Specifications

See the general specifications (GS 04L01A01-00E and GS 04L02A01-00E) for the detailed specifications.

SPECIFICATIONS

Standard Specifications

■ General Specifications

Attachment: Embedded panel (vertical panel)
The attachment angle may be slanted 30° to the rear. Left-right horizontal.
Attached panel thickness: 2–26 mm
Materials: Case:Steel
Bezel:Polycarbonate
Front filter:Polycarbonate
Paint colors: Bezel:Charcoal gray light (Munsell 10.0B 3.6/0.3 or equivalent)
Case:Grayish blue-green (Munsell 2.0B 5.0/1.7 or equivalent)
Front panel dustproof/water resistance specifications:
Compliant with IEC529-IP65
Compliant with NEMA No. 250 TYPE4 (except icing test)

■ Input unit

Number of inputs and measurement periods

Model	Inputs	Measurement period	Event file sampling period
DX102	2	125 ms	125,250,500 ms, 1,2,5,10,30,60,120,300,600 s
DX104	4		
DX106	6	1 second (2 seconds for A/D integration time of 100 ms)	1,2,5,10,30,60,120,300,600 s
DX112	12		
DX204	4	125 ms	125,250,500 ms, 1,2,5,10,30,60,120,300,600 s
DX208	8		
DX210	10	1 second (2 seconds for A/D integration time of 100 ms)	1,2,5,10,30,60,120,300,600 s
DX220	20		
DX230	30		

Measurement range :

Input type	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	
	50 V	-50.00 to 50.00 V	
TC	R *1	0.0 to 1760°C	32 to 3200°F
	S *1	0.0 to 1760°C	32 to 3200°F
	B *1	0.0 to 1820°C	32 to 3200°F
	K *1	-200.0 to 1370°C	-328 to 2498°F
	E *1	-200.0 to 800°C	-328.0 to 1472.0°F
	J *1	-200.0 to 1100°C	-328.0 to 2012.0°F
	T *1	-200.0 to 400°C	-328.0 to 752.0°F
	N *1	0.0 to 1300°C	32 to 2372°F
	W *2	0.0 to 2315°C	-328.0 to 4199°F
	L *3	-200.0 to 900°C	-328.0 to 1652.0°F
	U *3	-200.0 to 400°C	-328.0 to 752.0°F
RTD *5	Pt100 *4	-200.0 to 600°C	-328.0 to 1112.0°F
	JPt100 *4	-200.0 to 550°C	-328.0 to 1022.0°F
DI	DCV input (TTL)	OFF: less than 2.4 V ON: more than 2.4 V	
	Contact input	Contact on/off	

*1 R, S, B, K, E, J, T, N: IEC584-1 (1995); DIN IEC584, JIS C 1602-1995
*2 W: W-5%, Rd/W-26% Rd (Hoskins Mfg. Co.), ASTM E988
*3 L: Fe-CuNi, DIN43710, U: Cu-CuNi, DIN43710
*4 Pt100: JIS C 1604-1997, IEC 751-1995, DIN IEC751-1996,
JPt100: JIS C 1604-1989, JIS C 1606-1989
*5 Measuring current: i = 1 mA

Thermocouple burnout : Detector ON/OFF switching
Burnout upscale/downscale switching

Calculations :
Differential calculation : The difference between any two channels can be calculated.
Calculable inputs : DCV, TC, RTD
Linear scaling :
Scalable inputs : DCV, TC, RTD
Scalable range : -30,000 to 30,000
Square root :
Scalable input : DCV
Scalable range : -30,000 to 30,000

■ Display

Display: DX100: 5.5-inch color TFT LCD (320 × 240 pixels)
DX200:10.4-inch color TFT LCD (640 × 480 pixels)
* Some LCD display pixels may remain constantly on or constantly off, and brightness variations may occur due to the properties of the liquid crystal. Please note that this does not mean the display is broken.

