General Specifications

DAQSTATION DX1006N /S6 and /S66



This Sheet is a subset from the specifications of the Yokogawa standard product DX1000N (see footer "based on ..."). This document describes functions and properties of the qualified model to be used in environments that require data integrity and authenticity verification and controlled environmental parameters.

GS 04L43B01-01E-S6-S66

OVERVIEW

The DX1006N is a inner chassis removable model. This provides access to all of the internal components of the DX1006N from the front panel. It can be hooked up to network via Ethernet, which enables to inform by E-mail and to monitor on Web site as well as to transfer files by using FTP.

The recorder is equipped with six input channels. The data saved on a CF card can be converted by data conversion software to Excel, or ASCII format file, facilitating processing on a PC. Not only this, the Viewer software allows a PC to display waveforms on its screen and to print out waveforms. The model with option code /S6 is for DC voltage input only. The model with option code /S66 is for DC mA input only.

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STANDARD SPECIFICATIONS

General Specifications

Construction

Mounting:

Flush panel mounting (on a vertical plane) Mounting may be inclined downward up to 30 degrees from a

horizontal plane.

Allowable panel thickness:

2 to 26 mm

Material: Case: drawn steel

Bezel: polycarbonate

Display filter: polycarbonate

Case color:

Case:

Grayish blue green (Munsell 2.0B 5.0/1.7 or

equivalent)

Bezel:

Charcoal grey light (Munsell 10B

3.6/0.3 or equivalent)

Dimensions:

144 (W) x 144 (H) x 254.1 (D) mm

Weight: approx. 3.7 kg*

*without optional features

Input

Number of inputs:

DX1006N: six channels

Measurement interval:

DX1006N: 1 s,

Inputs: DC Voltage (with /S6 Model)

DC Ampere (with /S66 Model)



Input Type	Range	Measuring Range
DCV (/S6)	200 mV	-200.00 to +200.00 mV
	20 V	-20.000 to +20.000 V
		For applications according
		to KTA requirements the
		range between -10.000V
		and +10.000V has to be
		used!
DCA (/S66)*	200mV	Measuring Range:
		-200.00 to +200.00 mV
		Scaling:
		-20.000 to +20.000 mA

^{*/}S66 Model has internal 10Ω shunt resistor for each input channel to convert current into voltage

A/D integration time:

AUTO (20ms, 24V DC/AC Option /P1)

Moving average:

Moving average on/off selectable for each channel

Moving average cycles 2 to 400 selectable

Calculation:

Differential computation:

Between any two channels

Linear scaling:

Scaling limits: -30000 to 30000 Decimal point: user-selectable

Engineering unit: user-definable, up to 6

characters

Over value: Exceeds ± 5% of scaling

limits (on/off selectable)

Display

Display unit:

5.5-inch TFT color LCD (VGA, 320 x 240 pixels *)

Note *) In the part of crystal display, there are some pixels that can't always turn on or off. Please understand that the brightness of screen looks uneven because of characteristics of crystal display, but it is not out of order.

Display group:

Each measurement channel and computation channel can be assigned to display group of the trend, digital and bar graph display.

Number of display:

10 groups

Number of assignable channels for one group: 6 channels

Display color:

Trend/Bar graph:

Selectable from 24 colors

Background:

White or black selectable

Trend display:

Trend display type:

Vertical, horizontal, landscape, horizontal or split selectable

Number of indication channels:

6 channels per display (maximum)

Number of display:

10 displays (10 groups)

Line width:

1, 2, and 3 pixels selectable

Scales: Maximum 6 scales.

Bar graph, green band area and alarm mark can be displayed on scale display.

Number of divisions:

Selectable from 4 to 12 or C10 (10 divisions by main scale mark and scale values are displayed on 0, 30, 50, 70 and 100% position).

