EDX-200A

Universal Recorder

*EDX-200A-2H, EDX-200A-4H: CE compliant models are available. Inquiries are welcome.

Improved real-time processing function with high-speed DSP

- Incorporated real-time digital filter.
  8th digital filter enables acquisition of clear waveform.
- High-speed/low-speed dual sampling
  Measurement of high-speed and low-speed phenomena while reducing data quantities is possible.
- All channels synchronous 10 kHz high-speed sampling (For 32 channels)
  Measurement of 3 channels synchronous at max. 100 kHz
- Variety of input conditioner cards
- One-wire synchronous (Except EDX-200A-1)
  With a maximum of 8 units, large scale measurements in distributed arrangement can be supported.

●Conditioner cards (See page 3-93.)

Strain/Voltage/Acceleration Measurement Card	CVM-41A
Strain/Voltage Measurement Card	CDV-40B(-F)
Dynamic Strain Amplifier Card	DPM-42B
	DPM-42B-F
	DPM-42B-I
	DPM-42B-I-F
Thermocouple Card	CTA-40A
F/V Converter Card	CFV-40A
Charge Amplifier Card	CCA-40A(-F)
CAN Card	CAN-41A
Strain/Voltage Measurement Isolation Card	CDV-44AS/46AS
Constant Current Amplifier Card	CDA-44AS/45AS
AD Converter Cards	AD-40AS(-F)

●Option cards (See page 3-81.)

Multichannel CAN card	ECAN-40A
Time synchronization card	ETIM-40A
GPS/multichannel CAN card	EGPC-40A

Specifications

Models

Model name	Max. Channels*1	Slots for conditioner cards	Slots for optional functions	DCS-100A*2	DCS-101A*3
EDX-200A-2H	16	2	1	Yes	
EDX-200A-2H-0					
EDX-200A-2H-1				Yes	Yes
EDX-200A-4H	32	4	1	Yes	
EDX-200A-4H-0					
EDX-200A-4H-1				Yes	Yes
EDX-200A-4T	32	4	1	Yes	
EDX-200A-4T-0					
EDX-200A-4T-1				Yes	Yes
EDX-200A-1	8	1		Yes	
EDX-200A-1-1				Yes	Yes

Notes: *1. Max. input channels are when 8 channels input cards inserted.
*2. Dynamic Data Acquisition Software
*3. Simultaneous Acquisition of Video and Numeric Data/Arithmetic Operations/FFT Analysis Optional Software

Measuring Targets	Strain (Gage, transducer), voltage, thermocouples, pulse (F/V), piezoelectric acceleration (Built-in amplifier), CAN signals, GPS
Conditioner Cards for Analog Inputs	
	The conditioner cards for EDX series
	(For the details, see page 3-93.)
	[Note] The EDX-200A-4T can use only the CVM-41A, CDV-40B, CDV-40B-F and CAN-41A which performed temperature extension processing. When you use the EDX-200A-4T, you cannot replace any conditioner cards.
	[Note] The EDX-200A limits the number of CFV-40A. EDX-200A-1/2H: The number of CFV-40A is up to 1. EDX-200A-4H: The number of CFV-40A is up to 2.
Conditioner Cards for CAN Data Inputs	
	CAN card (2 ports, max. 256 channels): CAN-41A
	[Note] Can install one CAN-41A to the final slot.
	[Note] The EDX-200A-4T can use only the CAN-41A which performed temperature extension processing. When you use the EDX-200A-4T, you cannot replace any conditioner cards.
Voice Memo Input	1 channel (Voice memo can be recorded with measured data.)
	The RCU-42A (optional) is necessary.
	To playback the recorded voice memo, use the DAS-200A (optional).
Sampling	
Sampling Method	Simultaneously all channels
Sampling Mode	Normal: Records all channels' data at the same sampling clock.
	Dual: Enables high-speed sampling or low-speed sampling to every CH for recording.

Sampling Frequencies

Normal-sampling Mode

1-2-5 series	1 Hz to 100 kHz	
	1 Hz to 2 kHz	When using CAN-41A
2^n series	2 to 65536 Hz	
	2 to 2048 Hz	When using CAN-41A

Dual-sampling Mode

High-speed sampling [Sf]		
	1-2-5 series	1 Hz to 100 kHz
		1 Hz to 2 kHz when using CAN-41A
	2^n series	2 to 65536 Hz
		2 to 2048 Hz when using CAN-41A
Low-speed sampling [Ss]		
	1-2-5 series	The division frequencies from high-speed sampling, and Ss ≤ Sf/4
	2^n series	The division frequencies from high-speed sampling, and Ss ≤ Sf/4

Channels

Normal-sampling Mode	Max. 32 channels, 320 k/I (I is the integer part of the set sampling frequency.)	
Dual-sampling Mode	Max. 64 channels, 320 k/I (I is the integer part of the set sampling frequency.). "High-speed and low-speed" setting counts as 2 channels.	
When Using CAN-41A	EDX-200A-4H	Max. 24 + Channels of CAN data
	EDX-200A-2H	Max. 8 + Channels of CAN data
	EDX-200A-1	Channels of CAN data
	EDX-200A-4T	Max. 24 + Channels of CAN data

The Number of Sampling Frequency

Normal-sampling Mode

"320000/ The number of channels" or less

Dual-sampling Mode

High-speed sampling frequency: "320000/ The number of channels" or less.