Trend/bar graph display colors: DX100: Any of 12 colors
DX200: Any of 16 colors
Background: White or black
Status display: Display group name, login user name (when using login function), time (year/month/date, hour:minute:second), batch name (with /BT1), recording operation, memory status, media status, calculation status, key lock status, email status, main alarm display
Display types: Measurement data display (trend display, digital display, bar graph display), overview display, information display (alarm summary, message summary, memory summary), historical display
Trend display: Number of screens: 4 (4 groups)
Number of display channels:
DX100: Up to 6 channels per screen or all channels
DX200: Up to 10 channels per screen or all channels
Waveform update rates:
DX102, DX104: 15/30 seconds; 1/2/5/10/20/30 minutes; 1/2/4/10 hours/div
DX106, DX112: 1/2/5/10/20/30 minutes; 1/2/4/10 hours/div
DX204, DX208: 15/30 seconds; 1/2/5/10/20/30 minutes; 1/2/4/10 hours/div
DX210, DX220, DX230: 1/2/5/10/20/30 minutes; 1/2/4/10 hours/div
Direction: Vertical or horizontal
Thickness: 1, 2, or 3 dots
Scale:DX100: 6
DX200: 10

Message display:Display of messages input through key input, communication, or remote input
Other displayed information: Digital value display, tripline, grid, hour:minute, update rate
Digital display: Number of screens: 4 (4 groups)
Number of display channels:
DX100: Up to 6 channels per screen or all channels
DX200: Up to 10 channels per screen or all channels
Update rate: 1 second
Display contents:
Measurements, channel/tag names, units, alarm statuses

Bar graph display: Number of screens: 4 (4 groups)
Number of display channels:
DX100: Up to 6 channels per screen or all channels
DX200: Up to 10 channels per screen or all channels
Update rate: 1 second
Direction: Vertical or horizontal
Scale: 4 to 12
Reference position:
Edge or center (only during horizontal display)
Display contents:
Measurements, channel/tag names, scale upper/lower limits, units, alarm statuses, upper/lower limit alarm points

Overview display: Update rate: 1 second
Display contents:
Measurements and alarm statuses on all channels

Information display: Display types:
Alarm summary, message summary, memory information, etc.
Split screen display (DX200)
Display contents:
The screen is divided into four windows. Any display type/display group may be displayed in the windows from measurement data display or information display.
Number of stored display types: 4 maximum
Data reference functions: Function:
Redisplay of data from internal memory or removable storage media
Display data: Display data files, event data files
Display layout: Split screen (two parts) or full screen
Time-axis actions: Reducing, enlarging, scrolling

■ Storage functions

Removable storage media: The following removable storage media options are available when ordering a system:
• 3.5-inch floppy drive (2HD)
• Zip drive (100MB)
• CompactFlash memory card (CF+Adapter)

File types: The following data are saved on removable storage media:

File type	Data contents	Format
Display data	Maximum and minimum values in the waveform update period, from data sampled in the measurement period	Binary
Event data	Instantaneous values sampled in specified sampling period	Binary
Manual sample data	Instantaneous values for each key input or contact input	ASCII
Statistical calculation (TLOG) data*	Data at TLOG time-out	Binary
Report data*	Data at report time-out	ASCII
Settings file	Settings for set mode/setup mode	ASCII

* When using calculation option (/M1)

Data saving period: Display data: Linked to waveform update rate.
Event data: Specify the sampling period.

Event data file trigger: Free, trigger, or rotate
Measurement data file combinations:
The following combinations of display data files and event files are permitted:
• Display data file only
• Event file (trigger, rotate, free) only
• Display data file + event file (trigger, rotate)

Data size: Display data: Measurement data: 4 bytes/record
Calculation data: 8 bytes/record
Event data: Event data :Measurement data:2bytes/record
Calculation data: 4 bytes/record

Display data files only

Display updating (min/div)	1 minute	5 minutes	20 minutes	30 minutes	60 minutes	240 minutes
Saving interval (seconds)	2 seconds	10 seconds	40 seconds	60 seconds	120 seconds	480 seconds
Sampling time	Approx. 27 hours	Approx. 5 days	Approx. 23 days	Approx. 34 days	Approx. 69 days	Approx. 277 days

Event data files only

Saving interval	1 second	5 seconds	10 seconds	30 seconds	60 seconds	120 seconds
Sampling time	Approx. 27 hours	Approx. 5 days	Approx. 11 days	Approx. 34 days	Approx. 69 days	Approx. 138 days