Waveform span rate:

15, 30 sec./div.,1, 2, 5, 10, 15, 20, 30 min., 1, 2, 4, 10 hours/div selectable

Bar graph display:

Direction: Vertical or horizontal selectable

Number of indication channels:

6 channels per display

Number of display:

10 displays (10 groups)

Scales: Green band area and alarm mark can

be displayed on scale display.

Number of divisions:

Selectable from 4 to 12

Reference position: Left, right or center

Display renewal rate: 1 s

Digital indication:

Number of indication channels:

6 channels per display

Number of display:

10 displays (10 groups)

Display renewal rate: 1 s

Overview display:

Number of indication channels:

Measuring values and alarm status of all

Information display:

Alarm summary display:

Display the list of latest 1000 alarms summary. Jump to historical trend display by cursor pointing.

Message summary display:

Display the list of latest 450 messages and time.

Jump to historical trend display by cursor pointing.

Memory information:

Display the file list in internal memory. Jump to historical trend display by cursor pointing.

Relay status:

Display the on/off status of internal switch and relay output.

Log display (Protocol):

Log display types:

Login log, error log, communication log, FTP log, SNTP log,

Tags:

Display the tag number and tag comment. Tag number: 16 characters maximum Tag comment: 32 characters maximum

Messages:

Number of characters:

32 characters maximum

Number of messages:

100 messages (including 10 free messages)

Message adding function:

Message can be added on historical display.

Other display contents:

Status display area:

Date & time (year/month/day,

hour:minute:second), batch name (batch

number + lot number), login user name, display name, internal memory status, status indication icon

Trend display area:

Grid lines (number of divisions selectable from 4 to 12), hour : minutes on grid, trip levels (line widths are selectable from 1, 2 and 3 pixels)

Historical data:

Loading of historical data from internal or external memory. Selectable by date and time.

LCD saver function:

The LCD backlight automatically dims or off (selectable) if no key is touched for a certain preset time (can be set from 1, 2, 5, 10, 30, and 60 min).

Display auto return function:

The display type automatically returns to registered display type if no key is touched for a certain preset time (can be set from 1, 2, 5, 10, 20, 30 and 60 min)

Custom display function:

Display can be customized by lay outing display parts. Display data is saved in internal memory or external medium.

Number of customized display:

28 displays maximum (3 in internal memory and 25 in external medium)

Display part:

- General parts (digital, bar, label, tag number, tag comment,)
- Scale parts
- Trend parts
- List parts (alarm list, message list)
- Figure parts (line, rectangle, circle)

Edit function:

Select parts, grid, edit parts (move, resize, property, copy, paste, layout order change, dependency of visual property), group control, delete, save display

Custom display data:

Contents: Display contents data (for each

display) Format: Text

Output: External medium Custom display data save/load:

Each or all custom display data file can be saved in specified directory. Custom display data can be loaded from specified directory.

Data Saving Function

External storage medium:

Medium: CompactFlash memory card (CF card)

Format: FAT16 or FAT32

Internal memory:

Medium: Flash memory Capacity: 400MB

Maximum number of files can be saved: 400 files (total number of display data file plus

event data file)

Automatic saving:

Event data:

In case of trigger free (continuously free running without trigger): Periodic saving to CF card

Media FIFO function:

Allows the oldest file to be deleted and the newest file to be saved if the free space on the CF card is insufficient (on/off selectable).

Data Saving Period:

Event file:

Linked with the specified sampling period

Event File Sampling Period:

DX1006N:

Selectable from 1, 2, 5, 10 sec.

Measurement data File:

Event file (stores instantaneous values sampled periodically at a specified sampling rate)

Files can be created in the following combinations: Event file only

Data format: YOKOGAWA private format (Binary)

Maximum data size per file: 8,000,000 byte (8MB)

Data per channel:

Event data file:

Measurement data.....2 byte/data Mathematical data.....4 byte/data

Sampling time:

Examples of Sampling Time for 1 file (8MB)*: In case of measurement ch = 6 ch and mathematical ch = 24 ch

Event Data file (approx.)

