

## General Specifications

		CX1000	CX2000
Display		5.5-inch TFT color LCD	10.4-inch TFT color LCD
Control modes		Single loop control, cascade control, two-input switching control	
Control calculation functions		Continuous PID control, relay ON/OFF control, time-proportionate PID control, overshoot control function (Super)	
PID control (embedded)	Control interval	250, 500, 1000 ms	
	Controlled points	0, 2	0, 2, 4, 6
Monitoring	Measurement interval	1 second, 2 seconds	
	Measurement channels	6 channels	10 channels, 20 channels
Control I/O specifications	Universal output	Select from the following: 4-20 mA current output / Voltage pulse / Transfer contact relay.	
	DI	Contact input: 6 points/2 loops	
	DO	Open collector transistor output: 4 points/2 loops Make contact relay output: 2 points/2 loops	
Communication interface	Ethernet	Standard feature	
	RS422A/485	Optional (one only)	
	RS232		
External storage media	Floppy disks, ZIP disks, CompactFlash memory card		
Optional functions	Program setting function	Program patterns: 4 max (PG1) or 30 max (PG2) Segments: Max 99 per pattern, Total segments: 300 max	
	Measurement alarm	/A6: 6 alarms only /A6R: 6 alarms, with remote	/A4F: 4 alarms, with fail output /A4FR: 4 alarms, with fail output and remote
	Mathematical function	12 channels	30 channels
	DIO expanded module	–	Contact inputs: 12 Open collector outputs: 12
	VGA output	–	Can be specified
	3-wire isolated RTD input	Can be specified	Can be specified
	24 V DC/AC power supply	Can be specified	Can be specified
	24 V DC transmitter power output	–	Can be specified
	Batch header	Can be specified	Can be specified

## Standard Specifications

### Construction

Angle of mounting: Backward tilt of up to 30°; no tilt is allowed on either side, however.  
Thickness of mounting panel: 2 to 26 mm  
Material: Case = Steel plate, Bezel = Polycarbonate  
Color of coating: Case = Pale cobalt blue (equivalent to DIC 16 edition 102)  
Bezel = Light charcoal gray (equivalent to Munsell 10B3.6/0.3)  
Front panel: Dust- and drip-proof (compliant to IEC529-IP65, NEMA No. 250 Type 4 [except for icing tests])

### CONTROL FUNCTIONS

Control mode: Select from three control modes, i.e., single loop, cascade control, and loop control with PV switching.  
Note) The control mode is fixed to single loop control for loops 5 and 6.  
Control computation functions: Continuous PID control, relay on/off control, time proportional PID control

### Setting Ranges of Control Parameters

Proportional band: 0.1 to 999.9%  
Integral time: 0 to 6000 sec  
Derivative time: 0 to 6000 sec  
On-off control hysteresis width: 0.0 to 100.0% of measurement range  
Preset output value: -5.0 to 105.0% of output  
(Provided in case of control computation being stopped, PV input being in a burnout state, or instrument input being abnormal)  
Output limiter: Setting range: -5.0 to 105.0% for both high/low limits  
Shutdown function: Can provide a manipulated output of up to 0 mA when in manual mode operation with 4–20 mA output (shuts down the output for values smaller than -5.1%).  
Output rate-of-change limiter: Off, or a value from 0.1 to 100.0%/sec

### ALARM FUNCTIONS

#### Control Alarm

Types of control alarm: PV high limit, PV low limit, high limit of deviation, low limit of deviation, deviation within high and low limits, SP high limit, SP low limit, OUT high limit, and OUT low limit  
Other alarm type: Fault diagnosis, fail output  
Stand-by action: Turns off PV/SP alarm from starting control until steady condition  
Alarm output: 6 points/ 2 loops (transistor output 4 points, relay output 2 points)  
Alarm setting: 4 types/ loop  
Hysteresis: Can set each alarm setting  
Display: The status is shown in the digital display in case of alarm. A common alarm indication is also displayed. The alarm behavior: non-hold or hold-type can be selectable for common to all channels

#### Measurement Alarm

Types of alarm: High limit, low limit, differential high limit, differential low limit, high limit of rate-of-change, low limits of rate-of-change, high limit of delay, and low limits of delay (alarm delay)  
Alarm delay time: 1 to 3600 sec (1 hr)  
Time interval of rate-of-change alarm: Measuring interval × 1 to 15  
Alarm output: 6 points (option) \*alarm output can be assigned to control output  
Number of setting: Max. 4/ each channel  
Hysteresis: ON (0.5% of span)/ OFF selectable (common to all channels and all levels)  
Display: The status is shown in the digital display in case of alarm. A common alarm indication is also displayed. The alarm behavior: non-hold or hold-type can be selectable or common to all channels

