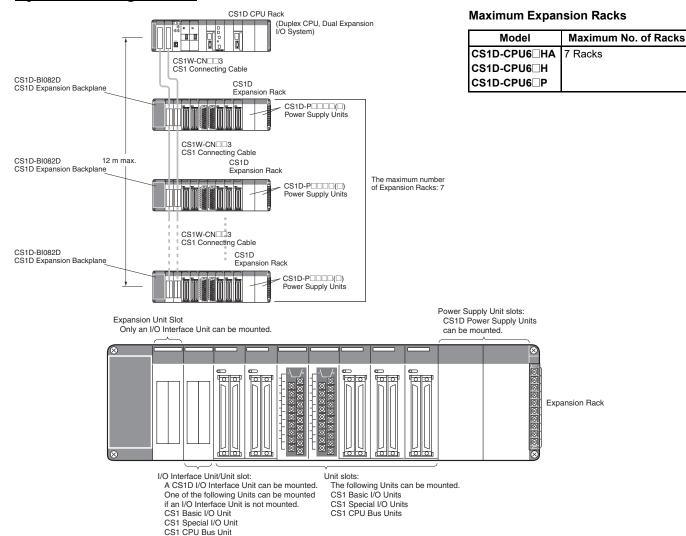
### **List of Required Devices**

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□ Po	wer 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 D	Ouplex CPU Dual I/O Expansion Systems)	1 Unit		
	CS1D-IC102D I/O Control Unit (fo	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		

# ■ Dual I/O Expansion Racks

The Dual I/O Expansion System has a duplexed expansion bus and supports online replacement of a Duplex Unit, online replacement of Units without a Programming Device, and online addition of I/O Units and Expansion Backplanes. (These functions are supported by the Duplex CPU Dual I/O Expansion System only.) Special I/O Control Units and I/O Interface Units are used in the Dual I/O Expansion System. The expansion bus can be set to either single or dual operation.

#### **System Configuration**



### **List of Required Devices**

Rack		Unit name	Number required
CPU Rack	CS1D-IC102D I/O Control Unit (for	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

Rack		Unit name	Number required		
Expansion Rack	CS1D-BI082D Expansion Backpla	ne (for Duplex CPU Dual I/O Expansion Systems)	1 Backplane		
	CS1D-PA207R/CS1D-PD02□ Pov	ver Supply Unit	2 Units (Just 1 Unit can also be used.)		
	CS1D-II102D I/O Interface Unit (fo	r Duplex CPU Dual I/O Expansion Systems)	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	7 Units		
		Single I/O Expansion System	8 Units		

## **Limitations on the System Configuration**

- Note: 1. Dual I/O Expansion cannot be used in a Duplex CPU Single I/O Expansion System or Single CPU System.
  - 2. The number of I/O Units that can be mounted in the Backplanes depends on the expansion method being used.
  - CS1W-PNT21 units can be used in the configuration with CS1D (duplex system) but do NOT support HOT SWAPPING function. (CS1W-PNT21 is a spcific product released in a specific area.)

#### SYSTEM 1 Expansion Racks (Dual I/O Expansion System)

Each Expansion Rack requires a CS1D Expansion Backplane (for a Duplex CPU, Dual I/O Expansion System), one or two CS1D Power Supply Units, and one or two I/O Interface Units.

# **■CS1D** Expansion Backplane

Name		Specifications	Current cons	Model		
	Applicable systems Number of Power Supply Units		Number of I/O Units	5 V system	26 V system	
CS1D Expansion Backplane	Duplex CPU, Dual I/O Expansion System only	2 Units max. (for duplex operation)	9 Units max. (Slot number 0 is reserved for an I/O Interface Unit.)	1.21		CS1D-BI082D

- Note: 1. C200H-series Units cannot be mounted.
  - 2. CS-series CPU Bus Units can be mounted in an Expansion Rack, but the I/O refreshing time is longer than it is when the CPU Bus Unit is mounted in the CPU Rack.

#### I/O Control Unit

When an Expansion Rack is being connected, mount the CS1D-IC102D I/O Control Unit in the left side of the CPU Backplane and connect the Connecting Cable. Two Units can be mounted to duplex the expansion bus.

Name	Specifications					Current consumption (A)		Model
	Applicable systems	Duplexing	Online Replacement	Mounting Backplane	Connecting Cable	5 V system	26 V system	
I/O Control Unit	Duplex CPU, Dual I/O Expansion System only	Supported	Supported	Expansion Backplane	CS1W-CN□□3 CS-series Connecting Cable	0.20		CS1D-IC102D

Note: Connecting Cables for Long-distance Racks (CV500-CN□□2) cannot be used.

# **■**CS1D I/O Interface Unit

When an Expansion Rack is being connected, mount the CS1D-II102D I/O Interface Unit in the left side of the CS1-series Expansion Backplane. Two Units can be mounted to duplex the expansion bus.

Name		Specifications					Current consumption (A)	
	Applicable systems	Duplexing	Online Replacement	Mounting Backplane	Connecting Cable	5 V system	26 V system	
CS1D I/O Interface Unit	Duplex CPU, Dual I/O Expansion System only	Supported	Supported	CPU Backplane	CS1W-CN□□3 CS-series Connecting Cable	0.22		CS1D-II102D

Note: Connecting Cables for Long-distance Racks cannot be used.