EDX-5000A

Memory Recorder/Analyzer



High-speed Sampling at 200 kHz per 32 Channels and Simultaneous Recording of Video with a High-speed Camera

- High-speed sampling at 200 kHz/32 channels
- ●Up to 80 input channels
- •Simultaneous recording of measuring data and video
- Conditioner cards selectable for specific applications
- Effective real-time processing capability

EDX-5000A is an advanced all-in-one measuring instrument having sophisticated features and high-speed processing capabilities.

It is the high-end model of EDX Series. Max. input channels are 80, and max. sampling frequency is 200 kHz for 32 channels in sync. It is possible to record data and video as well as rosette analysis and other arithmetic operations simultaneously.

The touch panel allows the EDX to be operated even without a keyboard.

● Conditioner Cards (See page 3-73)

Strain/Voltage/Acceleration Measurement Card Strain/Voltage Measurement Card Dynamic Strain Measurement Card

Thermocouple Card
F/V Converter Card
Charge Amplifier Card
Strain/Voltage Measurement Isolation Card
Constant Current Amplifier Card
A/D Converter Cards

CDV-40B(-F) DPM-42B-F DPM-42B-I DPM-42B-I-F CTA-40A CV-40A CCA-40A(-F) CDV-44AS CDA-44AS/45AS AD-40AS(-F)

Hardware Specifications

Mo	odels				
	Models	Max. analog input channels	Slots	Storage Devices	Windows® 10
	EDX-5000A-64-HE	64	8	HDD	
	EDX-5000A-64-SE	64	8	SSD	Farable la
	EDX-5000A-80-HE	80	10	HDD	English
	EDX-5000A-80-SE	80	10	SSD	

Applicable Condition	oner Cards CDV-40B (-F), CVM-41A, DPM-42B (-F),				
DPM-42B-I (-F), CTA-40A, CFV-40A,					
CCA-40A (-F), CDV-44AS, CDA-44AS,					
CDA-45AS, AD-40AS (-F)					
Input Channels EDX-5000A-64: Max. 64 (CDV-40B x 8)					
	EDX-5000A-80: Max. 80 (CDV-40B x 10)				
Analog Input	See spec of respective conditioner cards				
Digital I/O					
I/O points Max. 8					
I/O settings	Sets every bit to digital input, digital output,				
or remote-control input with the same common					
	Remote-control input: Measuring start, stop,				
balance conducting, etc.					
Input modes	Isolated TTL lever input				
Input voltage	Max. 5 VDC				
Isolation modes	Digital isolation				
Output modes	Isolated open-collector output with 10 $k\Omega$ built-in				
	pull-up resistors				
Output voltage	5 VDC				
Output current	Max. 25 mA per point				
Voice input	1 channel, to be recorded together with				
	measuring data. An optional remote control unit				
	RCU-42 is required.				
Sampling Frequenc	ies				
Sampling modes					
1-2-5 series					
1 Hz to 200 kHz	for up to 32-channel data acquisition				
	for up to 64-channel data acquisition				
1 Hz to 50 kHz f	or up to 80-channel data acquisition				
1 Hz to 10 kHz f	or real-time synchronous data processing				
2 ⁿ series					
2 to 131072 Hz for up to 32-channel data acquisition					
2 to 65536 Hz for up to 64-channel data acquisition					
2 to 32768 Hz for up to 80-channel data acquisition					
2 to 8192 Hz for real-time synchronous data processing					
The condition is using a 16-bit A/D converter, as for a 24-bit A/D					
	nnels above will be half of each channel.				
Storage HDD mode					
	: 30 GB or more				
Display Channel status LED (OVER value of every channel are settable)					
REC, BUSY, BATTERY, POWER LED					
12.1" wide touch panel					
	rs REC, STOP, BAL, and OPT are operated by touch panel,				
key	s on EDX, external keyboard, or mouse				
Output control con	nectors CONT.IN, CONT.OUT(For remote control unit,				
	or synchronous operation)				
External I/O Conne					
	External clock: CLK IN, CLK OUT				
	(Output at any frequency division ratio)				
External Interfaces	USB type keyboard, USB type mouse				
	VGA connector for monitor				
	USB I/F: 3 USB 2.0 in front, 2 USB 3.0 in rear				
	LAN I/F: 100/1000BASE-T				
Power Supply	100 to 240 VAC and 10 to 30 DC, dual supply				
	Built-in batteries against momentary power failure				
Current Consumpti	on EDX-5000A-64: Approx. 1.8 A				
	(For 100 VAC, CDV-40B x 8)				
	EDX-5000A-80: Approx. 2.0 A				
(For 100 VAC, CDV-40B x 10)					
Operating Temperature 0 to 40°C					
	y 20 to 80% RH (Non-condensing)				
Storage Temperatu	re -20°C to 60°C				