### INPUT SECTION

#### Specifications Common to Control and Measurement Inputs

Thermocouple burnout: Switchable between ON/OFF options of detection on a channel basis.  
Switchable between burnout upscale/downscale options  
Integral time of A/D converter: Select from the options of 20 ms (50 Hz), 16.7 ms (60 Hz) and AUTO (automatic switching between 20 ms and 16.7 ms depending on the power supply frequency).

#### Control Input

Input interval: 250, 500 or 1000 ms, synchronized with the control period  
Input type: DC voltage (DCV), thermocouple (TC), resistance temperature detector (RTD), DC current (DCA) with external shunt resistor

Linear scaling: Input ranges capable of scaling: Thermocouple (TC), resistance temperature detector (RTD), and DC voltage (DCV)  
Available range of scaling: -30000 to 30000, with a span smaller than 30000

Computation of input/output signal

Measurement input computation:

Input processing, square root extraction (0.0 to 5.0% low level cutoff), 10-segment linearizer, and 10-segment linearizer biasing, and bias addition (from -100.0 to 100.0% of measuring range), first order lag filter (time constant = 1 to 120 sec, or off)

Auxiliary computation input:

Input processing, square root extraction (0.0 to 5.0% low level cutoff), bias addition (from -100.0 to 100.0% of measuring range), ratio multiplication (0.001 to 9.999), and first order lag filter (time constant = 1 to 120 sec, or off)

### Table of Control Input Specifications

Input type	Range	Measuring range
DCV – applicable to linear scaling only	20 mV	–20.00 to 20.00 mV
	60 mV	–60.00 to 60.00 mV
	200 mV	–200.0 to 200.0 mV
	2 V	–2.000 to 2.000 V
	6 V	–6.000 to 6.000 V
	20 V	–20.00 to 20.00 V
TC	50 V	–50.00 to 50.00 V
	R <sup>1</sup>	0.0 to 1760°C
	S <sup>1</sup>	0.0 to 1760°C
	B <sup>1</sup>	0.0 to 1820°C
	K <sup>1</sup>	–200.0 to 1370°C
	E <sup>1</sup>	–200.0 to 800°C
	J <sup>1</sup>	–200.0 to 1100°C
	T <sup>1</sup>	–200.0 to 400°C
	N <sup>1</sup>	0.0 to 1300°C
	W <sup>2</sup>	0.0 to 2315°C
	L <sup>3</sup>	–200.0 to 900°C
	U <sup>3</sup>	–200.0 to 400°C
	PLATINEL	0.0 to 1400.0°C
	PR40-20	0.0 to 1900.0°C
W3Re/W25Re	0.0 to 2400.0°C	
RTD <sup>5</sup>	Pt100 <sup>4</sup>	–200.0 to 600.0°C
	JPt100 <sup>4</sup>	–200.0 to 550.0°C
Standardized signal	1 to 5 V	1.000 to 5.000 V

<sup>1</sup>: R, S, B, K, E, J, T, N : IEC584-1 (1995), DIN IEC584, JIS C1602-1995

<sup>2</sup>: W : W-5% Re/W-26% Re (Hoskins Mfg. Co.), ASTM E988

<sup>3</sup>: L : Fe-CuNi, DIN43710, U : Cu-CuNi – DIN43710

<sup>4</sup>: Pt100 : JIS C1604-1997, IEC751-1995, DIN IEC751-1996

JPt100 : JIS C1604-1989, JIS C1606-1989

<sup>5</sup>: Measuring current : I = 1 mA

### Measurement Input

Measuring interval: 1 or 2 sec (2 sec, if the integral time of A/D converter is 100 ms)  
Input type: DC voltage (DCV), thermocouple (TC), resistance temperature detector (RTD), Operation log (DI), DC current (DCA) with external shunt resistor