Data saving period	1s	2s	10s
Sampling time per file	19 hours	1,58 days	7,9 days

For calculation details see Appendix 1 in instruction manual IM04L41B01-01E Edition 6 or later.

File duration settings possible inside the calculation result are:

10/20/30 minutes or 1/2/3/4/6/8/12 hours or 1/2/3/5/7/10/14/31 days

Display hard copy:

Trigger:

Key operation or event action function Data format: png format

Drive/output: CF card or send to FTP-server

Data file retrieving function:

Data file in CF card or USB flash drive (only for USB option) can be retrieved and displayed.

Retrieved data file:

Event data file

Saving and retrieving of configuration data:

Configuration information can be saved and retrieved as text data.

Drive: CF card or USB flash drive (only for USB option)

Alarm Function

Number of alarm levels:

Up to four levels for each channel

Alarm types: High and low limits, differential high and low limits, high and low rate-of-change limits

and delay high and low Alarm delay time: 1 to 3600 s

Interval time of rate-of-change alarms:

The measurement interval times 1 to 32

Display: The alarm status (type) is displayed in the digital value display area upon occurrence of an alarm. A common alarm indication is also displayed.

Hysteresis:

Measure CH High/Low: 0.5 % of display span (or scaling span)

Delta High/Low: 0 % Math CH High/Low: 0 %

Outputs:

Output: Internal switch or relay output Number of internal switch: 30 points

Internal switch action: OR (disjunction, every alarm

may activate the switch)

Number of relay output points: 2 (/A1)

Relay action:

Energized (means Relay gets activated)
OR (disjunction, every alarm may activate the relay)

Memory (Alarm log):

The times of alarm occurrences/ recoveries, alarm types, etc. are stored in the memory. Up to 1000 latest alarm events are stored.

Event action function

General: Particular action can be executed by particular event.

Number of event action:

40 event action combinations can be used

Event:

Remote Input Level /Edge

User Key Edge

Action:

Time adjustment

Edge

Adjust internal clock to the nearest hour

Snapshot

Save display image to external media (CF)

Message input

Edge

Message writing

Write text messages on screen and save in the data file together with an event marker.

Security functions

General: Login function or key lock function can be set for each key operation or communication operation.

Key lock function:

On/off and password can be set for each operation key and FUNC operation.

Login function:

Using the login function described below, you can enter security settings on the instrument

- User name
- Password

User level and number of users:

System administrator:

5 users (all can be operated)

General user:

30 users (With user restrictions, you can set restrictions on each operation key and FUNC display operation.)

User restrictions setting:

10 kinds (for general users)

Clock

Clock: With calendar function (year of grace)
Clock accuracy: ±10 ppm, excluding a delay (of 1 second, maximum) caused each time the power is turned on.

Time setting method:

Key operation, event action function or SNTP client function

Time adjustment method:

During memory sample: Adjust 40 ms per second (No influence for measurement period)

During memory stop: Adjust at a time

Time zone: Time difference from GMT:

Settable from -1300 to 1300

Date display format:

Selectable from YYYY/MM/DD, MM/DD/ YYYY, DD/MM/YYYY or DD.MM.YYYY

DST function (summer/winter time):

The time at which the daylight savings time adjustment is automatically calculated and configured.

Communication Functions

Electrical specifications:

Confirms to IEEE802.3 (DIX specification for Ethernet frames)

Connection: Ethernet (10BASE-T), shielded twisted pair cable (STP)

Protocols: TCP, UDP, IP, ICMP, ARP, FTP, SNTP, DX private

FTP client function:

Data file auto-transfer from DX

Transferred data file:

Event data file and display image file (screenshot)

SNTP client function: The time on DX can be synchronized to the time of a SNTP server.

Setting/measurement server function:

Operation, setting or output of measurement data are available by DX private protocol.

Maintenance/test server function:

Output connection information or network information of the Ethernet communication.

Instrument information server function:

Output instrument information such as serial number or model name of DX.

