

# Analog I/O Selection Guide

| Classification                 | Model         | I/O capacity             | Isolation between I/O points*                                                                              | I/O ranges/types                                                                                                                           | Conversion time            | Remarks                                                                                                                                                         | Page                                                                        |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|--------------------------------|---------------|--------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------------------------------------------------------------------|--------------------------|-------------------------------------------------|----------------------------------------------|
| Analog Input Units             | CS1W-AD041-V1 | 4 inputs                 | No                                                                                                         | 1 to 5 V, 0 to 5 V, 0 to 10 V, $\pm 10$ V, 4 to 20 mA                                                                                      | 0.25 ms/pt                 | ---                                                                                                                                                             | 318                                                                         |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | CS1W-AD081-V1 | 8 inputs                 |                                                                                                            |                                                                                                                                            |                            | 2 x 34-pin MIL connectors                                                                                                                                       | 318                                                                         |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | CS1W-AD161    | 16 inputs                | Built-in power supply for 2-wire transmission device, measured value alarms (HH, H, L, LL), other features | 326                                                                                                                                        |                            |                                                                                                                                                                 |                                                                             |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | CS1W-PTW01    | 4 inputs                 |                                                                                                            |                                                                                                                                            | Yes                        | 1 to 5 V, 4 to 20 mA                                                                                                                                            | 100 ms/4 pts                                                                | Process value alarms (HH,H,L,LL) Rate-of-change calculation and alarm Input disconnection detection Top, bottom, valley hold Accumulated value output Variable range zero-span adjustment | 326                            |                                                                                       |                          |                                                 |                                              |
|                                | CS1W-PDC11    | 4 inputs                 |                                                                                                            |                                                                                                                                            |                            |                                                                                                                                                                 |                                                                             |                                                                                                                                                                                           |                                | 4 to 20mA, 0 to 20mA, 0 to 10V, +/-10V, 0 to 5V, +/-5V, 1 to 5V, 0 to 1.25V, +/-1.25V | 20 ms/4 pts, 10 ms/2 pts | Measured value alarms (H, L) and other features | 326                                          |
|                                | CS1W-PDC55    | 8 inputs                 |                                                                                                            |                                                                                                                                            |                            |                                                                                                                                                                 |                                                                             |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | CS1W-PTR01    | No                       |                                                                                                            |                                                                                                                                            | -1 mA to 1 mA, 0 to 1 mA   | 200 ms/8 pts                                                                                                                                                    | Measured value alarms (H, L), other features                                | 326                                                                                                                                                                                       |                                |                                                                                       |                          |                                                 |                                              |
|                                | CS1W-PTR02    |                          |                                                                                                            |                                                                                                                                            |                            |                                                                                                                                                                 |                                                                             |                                                                                                                                                                                           | -100 mV to 100 mV, 0 to 100 mV | 1 ms/pt max.                                                                          | ---                      | 318                                             |                                              |
|                                | C200H-AD003   |                          |                                                                                                            |                                                                                                                                            |                            |                                                                                                                                                                 |                                                                             |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 | 1 to 5 V, 0 to 10 V, -10 to 10 V, 4 to 20 mA |
| Analog Output Units            | CS1W-DA041    | 4 outputs                | No                                                                                                         | 1 to 5 V, 0 to 5 V, 0 to 10 V, $\pm 10$ V, 4 to 20 mA                                                                                      | 1 ms/pt                    | ---                                                                                                                                                             | 320                                                                         |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | CS1W-DA08V    | 8 outputs                |                                                                                                            | 1 to 5 V, 0 to 5 V, 0 to 10 V, $\pm 10$ V                                                                                                  |                            |                                                                                                                                                                 |                                                                             |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | CS1W-DA08C    | 8 outputs                |                                                                                                            | 4 to 20 mA                                                                                                                                 |                            |                                                                                                                                                                 |                                                                             |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | C200H-DA003   | 8 outputs                | No                                                                                                         | 1 to 5 V, 0 to 10 V, -10 to 10 V                                                                                                           | 1 ms/pt max.               | ---                                                                                                                                                             | 320                                                                         |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | C200H-DA004   | 8 outputs                |                                                                                                            | 4 to 20 mA                                                                                                                                 |                            |                                                                                                                                                                 |                                                                             |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
| Analog I/O Unit                | CS1W-MAD44    | 4 inputs and 4 outputs   | No                                                                                                         | Inputs: 1 to 5 V, 0 to 5 V, 0 to 10 V, $\pm 10$ V, 4 to 20 mA<br>Outputs: 1 to 5 V, 0 to 5 V, 0 to 10 V, $\pm 10$ V                        | 1 ms/pt                    | ---                                                                                                                                                             | 322                                                                         |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | C200H-MAD01   | 2 inputs and 2 outputs   |                                                                                                            | Inputs: 1 to 5 V, 0 to 5 V, 0 to 10 V, $\pm 10$ V, 4 to 20 mA<br>Outputs: 1 to 5 V, 0 to 5 V, 0 to 10 V, $\pm 10$ V                        | 1 ms/pt max.               |                                                                                                                                                                 |                                                                             |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
| Temperature Sensor Input Units | CS1W-PTS11    | 4 inputs                 | Yes                                                                                                        | B, E, J, K, L, N, R, S, T, U, WRe5-26, PLII, $\pm 100$ mV<br>Pt100 $\Omega$ (JIS, IEC), JPt100 $\Omega$ , Pt50 $\Omega$ , Ni508.4 $\Omega$ | 20 ms/4 pts<br>10 ms/2 pts | Measured value alarms (HH, H, L, LL), input disconnection alarms, top hold, bottom hold, valley hold, zero span adjustment over user-set range, other features. |                                                                             |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | CS1W-PTS12    |                          |                                                                                                            |                                                                                                                                            |                            |                                                                                                                                                                 |                                                                             |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | CJ1W-PTS51    |                          |                                                                                                            | 8 inputs                                                                                                                                   | B, J, K, R, S, T, L        | 250 ms/4 pts                                                                                                                                                    | Measured value alarms (H, L), input disconnection alarm, and other features | 336                                                                                                                                                                                       |                                |                                                                                       |                          |                                                 |                                              |
|                                | CJ1W-PTS52    | Pt100 (IEC, JIS), JPt100 |                                                                                                            |                                                                                                                                            | 250 ms/8 pts               |                                                                                                                                                                 |                                                                             |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | CJ1W-PTS55    | B, J, K, R, S, T, L      |                                                                                                            |                                                                                                                                            | 250 ms/4 pts               |                                                                                                                                                                 |                                                                             |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | CJ1W-PTS56    | Pt100 (IEC, JIS), JPt100 |                                                                                                            | 250 ms/8 pts                                                                                                                               | ---                        | 336                                                                                                                                                             |                                                                             |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | C200H-TS001   | 4 inputs                 | No                                                                                                         | K, J                                                                                                                                       |                            |                                                                                                                                                                 | 4.8 s max.                                                                  |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | C200H-TS002   |                          |                                                                                                            | K, L                                                                                                                                       |                            |                                                                                                                                                                 |                                                                             |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
|                                | C200H-TS101   |                          |                                                                                                            | JPt100                                                                                                                                     |                            |                                                                                                                                                                 |                                                                             |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |
| C200H-TS102                    | 5 inputs      |                          |                                                                                                            | Pt100                                                                                                                                      |                            |                                                                                                                                                                 |                                                                             |                                                                                                                                                                                           |                                |                                                                                       |                          |                                                 |                                              |

**Note:** Inputs are isolated from PLC signals for all Units.