Vibration Resistant	EDX-5000A-64-HE, EDX-5000A-64-SE,
	EDX-5000A-80-HE, EDX-5000A-80-SE
	49.0m/s ² (5 G), 5 to 55 Hz when not operating
	29.4m/s ² (3 G), 5 to 55 Hz when operating
	EDX-5000A-64-HE, EDX-5000A-80-HE
	9.8m/s ² (1 G), 10 to 200 Hz when operating
	EDX-5000A-64-SE, EDX-5000A-80-SE
	19.6m/s²(2 G), 10 to 200 Hz when operating
Impact Resistant	196.1m/s ² , (20 G), 11ms
EMC Directive	EN61326-1 (Class A)
Low Voltage Directive	EN61010-1, EN61010-2-030
	(Installation category II, Pollution degree 2,
	Measurement category O)
RoHS Directive	EN50581
Dimensions	EDX-5000A-64
	$365\mathrm{W} \times 159\mathrm{H} \times 300\mathrm{D}$ mm (Excluding protrusions)
	EDX-5000A-80
	$410 \mathrm{W} \times 159 \mathrm{H} \times 300 \mathrm{D}$ mm (Excluding protrusions)
Weight	EDX-5000A-64: Approx. 11.5 kg (Mainframe only)
	EDX-5000A-80: Approx. 12.5 kg (Mainframe only)
Optional Functions	CAN data acquisition (Input channels: Max 512)
	GPS data acquisition (Tracing data acquisition,
	time synchronous function)
Online Control	Controlled by DCS-100A
Standard Accessories Optional Accessories	AC power cable P-18 (With 2-pin conversion plug CM-39), DC power cable P-70 gound wire P-72, simplified instruction manual, instruction manual (CD-R), and EDX accessory bag Conversion cable, synchronous cable N-95 synchronous extension terminal,
	remote control unit RCU-42A, and belt hook

●Software Specifications in the EDX-5000A

Measuring Condition S	attings		
Measuring Channel Co			
Measurement ON/OFF, measuring modes, range, HPF,			
LPF, digital HPF, digital LPF, balance ON/OFF, CAL,			
calibration coefficient, offset, offset zero ON/OFF, un			
channel name, measuring range, rated capacity,			
rated output, upper-limit check value,			
lower-limit check value, numeric display digits (Selects			
any items to display)			
inner sensitivity register ON/OFF, input cable,			
cable compensation value			
Recordable Data			
Samplir	ng frequencies 1 Hz to 10 kHz:		
up to re	maining disk space of built-in memory		
Samplir	ng frequencies 10001 Hz to 200 kHz:		
	ta: 2 to 2 billion (Used as 16 bits)		
	2 to 1 billion (Used as 24 bits)		
Manual Measurement	Recording from REC to STOP, or preset data		
	starts from REC		
Interval Measurement	Automatic recording according to designated		
	starting time and recording interval		
Trigger Measurement	Recording according to preset trigger		
migger incusurement	conditions		
	Common trigger conditions		
	End trigger: Settable		
	Pre-trigger or post trigger:		
	Max. 4194304 points per channel when		
	A/D is set to 16-bit.		
	Delay amount depends on number of		
	measuring channels.		
	Analog trigger conditions		
	Trigger channels: Any 1 analog channel		
	Trigger level: Sets in physical quantity		
	Trigger slope: Up, down		
	Digital trigger conditions		
	Trigger bit: Any 1 bit		
	Trigger level: 0, 1		
	External trigger conditions		
	Trigger slope: Up, down		
	Complex trigger conditions		
	Trigger source: Selection of any 4 analog/		
	digital channels, an external		
	trigger channel, or a manual		
	trigger channel		
	AND/OR: be used for analog		
	trigger, digital trigger and		
	external trigger.		