Power Supply

See "24 VDC/AC Power Supply (/P1/S6 or /S66)" at page 13

Other Specifications

Memory backup:

A built-in lithium battery backs up the setup parameters (battery life: approximately10 years at room temperature).

Insulation resistance:

Each power terminal to ground terminal: see "24 VDC/AC Power Supply (/P1/S6 or /S66)" at page 13

Dielectric strength:

Power supply to ground terminal:

See "24 VDC/AC Power Supply (/P1/S6 or /S66)" at page 13

Contact output terminal to ground terminal: 1600 VAC (50 Hz), 1 min

Measuring input terminal to ground terminal: 1500 VAC (50 Hz), 1 min

Between measuring input terminals: 1000 VAC (50 Hz), 1 min

Between remote control terminal to ground terminal:

1000 VDC, 1 min

Safety and EMC Standards

EN61326-1 :2006 (IEC61326-1 :2005)

EN61000-6-4:2007 (IEC6100-6-4:2006)

EN55011 :2007 + A2 : 2007 (CISPR11 modified 2003 +

A1:2004 + A2:2006)

EN61000-6-2:2005 (IEC61000-6-2:2005)

EN61000-4-2:2009 (IEC61000-4-2:2008)

EN61000-4-3:2006 + A1:2008 (IEC61000-4-3:2006 +

A1 :2007)

EN61000-4-4:2004 (IEC61000-4-4:2004)

EN61000-4-5:2006 (IEC61000-4-5:2005)

EN61000-4-6:2009 (IEC61000-4-6:2008

EN61000-4-8:1993 + A1:2001 (IEC61000-4-8:1993 +

A1:2000)

EN61000-4-11 :2004 (IEC61000-4-11 :2004)

TÜVIS-Prüfgrundlagen : Kerntechnik G1.15.1 Fassung

von 04.2011

CE:

EMC directive:

EN61326-1 compliant, Class A Table 2 EN55011 compliant, Class A Group 1

Normal Operating Conditions

Power voltage:

See "24 VDC/AC Power Supply (/P1/S6 or

/S66)" at page 13

Ambient temperature:

5 to 50 °C

Ambient humidity:

20% to 80% RH (at 5 to 50 °C)

Extra ordinary Operation Conditions, induced vibrations due to external events:

Resistance to Vibrations in the Frequency Range between 5 and 35Hz (Seismic Event)

5 to 35 Hz.

 $7 g = 7 \times 9,81 \text{ m/s}^2 \text{ or less}$

1 octave/min

Resistance to Vibrations in the Frequency Range

between 5 and 100Hz (Plane Crash)

5 to 100 Hz,

 $7 g = 7 \times 9,81 \text{ m/s}^2 \text{ or less}$

10 octave/min

Shock: not acceptable

Magnetic field:

400 A/m or less (DC and 50 Hz)

Mounting position:

Can be inclined up to 30 deg backward. Mounting at an angle away from the

perpendicular is not acceptable.

Warm-up time:

At least 30 min after power on

Installation location:

In-room

Altitude: Less than 2000 m

Standard Performance

Measuring and Recording Accuracy:

(Reference conditions for calibration)

The following specifications apply to operation of the recorder under standard operation conditions.

Temperature:

23 °C ± 2 K

Humidity:

55% ± 10% RH

Warm-up time:

At least 30 min.

Other ambient conditions such as vibration should not adversely affect recorder operation.

The device is designed for a life time of 10 years. Spare parts supply as long as possible after

discontinuation, 3 years are guaranteed.

Input	Range	Measurement accuracy (digital display, A/D integration time: 16.7ms or more)	Max. resolution of digital display
DCV (/S6)	200 mV	±(0.05% of rdg + 3 digits*)	10 μV
	20 V	±(0.05% of rdg + 3 digits*)	1 mV
DCA (/S66)*	200 mV	±(0.05% of rdg + 3 digits ^{*)})	10 μV

^{*/}S66 Model has internal 10Ω shunt resistor for each input channel to convert current into voltage

Measurement accuracy in case of scaling (digits^{*)}: = measurement accuracy (digits) x scaling span (digits)/measurement span (digits) + 2 digits
Decimals are rounded off to the next highest number.