### Measurement Input Ranges and Measuring Ranges

Input type	Input Range	Measuring Range
DCV	20 mV	–20.00 to 20.00 mV
	60 mV	–60.00 to 60.00 mV
	200 mV	–200.0 to 200.0 mV
	2 V	–2.000 to 2.000 V
	6 V	–6.000 to 6.000 V
	20 V	–20.00 to 20.00 V
TC	50 V	–50.00 to 50.00 V
	R <sup>1</sup>	0.0 to 1760.0°C
	S <sup>1</sup>	0.0 to 1760.0°C
	B <sup>1</sup>	0.0 to 1820.0°C
	K <sup>1</sup>	–200.0 to 1370.0°C
	E <sup>1</sup>	–200.0 to 800.0°C
	J <sup>1</sup>	–200.0 to 1100.0°C
	T <sup>1</sup>	–200.0 to 400.0°C
	N <sup>1</sup>	0.0 to 1300.0°C
	W <sup>1</sup>	0.0 to 2315.0°C
	L <sup>3</sup>	–200.0 to 900.0°C
	U <sup>3</sup>	–200.0 to 400.0°C
	PLATINEL	0.0 to 1400.0°C
	PR40-20	0.0 to 1900.0°C
W3Re/W25Re	0.0 to 2400.0°C	
RTD <sup>5</sup>	Pt100 <sup>4</sup>	–200.0 to 600.0°C
	JPt100 <sup>4</sup>	–200.0 to 550.0°C
DI	DCV input	OFF: lower than 2.4 V ON: 2.4 V or higher
	Contact input	ON/OFF states

<sup>1</sup>: R, S, B, K, E, J, T, N : IEC584-1 (1995), DIN IEC584, JIS C1602-1995

<sup>2</sup>: W : W-5% Re/W-26% Re (Hoskins Mfg. Co.), ASTM E988

<sup>3</sup>: L : Fe-CuNi, DIN43710, U : Cu-CuNi – DIN43710

<sup>4</sup>: Pt100 : JIS C1604-1997, IEC751-1995, DIN IEC751-1996

JPt100 : JIS C1604-1989, JIS C1606-1989

<sup>5</sup>: Measuring current : I = 1 mA

Filter function: Switchable between ON/OFF options of moving average on a channel basis; selectable from 2 to 16 times for the frequency of moving average calculation

### Computation

Difference computation: Allows for calculation of difference between any two channels.

Input ranges capable of difference computation: DCV, TC and RTD

Linear scaling: Input ranges capable of scaling: DCV, TC, RTD

Available range of scaling: -30000 to 30000

Square root scaling: Input ranges capable of scaling: DCV

Available range of scaling: -30000 to 30000

### Storage Functions:

Store internal control loops' data (PV, SP and OUT of internal loops), Green series communication loops' data (PV, SP and OUT of connected Green series communication), measured data, and computed data.

## Style S3 Function

### ■ PV Math/SP Math Function

Math expression can be assigned to PV and SP of each loop  
Type of computation:

Four arithmetic operations, square root, absolute value, common logarithm, exponential, power, relational operations (<, ≤, >, ≥, =, ≠), logic operations (AND, OR, NOT, XOR), statistical operations (average, Max. Min. Max.-Min.) conditional operations ([expression 1 ? expression 2 ? expression 3])  
Note: conditional operators can be used with the other operands together

Available operands for arithmetic operations:

Measurement data, measurement math data, embedded/external control data, communication input data, constant W01-W36, control input data, control output DIO, expansion module DIO, measurement remote input, internal switch

Operation limitation: within 120 characters

Available operands in an expression: less than 35

In error case: Over/Under selection  
Over: upper limit of PV/SP value  
Under: lower limit of PV/SP value

### ■ Logic Math

Available number of operations: CX1000: up to 12  
CX2000: up to 30

Operation type: Relational operations (<, ≤, >, ≥, =, ≠), logic operations (AND, OR, NOT, XOR), conditional operations ([expression 1 ? expression 2 ? expression 3])

Note: conditional operators can be used with the other operands together Available operands in an expression: same as PV math/SP math operands

### ■ Internal SW

Number of available internal SW: CX1000: 18  
CX2000: 36

Non-hold type only

### ■ Analog Retransmission

Output type: Current output (4-20 mA, 0-20 mA, 20-4 mA, 20-0 mA), time proportional voltage pulse output, time proportional relay output

Display/record: Data is recorded/displayed as out value

Note: The loop of analog retransmission mode is not available for PID control.

Available math operation: Same as PV math/SP math

Available operands: Same as PV math/SP math

### ■ Communication Function

CX PC-UT gateway function:

By using CX as gateway, UT parameters can be set from PC.