		Trigger le	vel: An physical quantity is set for			
			the analog channel, and			
			0 or 1 for the digital channel.			
Trigger slope: Up, down						
TEDS Reads sensor's information and sets to channel condition automatically						
Measurin						
		ent, recording star	rt, pause, stop, balancing,			
CAL outpu						
Real-time Processing Simultaneous monitoring and recording of data						
			-			
	The sampling frequencies up to 10 kHz are available. • Video data acquisition with a web camera					
Camera DirectX compatible Web camera						
(Recognized by the OS as an imaging device)						
	Number of Cameras 1					
		640 x 480				
	Rate Max	at AVI format				
		rame rate depend	on the camera			
		is optional.	or the carriera.			
		itions during reco	ording video			
Manu	al mode, r	manual mode (Da	ata points preset)			
	etic Opera					
		nnels Max. 64				
			operators (Max. 200 characters), annel name (Max. 40 characters),			
		ero, and calculatio				
		ators and Consta				
		ower \rangle ,PI[π],()				
Funct	ions:					
SQR	Square ro		LOG Common logarithm			
ABS	Absolute	value	LN Natural logarithm			
SIN COS	Sine Cosine		EXP Exponent			
	Tangent		HMX Max. principal strain HMN Min. principal strain			
		Return value: Radian)	HSM Max. shearing strain			
		e (Return value: Radiar	-			
ATAN	Arc tange	ent (Return value: Radi	ian) SMN Min. principal stress			
		urn value: Angle)	SSM Max. shearing stress			
		eturn value: Angle)	DEG Principal strain direction			
		eturn value: Angle)				
●FFT Ana	iysis	inear spectrum in				
7 ti laiy 31.	: Types i		nower spectrum cross spectrum			
			nd cross-correlation			
Windov	aı	uto-correlation, ar	nd cross-correlation g, Hanning, Fejer, Blackman,			
	aı v Functio ı	uto-correlation, ar ns OFF, Hammin and Gaussian	nd cross-correlation g, Hanning, Fejer, Blackman,			
Analyze	v Function ed Data Po	uto-correlation, ar ns OFF, Hammin and Gaussian oints 256, 512, 1	nd cross-correlation 19, Hanning, Fejer, Blackman, 1 024, 2048, 4096, and 8192			
Analyze	au v Function ed Data Po s Channel	uto-correlation, ar ns OFF, Hammin and Gaussian oints 256, 512, 1 ls 4 channels/wir	nd cross-correlation 19, Hanning, Fejer, Blackman, 1 024, 2048, 4096, and 8192 Indow			
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Analyze Analysis Saving I Monitor Y-time Gra X-Y Graph Bar Graph Circle Met Numeric I Display FFT Graph Web Cam Over-inpu Graph Sca Cursors A t Windows Saving Im Environm Synchrone Others Inner, exte	au v Function ed Data Po s Channel File Forma aph X axi valuu X and Y Up to 8C Displays er Any o Display Us s max. anc u Up to 4 era Display Ide Capabl (Y axis) xvailable o the cursor y Up to 12 same tin ages Sav ental Sett bus Opera	uto-correlation, ar ns OFF, Hammin- and Gaussian bints 256, 512, 1 Is 4 channels/wir at Kyowa standa KS2 file version is indicates the times of measuremer axes indicate the 0 channels are core is max. and min. va ne channel is disp Up to 80 channels d min. values of eachannels of analy. is the over-input v le of displaying au y, X-Y graph (X, Y a on Y-time graph, X positions 2 different graph ne res each graph as a tings ation Standalone	nd cross-correlation 19, Hanning, Fejer, Blackman, 1024, 2048, 4096, and 8192 Indow 11 file format (KS2) 12 01.06 Interpretation of 8 channels. Interp			