Maximum allowable input voltage:

± 60 VDC (continuous) for all input ranges

Input resistance:

Approx. 500 $k\Omega$ or more for range 200 mVDC

Approx. 1 $\mbox{M}\Omega$ for 20 VDC ranges

^{*)} digit = significance of the last digit of the number in display = die Wertigkeit der letzten angezeigten Dezimalstelle

Effects of Operating Conditions

Ambient temperature:

With temperature variation of 10 °C DCV: ± (0.1% of rdg + 0.05% of range) or less

Power supply:

With variation within 18 to 30 V DC/AC Within measurement accuracy (no effect)

Magnetic field:

AC (50 Hz) and DC 400 A/m fields:

± (0.1% of rdg + 1 0 digits*) or less

*) digit = significance of the last digit of the number in display = die Wertigkeit der letzten angezeigten Dezimalstelle

EMC impact:

influences of various EMC impact are specified in details. See Attachment "EMC Specification DAQSTATION DX1006N /S6 and /S66".

Transport and Storage Conditions

The following specifies the environmental conditions required during transportation from shipment to the start of service and during storage as well as during transportation and storage if this instrument is temporarily taken out of service.

No malfunction will occur under these conditions without serious damage, which is absolutely impossible to repair; however, calibration may be necessary to recover normal operation performance.

Ambient temperature:

-25 °C to 60 °C

Humidity:

5% to 95% RH (No condensation is allowed.)

Shock:

30 g maximum while being packed

SPECIFICATIONS OF OPTIONAL FUNCTIONS

Alarm Output Relays (/A1)

An alarm signal is output from the rear panel as a relay contact signal.

Number of output:

2 points

Relay contact rating:

250 VDC/0.1 A (for resistance load),

250 VAC (50 Hz) / 3 A

Terminal configuration:

SPDT (NO-C-NC). Energized-at-alarm,

logic combination from multiple alarms: OR,

Fail/Status Output (/F1)

The relay contact output on the rear panel indicates the occurrence of CPU failure or selected status. You can select the contents output to the two relay output signals.

FAIL output relay:

The relay contact output on the rear panel indicates the occurrence of CPU failure.

Relay operation:

CPU normal: Energized, CPU failure: Deenergized

Status output relay:

The relay contact output on the rear panel indicates the occurrence of selected status Relay operation: Status detection: Energized

Status	Description
Memory status	Relay is energized when internal memory or external storage media is in the following conditions: Abnormality in the internal memory. When automatic saving of the settings to the external storage media is ON • When the remaining space on the external storage medium reaches 10%. • When an abnormality occurs with the external storage medium, and auto save fails • When the external storage medium is not inserted, operation is same as when automatic saving of the settings to the external storage media is OFF When automatic saving of the settings to the external storage media is OFF • When the remaining space on the external storage medium reaches 10%. • When the number of data file which is not saved to the external storage media exceeds 390 *Not including USB memory connected to the instrument
Measurement	Relay energized upon A/D converter abnormality
Failure	, , ,
Memory stop	Relay energized upon memory stop

Relay contact rating:

250 VDC/0.1 A (for resistance load), 250 VAC (50 Hz) / 3A

Mathematical Functions (/M1)

Used for calculating data, displaying trends and digital values, and recording calculated data assigned to channels.