Displays data files + event files / Display data files

Display updating (min/div)	1 minute	5 minutes	20 minutes	30 minutes	60 minutes	240 minutes
Saving interval (seconds)	2 seconds	10 seconds	40 seconds	60 seconds	120 seconds	480 seconds
Sampling time	Approx. 20 hours	Approx. 4 days	Approx. 17 days	Approx. 26 days	Approx. 52 days	Approx. 208 days

Display data files + event files/Event files

Saving interval	1 seconds	5 seconds	10 seconds	30 seconds	60 seconds	120 seconds
Sampling time	Approx. 6.9 hours	Approx. 34 hours	Approx. 2 days	Approx. 8 days	Approx. 17 days	Approx. 34 days

Specifications

See the general specifications (GS 04L01A01-00E and GS 04L02A01-00E) for the detailed specifications.

File saving method: Auto save or manual
Auto save: Display data file: Saved to removable storage media at fixed intervals (10 minutes to 31 days).
Event file: Saved to removable storage media at fixed intervals (3 minutes to 31 days) with free trigger, or saved at end of sampling with trigger or repeat.
Manual save: Data saved when removable storage media is inserted.

■ Alarm functions

Number of settings: Maximum 4 per channel
Alarm types: Upper/lower limits, difference upper/lower limits, change rate increase/decrease limits, delay upper/lower limits (alarm delay)
Change rate alarm interval: Measurement period × 1–15
Hysteresis: Switched between ON (0.5% of display span) and OFF (same for all channels/levels)
Display: Status (alarm type) display and common alarm display shown on digital display unit when alarm occurs.
Switching between display holding/non-holding.
Notification: Email notification
Storage: Stored information: Alarm occurrence/clear time, alarm type
Number of stored records: Most recent 120 records maximum
Output: Output points: DX100 (with option): 2, 4, or 6 points
DX200 (with option): 2, 4, 6, 12, or 24 points
Operations: Switching between excitation/non-excitation, holding/non-holding

■ Communication functions

Medium: 10BASE-T
Protocols: SMTP, HTTP, FTP, TCP, UDP, IP, ARP, ICMP
Email sending function: Notification types:
The following information is presented by email:
Alarm notification: Alarm information is presented when an alarm occurs or is cleared.
System notification: Notification of time when power is interrupted/restored. Notification of time remaining when internal memory overwriting starts. Notification of remaining free space when remaining space in storage media falls to 10%.
Periodic notification: Periodic notification of instantaneous values at preset times or intervals.
Report notification: Notification of report data when report time-out occurs (with /M1 option)
Notification addressee: 2 address groups (multiple addresses may be specified in each group, with a maximum of 150 characters per group)
Web server function: Displays the DX unit's screen, alarm information, instantaneous values, etc. on a browser. Messages can be input to the DX unit from the browser.
FTP client function: Automatic file transfer from DX unit (display data files, event files, report file)
FTP server function: Manual file transfer of information on removable storage media, directory editing, file deletion, and checking free space on removable storage media, working through a host computer
Real-time monitor function: Real-time remote monitoring of DX unit measurement data (special protocol)

■ Power supply

Rated supply voltage: 100–240 VAC (automatic switching)
Operating supply voltage range: 90–132, 180–264 VAC
Rated supply frequency: 50/60 Hz (automatic switching)

DX100 power consumption

Supply voltage	With LCD saver ON	Normal mode	Maximum
100 VAC	Approximately 30 VA	Approximately 32 VA	Approximately 45 VA
240 VAC	Approximately 42 VA	Approximately 47 VA	Approximately 62 VA

DX200 power consumption

Supply voltage	With LCD saver ON	Normal mode	Maximum
100 VAC	Approximately 50 VA	Approximately 53 VA	Approximately 75 VA
240 VAC	Approximately 78 VA	Approximately 80 VA	Approximately 106 VA

Normal operating requirements

Supply voltage ranges : 90 to 132, 180 to 250 V AC
Supply frequencies : 50 Hz ± 2%, 60 Hz ± 2%
Ambient temperature : 0 to 50°C
Ambient humidity : 20 to 80% RH (at 5 to 40°C)

Reference performance specifications

Measurement and display accuracy :
(reference operating conditions: temperature of 23 ± 2°C, humidity 55 ± 10% RH, supply voltage of 90 to 132 or 180 to 250 V AC, supply frequency of 50/60 Hz ± 1%, minimum 30 minutes warmup time; no vibrations or other which would adversely affect the performance of measuring instruments)