Specifications of Software Compatible with EDX-3000

	Settings
Measuring Channel Co	
	rement ON/OFF, measuring modes, range, HPF,
	gital HPF, digital LPF, balance ON/OFF, CAL,
	tion coefficient, offset, offset zero ON/OFF, unit, land, measuring range, rated capacity,
	utput, upper-limit check value,
	imit check value, numeric display digits (Selects
	ms to display)
innerse	ensitivity register ON/OFF, input cable,
	ompensation value
Recordable Data	
	ng frequencies 1 Hz to 10 kHz: emaining disk space of built-in memory
	ng frequencies 10001 Hz to 200 kHz:
	ta: 2 to 2 billion (Used as 16 bits)
	2 to 1 billion (Used as 24 bits)
Manual Measurement	Recording from REC to STOP, or preset data
	starts from REC
Interval Measurement	Automatic recording according to designated
Trimman Manas managant	starting time and recording interval
Trigger Measurement	Common trigger conditions End trigger: Settable
	Pre-trigger or post trigger:
-	Max. 4194304 points per channel when
	A/D is set to 16-bit.
	Delay amount depends on number of
	measuring channels.
	Analog trigger conditions
	Trigger channels: Any 1 analog channel Trigger level: Sets in physical quantity
	Trigger slope: Up, down
	Digital trigger conditions
	Trigger bit: Any 1 bit
	Trigger level: 0, 1
	External trigger conditions
	Trigger slope: Up, down
	Complex trigger conditions
	Trigger source: Selection of any 4 analog/ digital channels, an external
	trigger channel, or a manual
	trigger channel
	AND/OR: be used for analog
	trigger, digital trigger and
	external trigger.
	Trigger level: A physical quantity is set for
	the analog channel, and
	0 or 1 for the digital channel
	0 or 1 for the digital channel. Trigger slope: Up. down
Reading/Saving Measu	Trigger slope: Up, down
Capable of Reading/s	Trigger slope: Up, down uring Condition Files aving measuring condition files
Capable of Reading/s Reading/Saving sensor	Trigger slope: Up, down uring Condition Files aving measuring condition files r's Files
Capable of Reading/s Reading/Saving sensor Capable of Reading/s	Trigger slope: Up, down uring Condition Files aving measuring condition files r's Files aving sensor's CSV files by CH condition
Capable of Reading/s Reading/Saving sensor Capable of Reading/s Digital I/O Settings	Trigger slope: Up, down uring Condition Files aving measuring condition files r's Files aving sensor's CSV files by CH condition O points: Max. 8
Capable of Reading/s Reading/Saving sensor Capable of Reading/s Digital I/O Settings	Trigger slope: Up, down uring Condition Files aving measuring condition files r's Files aving sensor's CSV files by CH condition O points: Max. 8 O settings: Sets every bit to digital input,
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Capable of Reading/s Reading/Saving sensor Capable of Reading/s Digital I/O Settings I/	Trigger slope: Up, down uring Condition Files aving measuring condition files r's Files aving sensor's CSV files by CH condition O points: Max. 8 O settings: Sets every bit to digital input,
Capable of Reading/s Reading/Saving sensor Capable of Reading/s Digital I/O Settings I/ I/C TEDS Reads sensor's in	Trigger slope: Up, down uring Condition Files aving measuring condition files r's Files aving sensor's CSV files by CH condition O points: Max. 8 D settings: Sets every bit to digital input, digital output, or remote-control formation and sets to channel condition
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Capable of Reading/s Reading/Saving sensor Capable of Reading/s Digital I/O Settings I/ I/O TEDS Reads sensor's in automatically IMeasuring Operations Monitor measurement, CAL output, etc.	Trigger slope: Up, down uring Condition Files aving measuring condition files r's Files aving sensor's CSV files by CH condition O points: Max. 8 D settings: Sets every bit to digital input, digital output, or remote-control formation and sets to channel condition
Capable of Reading/s Reading/Saving sensor Capable of Reading/s Digital I/O Settings I/ I/O TEDS Reads sensor's in automatically IMeasuring Operations Monitor measurement, CAL output, etc. Real-time Processing	Trigger slope: Up, down uring Condition Files aving measuring condition files r's Files aving sensor's CSV files by CH condition O points: Max. 8 D settings: Sets every bit to digital input, digital output, or remote-control formation and sets to channel condition recording start, pause, stop, balancing,
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Capable of Reading/s Reading/Saving sensor Capable of Reading/s Digital I/O Settings I/ I/O TEDS Reads sensor's in automatically IMeasuring Operations Monitor measurement, CAL output, etc. Real-time Processing Simultaneous monito The sampling frequen Video data acquisitic Camera DirectX con (Recognizec Number of Cameras Resolution Max. 640 Frame Rate Max. 30 Saving File Format Resolution and fram The Web camera is o Measuring Condition Manual mode, mar	Trigger slope: Up, down Jaring Condition Files Javing measuring condition files r's Files Javing sensor's CSV files by CH condition O points: Max. 8 D settings: Sets every bit to digital input, digital output, or remote-control formation and sets to channel condition recording start, pause, stop, balancing, ring and recording of data ficies up to 10 kHz are available. To with a web camera Inpatible Web camera Ind by the OS as an imaging device) 1 D x 480 fps AVI format The rate depend on the camera. The potional. The during recording video The potional of the control of the con