### ■ Program Control Function (PG1, PG2)

Number of program patterns: 4 (PG1), 30 (PG2)

Number of segments per program pattern: 99 max.

Number of program segments:

300 max. (as the sum of segments for all program patterns)

Number of program events: 800 max.

Number of program repetitions: 999 max. or infinite

Segment time: 0 min:1 sec to 99 hr:59 min:59 sec

Switching among program patterns: A program pattern can be switched to another by means of contact input or CX operation.

Advance function: Forcibly moves the program to the next segment

Wait function: Wait time: Off, or 0 min:1 sec to 99 hr:59 min:59 sec

Wait zone: 0.0 to 100.0% of the span of measurement input range

PID parameters switching

Segment PID selection:

PID-parameter numbers being used can be selected on a segment basis

Zone PID selection: PID parameter sets are switched depending on the value of the applied PV input

Time event: The progress status of a program pattern is provided by means of contact output. (ON/OFF)

Number of events set: 16 max. per segment

Output: Provided after the lapse of a specified time from the moment of segment switchover.

Range of time lapse: 0 to 99 hr:59 min:59 sec

PV event: Alarm function for measured values/deviations within a program pattern

Number of events set: 16 max. per segment

Event type: PV high limit, PV low limit, high limit of deviation, low limit of deviation, deviation within high and low limits, SP high limit, SP low limit, Out high limit, Out low limit

Program event display

Group display: Up to 5 events and its name display

All display: All events display

All time events display: All time events and the some events name display

All PV event display: All PV events and the some events name display

## Hardware

### I/O Signal Specifications

#### ■ Control Output

Current output	Number of outputs:	2/2 loops
	Output signal:	4-20 mA DC or 0-20 mA DC
	Load resistance:	600 Ω max.
	Output accuracy:	±0.1% of span (1 mA or greater)
	Temperature drift:	±200 ppm/°C (tested for output section)
Voltage pulse output	Number of outputs:	2/2 loop
	Output signal:	On-state voltage: 12 V DC
	Load resistance:	600 Ω min.
	Resolution:	0.1%
Relay contact output	Number of outputs:	2/2 loops
	Output signal:	NC, NO, COM
	Contact rating:	250 V AC/3 A or 30 V DC/3 A (resistive load)

#### ■ Contact Input

Number of inputs: 6/2 loops  
Input signal: Voltage-free contact or open collector (TTL or transistor)  
Input condition: On-state voltage: 0.5 V max. (30 mA DC)  
Off input leakage current: 0.25 mA max.  
Input configuration: Photocoupler-isolated (two-point common)

#### ■ Contact Output

Number of relay outputs: 2/2 loops  
Relay contact rating: 250 V AC/1 A or 30 V DC/1 A (resistive load)  
Number of transistor outputs: 4/2 loops  
Transistor contact rating: 24 V DC/50 mA

#### ■ Analog Input Section

Input interval: 250, 500 or 1000 ms  
Input interval: 1 or 2 sec

#### ■ Installation Environment Standards

Normal operating conditions:

Ambient temperature: 0 to 50°C (5 to 40°C, if a floppy disk or Zip drive is in operation)

Ambient humidity: 20 to 80% RH (at 5 to 40°C)

Vibration: 10 to 60 Hz, 0.2 m/s<sup>2</sup>

Mechanical shock: Not allowed.

Transport and storage conditions:

Ambient temperature: -25 to 60°C

Ambient humidity: 5 to 95% RH (non-condensing)

Vibration: 10 to 60 Hz, 4.9 m/s<sup>2</sup>

Mechanical shock: 392 m/s<sup>2</sup> max. (when housed in a package)

Noise: Normal mode noise (50/60 Hz):

DC current (DCA): The peak value including a signal component is less than 1.2 times the measuring range.  
Thermocouple (TC): The peak value including a signal component is less than 1.2 times the thermal electromotive force.

Resistance temperature detector (RTD): 50 mV max.

Common mode noise voltage (50/60 Hz): 250 V AC rms max. for all ranges

Inter-channel maximum noise voltage (50/60 Hz): 250 V AC rms max.