Input type	Input	Measurement accuracy (digital reading)	Maximum digital reading resolution
DC voltage	20 mV	±(0.1% of rdg + 2 digits)	10 μV
	60 mV		10 μV
	200 mV		100 μV
	2 V		1 mV
	6 V		1 mV
	20 V		10 mV
	50 V	±(0.1% of rdg + 3 digits)	10 mV
Thermocouple (without reference junction compensation accuracy)	R	±(0.15% of rdg + 1°C) R and S are ±3.7°C for 0 to 100°C, and ±1.5 for 100 to 300°C And B is ±2°C for 400 to 600°C; accuracy not guaranteed for less than 400°C	0.1°C
	S		
	B		
	K	±(0.15% of rdg + 0.7°C) ±(0.15% of rdg + 1°C) for -200 to -100°C	
	E	±(0.15% of rdg + 0.5°C)	
	J	±(0.15% of rdg + 0.5°C) ±(0.15% of rdg + 0.7°C) for -200 to -100°C	
	T		
	N	±(0.15% of rdg + 0.7°C)	
	W	±(0.15% of rdg + 1°C)	
	L	±(0.15% of rdg + 0.5°C) ±(0.15% of rdg + 0.7°C) for -200 to 100°C	
	U		
RTD	Pt100	±(0.15% of rdg + 0.38C)	
	JPt100		

Reference junction compensation: INT (internal)/EXT (external) switching (common to all channels)
Reference junction compensation accuracy
Types R, S, B, W: ± 1°C
Types K, J, E, T, N, L, U: ± 0.5°C (for measurement at 0°C or higher)
Maximum input voltage: 2 VDC or lower voltage range and thermocouple: ±10 VDC (continuous)
6 VDC or higher voltage range: ±60 VDC (continuous)
Input resistance: 2 VDC or lower voltage range and thermocouple: 10 MΩ or higher
6 VDC or higher voltage range: Approximately 1 MΩ
Input external resistance: DC voltage, thermocouple input: 2 kΩ or lower
RTD input: 1 wire, 10 Ω or less (all three wires equal)
Input bias current: 10 nA or less
Maximum common mode noise voltage:
250 VAC rms (50/60 Hz)
Common mode rejection ratio (CMRR):
120 dB (50/60 Hz ±0.1%, 500 Ω unbalanced, across minus terminal and ground)
Normal mode rejection ratio (NMRR):
40 dB (50/60 Hz ±0.1%)
Maximum noise voltage across channels: 250 VAC rms (50/60 Hz)
Interference across channels: 120 dB (for 500 Ω input external resistance and 60 V input to other channel)

Specifications for options

■ Alarm relay contact output (/AR1, /AR2, /A3, /A4*, /A5*)

Function: Relay output through back side when alarm occurs
Outputs: 2, 4, 6, 12* or 24*
Relay contact capacitance: 250 VDC/0.1 A (resistance load), 250 VAC (50/60 Hz)/3 A
Output form: NO-C-NC (switching between excitation/non-excitation, AND/OR, holding/non-holding)
* /A4 and /A5 are for DX200 only.

■ Batch functions

Batch number functions: In operation mode, batch names and comments can be input. Automatic incrementing of lot numbers at each batch start. Preset application names, supervisor names, and manager names can be viewed on the batch input screen.
Data files: The following information is added to the data file header:
• User name
• Application name
• Supervisor name
• Manager name
• Batch name (text string with up to 16 characters, plus 4-digit lot number)
• Comments (up to 32 characters × 3 lines)

■ Serial communications (/C2, /C3)

Functions: Control and settings through host computer, data output to host
Media: EIA RS-232 (/C2) or RS-422-A/485 (4-wire) (/C3) compliant
Protocol: Special protocol or Modbus
Synchronization method: Start-stop synchronization
Communication method (RS-422-A/485):
4-wire half-duplex multi-drop connection (1:N, where N is 1–32)
Transfer rate: 1200, 2400, 4800, 9600, 19,200, 38,400 bps
Data length: 7/8 bits
Stop bit: 1 bit
Parity: ODD, EVEN, NONE
Maximum communication distance:
1.2 km (RS-422-A/485)
Communication mode: Control and settings I/O are in ASCII mode. Measurement data are output in ASCII or binary mode.
Modbus communication: Operation mode: RTU MASTER or RTU SLAVE
RTU MASTER: Capable of data acquisition for 8 packet groups. Registers of a continuous data type in the same slave can be registered in a single packet group.
RTU SLAVE: Outputs measurement/calculation data and alarm statuses.