В		
Order	of filter: 1 to 8	
	tude ratio: -3dB (At cutoff poin	t)
	uation: -6 x N dB (N is the filteri	
	aneously use with built-in LPF	<u> </u>
	ation channels Max. 64	
Calcula	ation conditions ON/OFF, ope	rators (Max. 200 characters),
	, numeric display digits, chann	
	ulation zero, and calculation ze	
	ole Operators and Constants	
	k,/,^ 《power》,PI[π],()	
Functi	· · · · · · · · · · · · · · · · · · ·	
SQR	Square root	LOG Common logarithm
ABS	Absolute value	LN Natural logarithm
SIN	Sine	EXP Exponent
COS	Cosine	HMX Max. principal strain
TAN	Tangent	HMN Min. principal strain
ASIN	Arc sine (Return value: Radian)	HSM Max. shearing strain
ACOS	Arc cosine (Return value: Radian)	SMX Max. principal stress
ATAN	Arc tangent (Return value: Radian)	SMN Min. principal stress
DSIN	DSIN (Return value: Angle)	SSM Max. shearing stress
DCOS	DCOS (Return value: Angle)	DEG Principal strain direction
DTAN	DTAN (Return value: Angle)	
●FFT Anal	ysis	
Analysis	Types Linear spectrum, power	er spectrum, cross spectrum,
	auto-correlation, and o	ross-correlation
Window	Functions OFF, Hamming, H	lanning, Fejer, Blackman,
	and Gaussian	
Analyze	d Data Points 256, 512, 1024	4, 2048, 4096, and 8192
Analysis	Channels 4 channels/windo	w, max. 8 windows
Saving F	ile Format Kyowa standard f	ile format (KS2)
	KS2 file version: 01	.06
lMonitor		
Y-time Gra	ph X axis indicates the time, a	and Y axis the physical
		for a maximum of 16 channels
	10 graphs per window is	
Y-time (all o	:hannel) Graph X axis indicate	
		int of measurement.
		is the same for all channels.
Y-time (DI)	/) Graph X axis indicates the	
		ment for a maximum of 16
		llows channel's zero position
	to be set on the Y ax	
	Any combination of 8 channel	
Bar Graph	Up to 32 channels are contain	
51 1: 10	are indicated on a window. Pe	
Digital Gra	ph X axis indicates the time, a	
	channel (Up to 16 bits). 1	to 4 graphs are displayed
<u>c: 1.1</u>	on a window.	12 2 1
	Any one channel is displaye	
		a horizontal or vertical bar mete
		nannels or all channels are listed
	and min. values of each chang	· · · · · · · · · · · · · · · · · · ·
	Up to 4 channels of analyzed	results are displayed
	Pra Displays captured images	
Over-inpu	t Capable of displaying the ex	
- 101	values in red, except FFT gra	
Graph Scal		scale and full scale values on th
	Y-time graph (Y axis), X-Y g	rapn (x, y axes) and
	bar graph (Y axis).	wittela alala arra - ra 1 1 2 1
		witchable among 1-axis, 2-axis
Displace	and channel-by-channel	
	lor Any color is selectable.	ole are enecified
	Any title or X and Y axis labe	
vvindows	8 numeric windows, 8 graph	WITIOOWS
A!!!.	(Including an FFT window)	a degine de a militare de la
Auxiliary II		e desired auxiliary lines on the
		d Y axis), X-Y Graphs (X axis an
	Y axis), and Bar Graphs (
Con	ve Data Displays the compar	ach for both X axis and Y axis.)
Comparati	ve para - Displays the combai	auve uata (PTEVIOUS KSZ