Warm-up time: 30 min minimum after power-on

#### ■ Safety and EMC Standards

CSA: CSA22.2 No1010.1 installation category II, pollution degree 2

UL: UL61010B-1 (CSA NRTL/C)

CE: EMC directive: EN61326 compliance (Emission: Class A, Immunity: Annex A)

EN61000-3-2 compliant

EN61000-3-3 compliant

EN55011 compliant, Class A Group 1

Low voltage directive: EN61010-1 compliant, measurement category II, pollution degree 2

C-Tick: AS/NZS 2064 compliant, Class A Group 1

#### ■ Power Supply Section

Supply voltage: 100 to 110 V AC ±10% or 200 to 220 V AC ±10%

Supply frequency: 50 Hz ±2% or 60 Hz ±2%

Power consumption:	Supply Voltage	When LCD Saver Is On	When in Normal Operation	Maximum
CX2000	100 V AC	Approx. 43 VA	Approx. 45 VA	75 VA
	240 V AC	Approx. 62 VA	Approx. 65 VA	106 VA
CX1000	100 V AC	Approx. 20 VA	Approx. 23 VA	39 VA
	240 V AC	Approx. 29 VA	Approx. 32 VA	51 VA

#### ■ Isolation

Insulation resistance: 20 MΩ min. between each terminal and ground (at 500 V DC)

Withstanding voltage:

Between power supply terminal and ground: 1500 V AC (50/60 Hz), 1 min

Between relay contact output terminal and ground: 1500 V AC (50/60 Hz), 1 min

Between measurement input terminal and ground: 1500 V AC (50/60 Hz), 1 min

Between measurement input terminals: 1000 V AC (50/60 Hz), 1 min

Between contact input terminal and ground: 500 V DC (50/60 Hz), 1 min

Between current output terminal and ground: 500 V AC (50/60 Hz), 1 min

Between voltage pulse output terminal and ground: 500 V DC (50/60 Hz), 1 min

Between transistor contact output terminal and ground: 500 V DC (50/60 Hz), 1 min

Grounding: JIS Class D

## Standard Performance Data

Measurement/reading accuracy:

Tested under the following conditions:

Standard operating conditions: 23 ±2°C, 55 ±10% RH

Supply voltage range: 90 to 132 V AC; 180 to 250 V AC

Supply frequency range: 50/60 Hz ±1% max.

Note: The accuracy performance is tested after a warm-up time of at least 30 min and in a location free from such adverse effects on the instrument's operation as mechanical vibration.

See the CX1000/CX2000 General Specifications documents (GS 04L31A01-02E) for complete product specifications.

Input Type	Range	Measurement Accuracy (Digital Readings)	Max. resolution of digital display
DC voltage (DCV)	20 mV	$\pm(0.1\% \text{ of rdg} + 2 \text{ digits})$	10 $\mu\text{V}$
	60 mV		10 $\mu\text{V}$
	200 mV		100 $\mu\text{V}$
	2 V		1 mV
	6 V		1 mV
	20 V		10 mV
Thermocouple (TC) - excluding the accuracy of reference junction compensation	50 V	$\pm(0.1\% \text{ of rdg} + 3 \text{ digits})$	10 mV
	R	$\pm(0.15\% \text{ of rdg} + 1^\circ\text{C})$ , where R and S = $\pm 3.7^\circ\text{C}$ over 0 to 100°C and $\pm 1.5^\circ\text{C}$ over 100 to 300°C; B = $\pm 2^\circ\text{C}$ over 400 to 600°C, and is not guaranteed for temperatures below 400°C.	0.1°C
	S		
	B		
	K		
	E		
	J		
	T		
	N		
	W		
	L		
	U		
PLATINEL	0.0 to 1400.0°C		
Resistance temperature detector (RTD)	PR40-20	Not guaranteed over 0 to 450°C $\pm(0.9\% \text{ of rdg} + 16.0^\circ\text{C})$ over 450 to 750°C $\pm(0.9\% \text{ of rdg} + 6.0^\circ\text{C})$ over 750 to 1100°C $\pm(0.9\% \text{ of rdg} + 2.0^\circ\text{C})$ over 1100 to 1900°C	
	W3Re/W25Re	$\pm(0.3\% \text{ of rdg} + 2.8^\circ\text{C})$	
	Pt100	$\pm(0.15\% \text{ of rdg} + 0.3^\circ\text{C})$	
	JPt100		

Measurement accuracy during scaling:

Measurement accuracy during scaling (digits) = measurement accuracy (digits) + 2 digits where the value is rounded up to the nearest whole number.

Reference junction compensation:

Switchable between INT (internal) and EXT (external) options (common to all channels).