■ FOUNDATION Fieldbus communication functions (/CF1)

Interface: FOUNDATION™ Fieldbus H1 (transfer rate: 31.25 kbps)

Physical type: 113 (standard-power signaling, bus powered, non I.S.)
Communication line conditions: Power voltage: 9–32 VDC, supply current: 16.5 mA (maximum)
Connection: M4 screws (2 terminals)
Signal insulation: 500 Vrms withstand voltage between communication terminal and ground (50/60 Hz, for one minute)
Device type: Link master
AI blocks: 8 blocks (one channel per block) for sending DX measurement/calculation data to other equipment
MAI block: 1 block (8 channels) for sending DX measurement/calculation data to other equipment
MAO block: 1 block (8 channels) for receiving data from other equipment and displaying/recording the data

■ **VGA output (/D5) (DX200 only)**
Enables connection to external display device.

■ **FAIL/memory end output (/F1)**
Relay output is performed when a system error occurs, when internal memory overwriting starts, or when the removable storage media free space falls to a certain level.
Manual saving: Relay output a specified number of hours before internal memory overwriting starts (1, 2, 5, 10, 20, 50, or 100 hours).
Auto-saving: Relay output when the external storage medium free capacity falls to 10%.
Relay contact capacitance: 250 VDC/0.1 A (resistance load), 250 VAC (50/60 Hz)/3 A

■ **Clamp input terminal (/H2)**
A clamp input terminal is used as an input terminal.

■ **Desktop type (/H5□, /H5)**
Includes carrying handle and power cord (model /H5 does not include power cord)

■ **Calculation functions (/M1)**
These functions enable the calculations listed below, as well as displaying and recording trends and digital values on calculation channels.
Number of calculation channels:
DX102, DX104: 8 channels
DX106, DX112: 12 channels
DX204, DX208: 8 channels
DX210, DX220, DX230: 30 channels
Calculation types
General calculations: Arithmetic calculations (+, -, *, /), square roots, absolute values, common logarithms, exponents, powers, relational calculations (<, >, =, ≠), logical calculations (AND, OR, NOT, XOR)
Statistical calculations: Time-series data averages, maximum values, minimum values, totalized values
Moving averages: Moving averages are determined for calculation results.
Constants
DX100: Up to 12 constants can be set.
DX200: Up to 30 constants can be set.
Online digital communications input:
Can be used for calculation formulas other than statistical calculations.
DX100: 12 channels
DX200: 30 channels
Remote inputs: Up to 8 remote inputs can be used. Remote statuses (0/1) can be used in calculation formulas.
Reporting functions
Report types: Hourly reports, daily reports, hourly + daily reports, daily + weekly reports, daily + monthly reports
Calculation types: Average values, maximum values, minimum values, totalized values

■ **Cu10/Cu25 RTD input/3-wire isolated RTD input (/N1)**
This option enables Cu10 and Cu25 inputs in addition to the standard inputs.

■ **3-wire isolated RTD input (/N2)**
With this option, all RTD input points are isolated (A, B, and b are all isolated).
* Only available with DX106, DX112, DX210, DX220, and DX230.

■ **24 VDC/AC power driven model (/P1)**
Rated supply voltage: 24 VDC or 24 VAC (50/60 Hz)
Operating supply voltage range: 21.6 to 26.4 VDC/AC
DX100 power consumption:

Supply voltage	With LCD saver ON	Normal mode	Maximum
24 VDC	17 VA	19 VA	30 VA
24 VAC (50/60 Hz)	28 VA	32 VA	45 VA

DX200 power consumption

Supply voltage	With LCD saver ON	Normal mode	Maximum
24 VDC	34 VA	35 VA	54 VA
24 VAC (50/60 Hz)	50 VA	53 VA	76 VA