Comparative Data Displays the comparative data (Previous KS2

format file) on the Y-time graphs, neither
Y-time (All channels) graphs nor Y-time (DIV) graphs,
and X-Y graphs for comparing the monitor data.
The size of the data file is maximum 10 MB.
If the file size exceeds 10 MB, displays
the 10 MB data from its head.

■Configuration

Operation Modes Standalone, sync host, sync guest setting

Control Modes Off-line, Online switching

Automatic File Conversion Automatic file conversion upon measurement (CSV, XLS, XLSX, or RPCIII format)

Others

Oscillator switching (Internal, external), operation beep,

balance reference values front speaker ON/OFF

A/D bits switching: 12 or 24 bits

Optional switch setting

Data Reproduction, Data Analysis Specifications

	uction, Data Ana	.,J.J. Jpecinications			
Data Reprodu		luc . C . I			
Graph Displa					
	allows 1, 2, or 4 graphs to				
Y-time Graph		aph, and allows Y axis to be			
	scaled automatically.				
X-Y Graph		4 channels to be plotted on			
X- and Y-axis. Both axes to be scaled automatically.					
	ay Displays all data in every				
Numeric Data Display Lists any 16 channels data					
Cursor Numeric display of the engineering value of cursor					
position.					
	om in data between 2 cursor				
Dis	play max. and min. data bet	ween 2 cursors.			
Scrolling Scr	olls X axis on Y-time graphs.				
Data File Edit	ing Extracting of an arbitra	ry range or arbitrary channel			
	from collected data f	ile and conversion to a CSV			
	format file are possib	le. Data file titles, comments,			
		isplay and editing are possible			
Max. and mir		nd min. data of each channel			
	(Max. 5-data),	400-data around the max. or			
	min. are showr	n in graphs.			
KS2 File Bloo	k number support (1 block d	lisplay, all block display) .			
Di	splays and plays back the au	dio data.			
Video Playba	ck Playback, backward, repo	eat, frame-by-frame forward,			
	frame-by-frame backw	vard, jump to the beginning,			
	jump to the end, set th	ne beginning position,			
set the end position. Playback speed: ×0.1 to ×20.					
Plays back the measured data, video and GPS data at					
the same time.					
AVI Files Set	s playback frame rate, start f	rame No. (Time)			
	ring Files Reproduces the s				
-	(CSV format file				
●Data Analy	sis	·			
Statistic Pro	cessing A list of maxima, n	ninima, averages and			
		ns in a desired section of the			
	data file. The resul	ts are saved in CSV files.			
Arithmetic	Operations				
Inter-cha	nnel operations for up to 2 fi	iles. The result is saved in a			
	Up to 320 expressions is pos				
Expressio	n: Up to 200 characters				
	Operators and Constants				
	', ˆ 《power》,PI[π],()				
Function					
SQR S	iquare root	LOG Common logarithm			
	Absolute value	LN Natural logarithm			
	iine	EXP Exponent			
	Cosine	HMX Max. principal strain			
	angent	HMN Min. principal strain			
	Arc sine (Return value: Radian)	HSM Max. shearing strain			
	Arc cosine (Return value: Radian)	SMX Max. principal stress			
	Arc tangent (Return value: Radian)	SMN Min. principal stress			
	OSIN (Return value: Angle)	SSM Max. shearing stress			
	COS (Poturn value: Angle)	DEC Principal strain direction			