Channel assignable to calculated data:

DX1006N:

Up to 24 channels (101 to 124)

Max. character length of expression:

120 characters

Operation:

General arithmetic operations:

Four basic arithmetic operations (+,-,x,/), square root, absolute, common logarithm, natural logarithm, exponential, power, relational operations $(>, \ge, <, \le, =, \ne)$, logic operations (AND, OR, NOT, XOR)

Conditional operation:

[a?b:c] (Execute "b" in case of "a" is not "0", or execute "c" in case of "a" is "0")

Special computation: PRE()

Constant:

Up to 60 constants (K01 to K60)

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24 VDC/AC Power Supply (/P1/S6 or /P1/S66)

Rated power supply:

24 V DC/AC

Power cable:

Length = 2 meter or more

Allowable power supply voltage range:

18 to 30 V DC/AC

Overvoltage:

max. 33V for 10 minutes

Insulation resistance:

Power supply to ground terminal: $20 \text{ M}\Omega$ or

greater (at 500 VDC)

Dielectric strength:

Power supply to ground terminal: 500 VAC (50

Hz), 1 min

Max. power consumption:

Supply voltage	LCD off	Normal	Max.
24 VDC	8 VA	15 VA	28 VA
24 VAC (50 Hz)	15 VA	24 VA	45 VA

Remote Control (/R1)

This option allows eight inputs to be controlled remotely by a contact input. Please refer the part of "Event action function" for functions to be controlled.

PKI (/S6 or /S66)

Every data file is signed with the recorder's individual signing key. This allows detection of any data change (data integrity verification).

Verification of data integrity by use of YOKOGAWAs original viewer software DAQSTANDARD DXA120/S6 (sold separately) operator gets informed about:

Integrity: has data file changed since

production.

Authenticity: which recorder created the

data file.

Logarithmic display:

Y = 10 EXP ((SU-SL)x(X-VL)/(VU-VL)+SL)

Where:

X: input voltage

VL: low limit of display (Y) span
VU: upper limit of display (Y) span
SL: lower scale of input X (up to -15)
SU: upper scale of input X (up to +15)
Maximum difference between SU and SL:
15 (decades)

USB interface (/USB1)

USB interface specification:

Based on Rev1.1, host function

Number of ports:

2 ports (Front and rear panel)

Power supply:

5V, 500mA (for each port)*1

Available USB devices:

Keyboard:

104/89 keyboard (US Layout and German Layout) based on USB HID Class Ver.1.1

External medium:

USB flash drive (some of USB flash drives may not be supported by DXAdvanced)

*1: For low powered devices (bus power < 100 mA): 5V ± 5%

For high powered devices (bus power < 500 mA): $5V \pm 10\%$

Devices which need more than 500 mA total bus power for 2 ports can not be connected at the same time.

Calibration correction function (/CC1)

Corrects the measurement value of each channel using segment linearizer approximation.

Number of segment points:

2 to 16

Calibration correction control function:

You can specify how calibration correction settings are periodically performed.

APPLICATION SOFTWARE

DXA120/S6 - DAQSTANDARD (sold separately)

Operating environment

OS: Windows 2000 SP4

Windows XP (Home Edition SP2, SP3,

Professional SP2, SP3)*

* Except for Professional x64 Edition

Windows Vista (Home Premium SP1, SP2,

Business SP1, SP2)*

* Except for 64-bits editions

Windows 7 (Home Premium 32-bit and 64-bit editions. Professional 32-bit and 64-bit

editions)

Processor and main memory

2000/XP: Intel Pentium III, 600 MHz or faster

x64 or x86, 128MB or more

Vista: Intel Pentium 4, 3GHz or faster x64

or x86, 2GB or more

7: 32-bit edition

Intel Pentium 4, 3GHz or faster x64

or x86, 2GB or more

64-bit edition

Intel x64 processor that is equivalent to Intel Pentium 4, 3 GHz or faster, 2GB or more

Hard disk: 100MB or more of free space

A video card that is recommended for the OS and a display that is supported by the OS, has a resolution of 1024 x 768 or higher, and that can show 65.536 colors (16-bit, high color) or more.

Configuration software:

Setting mode:

Configuration of setting mode and basic setting mode

Configuration via communication:

Configuration of setting mode and basic setting mode without communication configuration (ex. IP address)

Data viewer software:

Number of display channels:

32 channels per group, 50 groups maximum

Viewer function

Waveform display, digital display, circular display, list display, operation log display etc.