■ **Remote control (/R1)**
The remote control can be used to control the following through contact input (as many as 8 points can be set):
- Memory start/stop (level)
- Event file external trigger input (level)
- Time setting (time set to reference time through contact; trigger; 250 ms or greater)
- Calculation start/stop (level)
- Calculation data reset (trigger; 250 ms or greater)
- Manual sampling (trigger; 250 ms or greater)
- Message writing (as many as 8 types can be set; trigger; 250 ms or greater)
- Load settings (as many as 3 types can be set; trigger; 250 ms or greater)
- Alarm ACK (trigger; 250 ms or greater)
- Snapshot (trigger; 250 ms or greater)

■ **24 VDC transmitter power supply output (/TPS2*, /TPS4, /TPS8*)**
Output voltage: 22.8–25.2 VDC (for rated load current)
Rated output current: 4–20 mA DC
Maximum output current: 25 mA DC (overcurrent assured operation current: approximately 68 mA DC)
Permitted conductor resistance: RL ≤ (17.8 – transmitter minimum operating voltage)/0.02 A (250 Ω load shunt resistance; drop voltage not included)
Maximum cable length: 2 km (using CEV cable)
Insulating resistance: 20 MΩ or greater across output and main unit ground (500 VDC)
Withstand voltage: 500 VAC across output and main unit ground (50/60 Hz; I = 10 mA), for one minute
Across output terminals: 500 VAC (50/60 Hz; I = 10 mA), for one minute
* /TPS2 is for DX100; /TPS8 is for DX200 only.

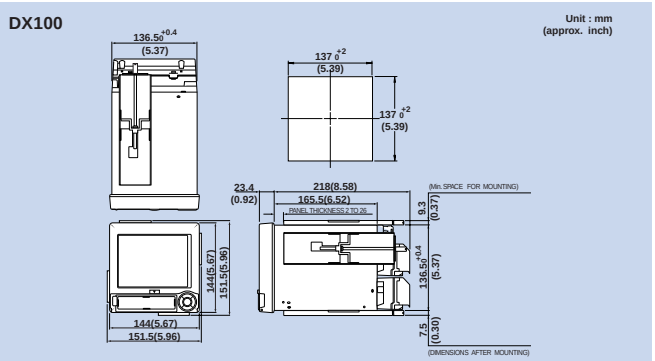
Application software (DAQSTANDARD)

■ **System requirements**
Operating system: Microsoft Windows 98/Me/2000/NT4.0/XP
Processor: Pentium 166 MHz MMX or higher (Pentium II 266 MHz or higher recommended)
RAM: 32MB or more (64MB or more recommended)
Disk drive: CD-ROM compatible with Windows 98/Me/2000/NT4.0/XP
Free hard drive space: 10MB or more (100MB or more recommended)
Video card: Video card compatible with Windows 98/Me/2000/NT4.0/XP and capable of displaying 32,000 colors or more (video card capable of displaying 64,000 colors or more recommended)
Printer: Printer and printer driver compatible with Windows 98/Me/2000/NT4.0/XP

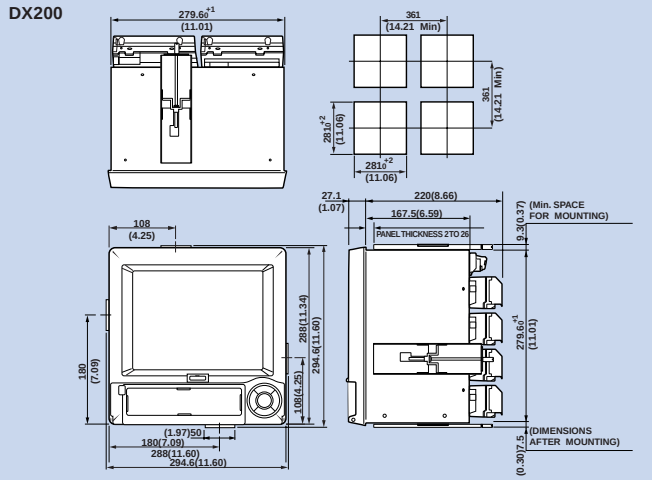
■ **Main functions (package)**
Setup software: Removable storage media: Setup and set mode settings
Online settings: Setup and set mode settings other than communication-related settings (e.g., IP address)
Data Viewer: Number of display channels:
32 channels per group, maximum 30 groups
Display functions: Waveform display, digital display, circular display, list display, TLOG display, report display, etc.
Linked file display: Data files generated by breaking up contiguous data into multiple files during continuous data acquisition (due to auto-saving or a power interruption) can be displayed as linked files. (A total of one million data entries may be linked together.)
Interval calculations: Maximum, minimum, average, rms, p-p
File conversion: Conversion to ASCII, Lotus 1-2-3, and Excel formats
Printouts: Printouts of replayed data