Reference junction compensation accuracy:

$\pm 1^\circ\text{C}$  for types R, S, B, W, PR40-20 and W3Re/W25Re  
 $\pm 0.5^\circ\text{C}$  for types K, J, E, T, N, L, U and PLATINEL (when measuring temperatures no lower than 0°C)

Maximum input voltage:

$\pm 10 \text{ V DC}$  (continuous) for 2 V DC or lower voltage ranges and TC input  
 $\pm 30 \text{ V DC}$  (continuous) for 6 and 20 V DC voltage ranges

Input resistance:

10 M $\Omega$  min. for 2 V DC or lower voltage ranges and TC input  
Approx. 1 M $\Omega$  for 6, 20 V, and 50 V DC voltage ranges

External input resistance:

2 k $\Omega$  max. for DCV and TC inputs  
10  $\Omega$  max. per wire for RTD input (all three wires must have the same resistance)

Input bias current:

10 nA max.

Interference between channels:

120 dB (when external input resistance is 500  $\Omega$  and the level of input to other channels is 30 V)

Common mode rejection ratio:

120 dB (50/60 Hz  $\pm 0.1\%$ , unbalanced)  
500  $\Omega$  input resistance; tested between negative input terminal and ground)

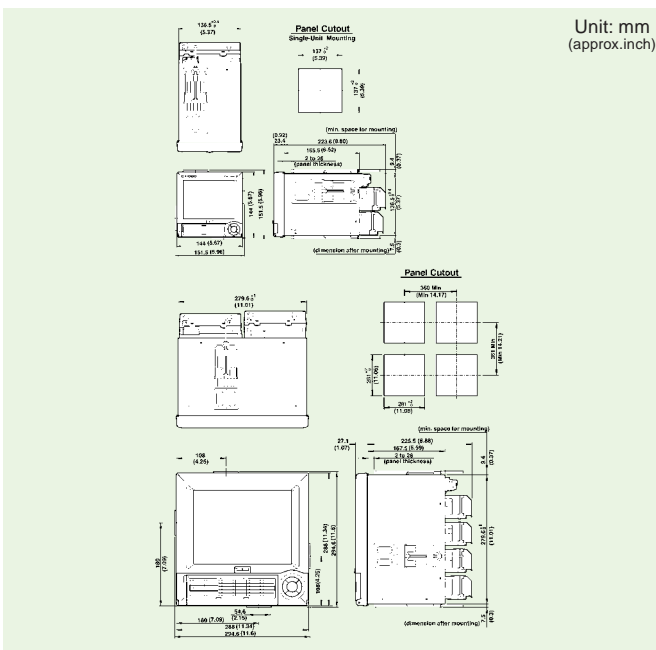
Normal mode rejection ratio: 40 dB (50/60 Hz  $\pm 0.1\%$ )

## Models and Suffix Codes

### CX2000

Model	Suffix Code	Option Code	Remarks
CX2000			DAQSTATION CX2000 (Embedded loop: 0 loop, Measurement channel: 0 ch)
CX2010			DAQSTATION CX2000 (Embedded loop: 0 loops, Measurement channel: 10 ch)
CX2020			DAQSTATION CX2000 (Embedded loop: 0 loops, Measurement channel: 20 ch)
CX2200			DAQSTATION CX2000 (Embedded loop: 2 loops, Measurement channel: 0 ch)
CX2210			DAQSTATION CX2000 (Embedded loop: 2 loops, Measurement channel: 10 ch)
CX2220			DAQSTATION CX2000 (Embedded loop: 2 loops, Measurement channel: 20 ch)
CX2410			DAQSTATION CX2000 (Embedded loop: 4 loops, Measurement channel: 10 ch)
CX2420			DAQSTATION CX2000 (Embedded loop: 4 loops, Measurement channel: 20 ch)
CX2610			DAQSTATION CX2000 (Embedded loop: 6 loops, Measurement channel: 10 ch)
CX2620			DAQSTATION CX2000 (Embedded loop: 6 loops, Measurement channel: 20 ch)
External storage medium	-1		3.5 in. floppy disk drive
	-2		Zip disk drive provided with medium
	-3		CompactFlash memory card (CF + Adapter)
Communication port	-0		Ethernet only
	-1		Ethernet, RS-232C communication interface
	-2		Ethernet, RS-422A/485 communication interface
Language		-2	English/Germany/French deg summer/winter time
Option	/A6		Measurement alarm (6 DO)
	/A6R		Measurement alarm (6 DO, 8 DI)
	/A4F		Measurement alarm (4 DO, FAIL/memory end detection and output)
	/A4FR		Measurement alarm (4 DO, 8 DI, FAIL/memory end detection and output)
	/BT1		Batch header function
	/CST1		Control-purpose extension DIO (12 DI, 12 DO terminals)
	/D5		VGA output
	/M1		Computation functions (including report functions)
	/N2		Three legs isolated RTD
	/P1		24 V DC/AC power supply
/TPS4		24 V DC transmitter power supply (4 loops)	
/PG1		Program control (number of program patterns: 4)	
/PG2		Program control (number of program patterns: 30)	