DCOS DCOS (Return value: Angle)

DTAN DTAN (Return value: Angle)

FFT Analysis
Analysis Types: Linear spectrum, power spectrum, cross spectrum,
auto-correlation, cross-correlation, coherence,
and transfer function
Analyzed data points: 256, 512, 1024, 2048, 4096, 8192, 16384,
and 32768
Window functions: OFF, Hamming, Hanning, Fejer, Blackman,
and Gaussian
LPF: 1, 2, 5, 10, 20, 50, 100, 200, 500, 1000, 2000 Hz
and FLAT, 12 steps
Integration times: 0 (None) to 2

Analysis types	Y-time graph	Analysis graph 1	Analysis graph 2
Linear spectrum	Yes	Amplitude (linear)/amplitude (log)	Phase
Power spectrum	Yes	Amplitude (linear)/amplitude (log)	
Cross-spectrum	Yes	Amplitude (linear)/amplitude (log)	Phase
Auto-correlation	Yes	Correlation	
Cross-correlation	Yes	Correlation	
Coherence	Yes	Coherence	
Transfer function	Yes	Amplitude (linear)/amplitude (log)	Phase

Analyzed results are saved in CSV files

Shift data points: 2 or more

Histogram Analysis

Algorithm types

Peak/valley, maxima/minima, 1D rainflow, amplitude,

1D time at level, 1D rainflow + peak/valley,

Average times: 0 or more (0: whole waveform)

1D rainflow + maxima/minima,

2D rainflow

Slices:

1D algorithm: Even numbers from 10 (± 5) to 256 (± 128)

2D algorithm: Even numbers from 10 to 50

Slice width, hysteresis, offset (For maxima/minima), etc. to be specified.

Results: Tabular or drawing display (3D display for 2D rainflow)

Life Prediction Processing

Predicts life from the result of histogram analysis of 1D rainflow method, 2D rainflow method, or amplitude method.

The life prediction data is shown and saved as a file. (Allows S-N data files to be read.)

Filtering Digital IIR filters, 4th order Butterworth

(Cutoff: -6dB, no phase delay)

HPF & LPF: FLAT to 500 k Hz (Effective up to one-half of the sampling frequency)

Mirroring

Analysis results are saved as an additional format

Differentiation/ Integration

Differential/integration times 0 (None) to 2

Analysis results are saved as additional format

•Utility

DEG Principal strain direction

Multiple Files Conversion Conversion to CSV, XLS, XLSX, or RPCIII format

File Coupling Multiple files (Host and guests) acquired in

synchronized operation are coupled into one file.

Reverse Conversion Data files converted by this software into CSV

format are converted back to KS2 format

File Division Extracts the specified block No. data of the data file into

single file. Batch Analysis Analysis of multiple files under same conditions at

> one time. Histogram analysis, filtering and differentiation/

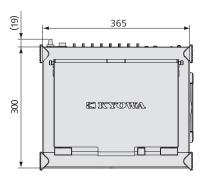
integration are available.

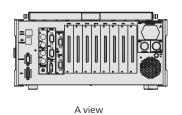
Allow start point of each file to be set

Overlap of Multiple Files Up to 16 data files are displayed and overlapped as Y-time data.

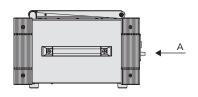
Multiple Files Conversion Converts multiple KS2 files acquired in the interval measurement into a CSV file.

EDX-5000A-64









EDX-5000A-80