Dimensions

DX100



DX200



Two panel brackets are used in panel-mounting the DX100 and DX200. They may be used either on the left and right or top and bottom. See Yokogawa's General Specification (GS 4L1A1-E) for information on panel cutting dimensions for DX100 vertical or horizontal attachments. Unless otherwise indicated, tolerance is ±3% (or ±0.3 mm for dimensions under 10 mm).

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Options

DX100

Model code	Suffix code	Optional code	Description
DX102			DAQSTATION DX100 (2 ch)
DX104			DAQSTATION DX100 (4 ch)
DX106			DAQSTATION DX100 (6 ch)
DX112			DAQSTATION DX100 (12 ch)
External memory	-1		FDD
	-2		Zip (with medium)
	-3		CompactFlash memory card (CF+Adapter)
Display language	-2		English/Germany/French, deg F & Summer/ winter time (with English DAQSTANDARD)
Options		/AR1	Alarm output 2 points/Remote control*1*2
		/AR2	Alarm output 4 points/Remote control*1*2
		/A3	Alarm output 6 points*1*3
		/BT1	Batch function
		/C2	RS-232 interface (including Modbus Master/ Slave protocol)*4*5
		/C3	RS-422-A/485 interface (including Modbus Master/Slave protocol)*4*5
		/CF1	FOUNDATION Fieldbus*4*6
		/F1	Fail/memory end detection and output*3
		/H2	Clamped input terminal
		/H5	Desktop type (without power code, screw type power terminal)*7
		/H5[ ]	Desktop type (with power code)*8
		/M1	Mathematical function (with report function)
		/N1	Cu10, Cu25 RTD input/3 legs isolated RTD
		/N2	3 legs isolated RTD*9
		/P1	24 VDC/AC power supply
		/TPS2	24 VDC transmitter power supply (2 loops)*10
		/TPS4	24 VDC transmitter power supply (4 loops)*11
		/R1	Remote control

*1 /AR1, /AR2, and /A3 cannot be specified together.
*2 If /AR1 or /AR2 is specified, /R1 cannot be specified.
*3 If /A3 is specified, /F1 cannot be specified.
*4 /C2, /C3, and /CF1 cannot be specified together.
*5 In case that Modbus master function is utilized, /M1 must be specified.
*6 In case that FOUNDATION Fieldbus (/CF1) is specified, /M1 must be specified together.
*7 In case that 24 VDC/AC power supply (/P1) and desktop type are specified together, /H5 must be specified.
/P1 and /H5[ ] cannot be specified together.
*8 /H5[ ]
- D ..... Power cord UL, CSA st'd
- F ..... Power cord VDE st'd
- R ..... Power cord SAA st'd
- J ..... Power cord BS st'd
- H ..... Power cord GB st'd

*9 /N2 cannot be specified for DX102, DX104.
*10 In case that /TPS2 is specified, /TPS4, /AR2, /A3, or /F1 cannot be specified.
*11 In case that /TPS4 is specified, /TPS2, /AR1, /AR2, /A3, or /F1 cannot be specified.