Data conversion:

File conversion to ASCII, or MS-Excel format

PKI function:

Verification of data integrity informs about: has data file changed since Integrity:

production.

which recorder created the Authenticity:

data file.

DXA170 - DAQStudio (optional, sold separately)

Custom display builder software

Operating environment

The following operating environment will be applied to products that are shipped from late August 2010.

OS: Windows XP (Home Edition SP3, Professional

* Except for Professional x64 Edition Windows Vista (Home Premium SP1, SP2*, Business SP1, SP2*)

* Except for 64-bits editions

Windows 7 (Home Premium 32-bit and 64-bit editions. Professional 32-bit and 64-bit editions)

Processor

XP: Intel Pentium 4, 1.6 GHz or faster

x64 or x86 processor

Vista: Intel Pentium 4, 3GHz or faster x64

or x86 processor

7: 32-bit edition

Intel Pentium 4, 3GHz or faster x64

or x86 processor

64-bit edition

Intel x64 processor that is equivalent to Intel Pentium 4, 3

GHz or faster

Memory: 512 MB or more (Windows XP)

2 GB or more (Windows Vista/7)

Hard disk: 100MB or more of free space

Display: A video card that is recommended for the OS and a display that is supported by the OS. has a resolution of 1024 x 768 or higher, and that can show 65,536 colors (16-bit, high color) or more.

General functions

- (1) Send and receive the parts layout data of the custom display (via Ethernet or CF card).
- (2) Display the custom screens, create new custom display and edit.
- (3) Save and load the file of configured or edited custom display data.

MODEL AND SUFFIX CODES

Models: DX1006N-3-4-2/A1/F1/M1/P1/USB1/CC1/S6 DX1006N-3-4-2/A1/F1/M1/P1/USB1/CC1/S66

Modell Suffix Code Code		Option Code	Erläuterung		
DX1006N					Basic Model with 6 channels and pull out chassis
	-3				400MB Internal Memory
		-4			CF Card as External Media
			-2		German, English or French as Language
				/A1	2 Alarm Relay Outputs
				/F1	FAIL Relay and Status Output
				/M1	Mathematical Functions
				/P1	24V AC/DC Power Supply with extended Range 18-30V in Combination with Option /S6 or /S66
				/R1	Remote Inputs for Time Synchronization
				/USB1	2 USB Ports for Memory Stick or external Keyboard
				/CC1	Calibration Correction Function
				/S6*	PKI Functions, Log Scales and additional Mounting Holes
				/S66*	/S6 plus additional internal Shunt Resistors 10Ω for all Channels for direct Current Measurement

^{*/}S6 and /S66 cannot specified together

Application Software

Model code	Description	os	
DXA120/S6	DAQSTANDARD Software including Data integrity verification functions	Windows XP/Vista/7	
DXA170	DAQSTUDIO Software (optional, sold separately)	Windows XP/Vista/7	

STANDARD ACCESSORIES

Product	Qty
Mounting brackets B9900BX for Panels between 0 mm and 36 mm thickness	2
Terminal screws	5
Door lock key	2
Operation guide	1
Instruction manual (CD-ROM)	1
All German and English Documents including "Betriebshandbuch" DXA-KTA on CDROM (Bestell-Nr.: 12/46KTA-Kit)	1
DAQSTANDARD software (CD-ROM)	0
CF card	1

OPTIONAL ACCESSORIES

Product	Model code (part number)	Specification
DAQSTANDARD Software including Data integrity verification functions	DXA120/S6	
CF card	772094	1 GB
Mounting bracket for Panels between 0 mm and 36 mm thickness	B9900BX	see below
Door lock key	B8706FX	
Mounting bracket for Panels between 40 mm and 72 mm thickness	398910	see below
Mounting bracket "Siemens" for Panels between 30 mm and 74 mm thickness	It is not a part from Yokogawa	see below
Instruction Manual for Regression Tests including Protocol for every specified function of the recorder. Related to TS03 and TS21.	19/DX1K-RegTest	