## Dimensions



The CX1000/CX2000 requires two brackets for panel mounting. Use them to mount the CX at two points: upper and lower or right and left ends. See "GS 04L31A01-01E" for the dimensions of the panel cutouts when the instruments are horizontally/vertically mounted without space between them. The tolerance is  $\pm 3\%$  ( $\pm 0.3 \text{ mm}$  for less than 10 mm) unless otherwise specified. Weight: CX1000: 2.6 kg, CX1006: 3.0 kg, CX1200: 3.0 kg, CX1206: 3.1 kg, CX2000: 6.3 kg, (Approximately) CX2010: 6.6 kg, CX2020: 7.0 kg, CX2200: 6.7 kg, CX2210: 6.9 kg, CX2220: 7.2 kg, CX2410: 7.1 kg, CX2420: 7.5 kg, CX2610: 7.4 kg, CX2620: 7.7 kg

### CX1000

Model	Suffix Code	Option Code	Remarks
CX1000			DAQSTATION CX1000 (Embedded loops: 0 loop, Measurement channels: 0ch)
CX1006			DAQSTATION CX1000 (Embedded loops: 0 loop, Measurement channels: 6ch)
CX1200			DAQSTATION CX1000 (Embedded loops: 2 loops, Measurement channels: 6ch)
CX1206			DAQSTATION CX1000 (Embedded loops: 2 loops, Measurement channels: 6ch)
External storage medium	-1		3.5 in. floppy disk drive
	-2		Zip disk drive provided with medium
	-3		CompactFlash memory card (CF + Adapter)
Communication port	-0		Ethernet only
	-1		Ethernet, RS-232C communication interface
	-2		Ethernet, RS-422A/485 communication interface
Language		-2	English
Option	/A6		Measurement alarm (DO 6)
	/A6R		Measurement alarm (DO 6, DI 8)
	/A4F		Measurement alarm (DO 4, FAIL/Memory end detection and output)
	/A4FR		Measurement alarm (DO 4, DI 8, FAIL/Memory end detection and output)
	/BT1		Batch header function
	/M1		Computation functions (including report functions)
	/N2		3 legs isolated RTD
	/P1		24 V DC/AC power supply
/PG1		Program control (number of program patterns : 4)	
/PG2		Program control (number of program patterns : 30)	

## Accessories

### Optional Accessories

Product	Model (Part No.)	Specification
Shunt resistor for standard screw terminals	415920	250Ω±0.1%
	415921	100Ω±0.1%
	415922	10Ω±0.1%
3.5-inch floppy disk	705900	2 HD(10 units)
Zip disk	A1053MP	100 MB
CompactFlash memory card (CF + Adapter)	B9968NL	32 MB or more
Mounting bracket	B9900BX	—

## Related Products

### Green Series Digital Indicating Controllers

Includes the "Super" overshoot control function and "Super 2" hunting control function.

- ◆ UT550 includes eight controller modes, such as cascade control.
- ◆ UT750 also provides two-loop control and custom calculations.



UT550



UT750

### DAQSTATION DX100/DX200

The data acquisition and recording stations have state-of-the-art networking functions.

- ◆ 10Base-T Ethernet support is a standard feature.
- ◆ A wide-viewing-angle, high-resolution TFT color LCD panel
- ◆ Storage medium (floppy discs, ZIP, Compact flash memory card (CF + Adapter))
- ◆ IEC529-IP65 standard to keep out dust, grit and water spray



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#### NOTICE

- Before operating the product, read the instruction manual thoroughly for proper and safe operation.
- If this product is for use with a system requiring safeguards that directly involve personnel safety, please contact the Yokogawa sales offices.