DX200

Model code	Suffix code	Optional code	Description
DX204			DAQSTATION DX200 (4 ch)
DX208			DAQSTATION DX200 (8 ch)
DX210			DAQSTATION DX200 (10 ch)
DX220			DAQSTATION DX200 (20 ch)
DX230			DAQSTATION DX200 (30 ch)
External memory	-1		FDD
	-2		Zip (with medium)
	-3		CompactFlash memory card (CF+Adapter)
Display language	-2		English/Germany/French, deg F & Summer/ winter time (with English DAQSTANDARD)
Options		/AR1	Alarm output 2 points/Remote control*1*2
		/AR2	Alarm output 4 points/Remote control*1*2
		/A3	Alarm output 6 points*1
		/A4	Alarm output 12 points*1
		/A5	Alarm output 24 points*1*3
		/BT1	Batch function
		/C2	RS-232 interface (including Modbus Master/Slave protocol)*4*5
		/C3	RS-422-A/485 interface (including Modbus Master/Slave protocol)*4*5
		/CF1	FOUNDATION Fieldbus*4*6
		/D5	VGA video output
		/F1	Fail/memory end detection and output*3
		/H2	Clamped input terminal
		/H5	Desktop type (without power code, screw type power terminal)*7
		/H5[ ]	Desktop type (with power code)*8
		/M1	Mathematical function (with report function)
		/N1	Cu10, Cu25 RTD input/3 legs isolated RTD
		/N2	3 legs isolated RTD*9
		/P1	24 VDC/AC power supply
		/TPS4	24 VDC transmitter power supply (4 loops)*10
		/TPS8	24 VDC transmitter power supply (8 loops)*11
		/R1	Remote control

*1 /AR1, /AR2, /A3, /A4, /A5 cannot be specified together.
*2 If /AR1 or /AR2 is specified, /R1 cannot be specified.
*3 If /A5 is specified, /F1 cannot be specified.
*4 /C2, /C3, and /CF1 cannot be specified together.
*5 In case that Modbus master function is utilized, /M1 must be specified.
*6 In case that FOUNDATION Fieldbus (/CF1) is specified, /M1 must be specified together.
*7 In case that 24 VDC/AC power supply (/P1) and desktop type are specified together, /H5 must be specified.
/P1 and /H5[ ] cannot be specified together.
*8 /H5[ ]
- D ..... Power cord UL, CSA st'd
- F ..... Power cord VDE st'd
- R ..... Power cord SAA st'd
- J ..... Power cord BS st'd
- H ..... Power cord GB st'd

*9 /N2 cannot be specified for DX204, DX208
*10 In case that /TPS4 is specified, /TPS8 or /A5 cannot be specified.
*11 In case that /TPS8 is specified, /TPS4 or /A5 cannot be specified.
In case that /TPS8 is specified, /F1 and /A4 cannot be specified together.

Application Software

Model	Description	Operating System
DXA100-02	DAQSTANDARD	Windows 98/Me/NT4.0/2000/XP
WX104/CD1	DAQEXPLORER	Windows 98/Me/NT4.0/2000/XP
DXA310-021	DAQ-PharmBio	Windows 98/Me/NT4.0/2000/XP
DXA410-02	DAQOPC(Basic)	Windows NT4.0/2000
DXA410-04	DAQOPC(Advanced)	Windows NT4.0/2000
WX101/CD1	DAQLOGGER(1600 channels)	Windows 98/NT4.0/2000/XP
WX81/CD1	DAQLOGGER Client(1600 channels)	Windows 98/NT4.0/2000/XP

Accessories

Accessories (sold separately)

Product	Product Model (part number)	Specification
Shunt resistor for screw terminal (stamdard)	415920	250 Ω ± 0.1%
	415921	100 Ω ± 0.1%
	415922	10 Ω ± 0.1%
Shunt resistor for clamp terminal (for/H2)	438920	250 Ω ± 0.1%
	438921	100 Ω ± 0.1%
	438922	10 Ω ± 0.1%
3.5-inch floppy disks	705900	2HD (10 disks)
Zip disk	A1053MP	100 MB
CompactFlash memory card (CF+Adapter)	B9968NL	32 MB or more
Fuse	A1347EF(DX100)	250V 1A TL
	A1423EF(DX200)	250V 1.25A TL
	A1352EF(DX100)	250V 4A TL (for /P1)
	A1463EF(DX200)	250V 6.3A TL (for /P1)
Bracket	B9900BX	–
Module removal handle	790581	–

Related Products

DX100L DAQSTATION Special Housing Model

Special housing model for advanced network functions

- Works with recorders with different panel cuts and depths than the standard DX100.
- Foxboro(SPEC200),

DX200C DAQSTATION Circular Display Model

Circular display model for advanced network functions

- Enables circular display in addition to ordinary T-Y trend display.
- Period settings: 1/2/6/8/12/16 hours; 1/2 days; 1/2/4 weeks
- 4 or 8 input channels

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.

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