B9900BX - Mounting bracket for Panels between 0 mm and 36 mm thickness



398910 - Mounting bracket for Panels between 40 mm and 72 mm thickness



Mounting bracket "Siemens" for Panels between 30 mm and 74 mm thickness

DIMENSIONS

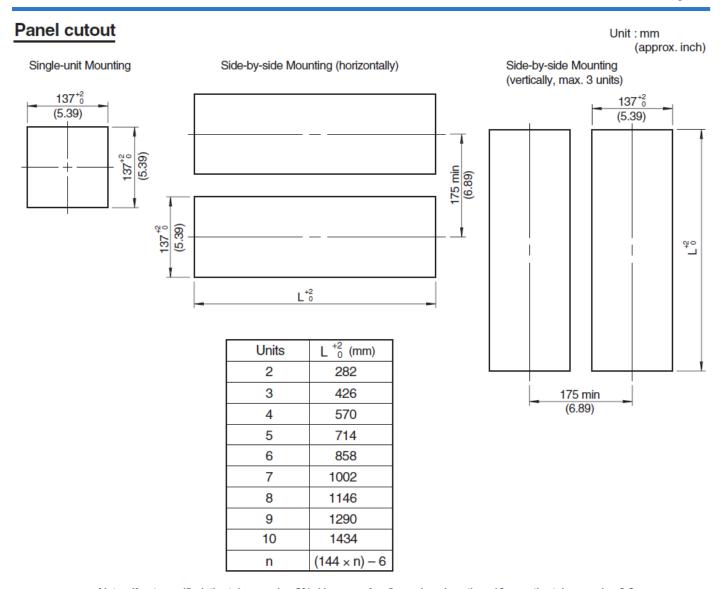
Tarminal Arrangement

Unit: mm (approx.inch) m136.5 *0.4 (5.37) USB (/USB1) Power Supply Terminal Seganganasa Beganganasa Beganganasa Option Terminal OI. Input Terminal channel 1-6 MAX 258.5 (10.18) (/H2 or /PM1) 24.0 151.5 (5.96) 254.1(10.0) 144 (5.67) 200.5 (7.89) (min. space for mounting) 2 to 26 (panel thickness) 30.8 (1.21) 151.5 (5.96) 144 (5.67) 110.3 (4.34) 34.8 (1.37) (0.30)

(4.46)

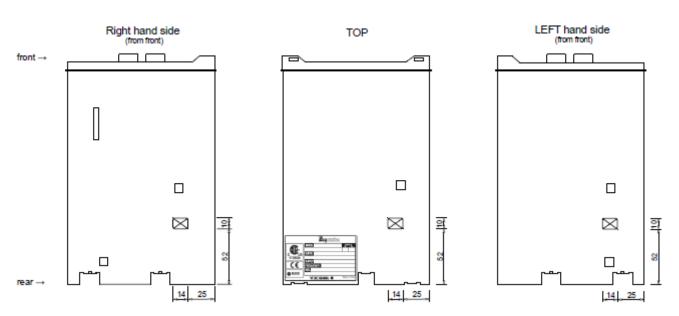
Dimentions

(dimension after mounting)



Note : If not specified, the tolerance is $\pm 3\%$. However, for dimensions less than 10 mm, the tolerance is ± 0.3 mm.

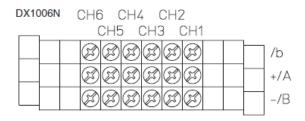
Cutouts for Mounting Brakets



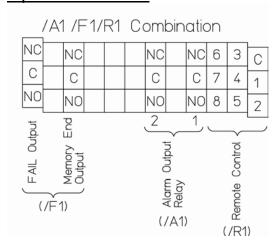
Power Supply Terminal



Input Terminals



Option Terminals



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