

## Provides the functionality of isolators, power supplies, signal converters, and other devices.

- The Analog Input Unit converts analog input signals such as 1 to 5 V or 4 to 20 mA into digital values, and takes the values scaled in industrial units, and transfers it to the CPU Unit as the process value. Because of this, no ladder program is required at the CPU Unit for scaling.
- The Analog Output Unit converts analog output set values from the CPU Unit to analog output signals such as 4 to 20 mA or 1 to 5 V, and outputs them.
- The built-in functions, such as measurement value alarms, rate-of-change calculations, and square roots, have enabled major savings in cost and space compared with previous systems.
- High-resolution Models and 8-point Input Models are also available. By combining the Units, logging/monitoring systems can be constructed, or the Units can be used together with LCBs/LCUs to construct complete process control systems.
- Parameters can be easily displayed and set in an easy-to-understand form without special tools.



## Features

### Process Analog Input:

- Up to eight analog inputs can be connected for each Unit.
- There is isolation between input channels, so unwanted circuit paths between thermocouple inputs can be prevented. (Except for CS1W-PTR01/02)
- Output scaling ( $\pm 32,000$ )
- Process value alarms (HH, H, L, LL)
- Input disconnection alarm
- Rate-of-change calculation and alarm
- Top/bottom/valley hold (CS1W-PTS11/PTS12/PDC11 only)

### Process Analog Output:

- Up to four analog set values can be output for each Unit.
- All outputs are isolated.
- Output rate-of-change limit
- Output high/low limits
- Output scaling ( $\pm 32,000$ )
- Control output answer input (CS1W-PMV01 only)

### Isolated-type Pulse Input:

- Provides up to four pulses from a device such as a displacement flowmeter. The accumulated value can also be calculated at the same time and transferred to the CPU Unit at each cycle. (CS1W-PPS01)

## System Configuration

These Process Analog I/O Units belong to the CS-series Special I/O Unit group.

- They can be mounted to CS-series CPU Racks or Expansion I/O Racks.
- They cannot be mounted to C200H CPU Racks, Expansion I/O Racks, or SYSMAC BUS Remote I/O Slave Racks.

The number of Units that can be mounted to one Rack (either a CPU Rack or Expansion I/O Rack) depends upon the maximum current supplied by the Power Supply Unit and the current consumption by the other Units.

There are no restrictions on Rack position.

**Note:** I/O addresses for Special I/O Units are allocated according to the unit number set on the switches on the front panel, and not according to the slot position in which they are mounted.