"High-speed and low-speed" setting counts as 2 channels.

Digital Filter	Butterworth filter (IIR)
	Type of filter: LPF, HPF
	Order of a filter: 1 to 8
	Amplitude ratio at cutoff point: -3dB
	Attenuation: -6 × N dB/oct. (N is order of the filter)
	Simultaneously use with built-in LPF possible.
	Application on CAN data not possible.
Data Recording Unit	CF card
	Capacity: 128 MB to 16 GB (our recommended only)
	Maximum data file size (available data file size to be recorded)
	When the number of repeat times is 1: 4 GB/data file
	When the number of repeat times is 2: 1 GB/data file
	(1GB = 1000000000 bytes)
Indicator	Channel status display LED:
	EDX-200A-2H: 16; EDX-200A-4H/4T: 32; EDX-200A-1: 8
	Unit status display LED:
	EDX-200A-2H/4H/4T: 7; EDX-200A-1: 4
	Unit status display organic EL monitor:
	EDX-200A-2H/4H/4T: 1; EDX-200A-1: 0

Control Switch

UP/DOWN	: Changes the display on the small indicator.
REC/PAUSE	: Starts and pauses data recording.
STOP	: Stops data recording.
BAL.	: Execute the balance.
LOAD	: Loads and sets conditions.
OPT.	: Conducts the pre-set arbitrary function.
ID	: Sets the EDX-200A identification No.
POWER	: POWER switch
USB/LAN	: Selects a communication interface (USB /LAN)

[NOTE] The EDX-200A-1 does not have the UP/DOWN switch and ID switch.

External Control Connector	CONT. IN and CONT. OUT (for remote control and synchronous operation)
	[NOTE] The EDX-200A-1 does not have the CONT. OUT connector for the synchronous operation
Communication interfaces	USB(USB2.0 High Speed) 1 port
	Connector: Series B receptacle connector
	LAN(10/100BASE-T) 2 ports
	LAN IN connector: For PC communication
	LAN OUT connector For synchronous operation
	Connector: RJ45 modular jack connector
	[NOTE] The EDX-200A-1 does not have the LAN OUT connector for the synchronous operation.
Synchronous Operation	Max. 8 EDX-200A units can be connected for synchronous operation by using synchronous cables N-95 N-128.
	Max. 8 EDX-200A units can be connected for synchronous operation by using LAN cables.
	[NOTE] The synchronous operation is not available with the EDX-200A-1.

How To Setting Conditions

Online setting: Set measuring conditions on the PC via the LAN or USB interface.

Offline setting: Set measuring conditions by allowing the EDX-200A to read measuring conditions in the CF card. (Use DCS-100A to set measuring conditions.)

Saving Conditions Store the conditioner cards' setting conditions and measuring conditions in nonvolatile memory in the EDX-200A.

When turning ON the EDX-200A, the user can immediately start data recording with previously set conditions.

Measuring Modes Manual measurement/trigger measurement/ interval measurement

Manual Measurement	The user starts and stops data recording, or data recording is stopped according to the previously set parameters.
	Voice memo can be recorded simultaneously when measuring in this mode
Trigger Measurement	Data is automatically recorded with preset trigger conditions.
	Note: Trigger measurement is not available by CAN data of the CAN-41A
Interval Measurement	Data is automatically recorded with preset interval conditions.

Available measurements in the dual-sampling mode

High-speed sampling channel	Low-speed sampling channel
Manual measurement	Manual measurement
Trigger measurement	Manual measurement
	Interval measurement
Interval measurement	Interval measurement

Starting and Stopping Data Recording

Data recording starts/stops by using the PC, panel switches or the RCU-42A

Balance Operation	Adjust the balance of the strain input channel and conduct the zero suppress of the voltage input CH of the CVM-41A by using the PC, control switches (on the front panel) or the RCU-42A
Format of Recorded Data	KYOWA's standard KS2 format
	Data in this format can be analyzed using the optional DAS-200A Data Analysis Software.
Data Collection	Online data collection using the PC or offline data collection by allowing the PC to directly read the CF card
TEDS Function	TEDS function is available only when online control from the PC.
	TEDS compatible conditioner cards: CDV-40B (-F), DPM-42B (-F), DPM-42B-I (-F), CCA-40A (-F), CDV-44AS, CDA-44AS, CDA-45AS, CVM-41A
Power Supply	EDX-200A-4H: 10 to 36 VDC
	EDX-200A-2H: 10 to 36 VDC
	EDX-200A-1: 10 to 33 VDC
	EDX-200A-4T: 10 to 36 VDC
	Connector type: RM12BRD-4PH (Hirose)
Current Consumption	EDX-200A-2H: Approx. 1.6 A (12 VDC with 4 CDV-40B cards installed)
	EDX-200A-4H: Approx. 2.6 A (12 VDC with 2 CDV-40B cards installed)
	EDX-200A-4T: Approx. 2.6 A (12 VDC with 4 CDV-40B cards installed)
	EDX-200A-1: Approx.1.0 A (12 VDC with 1 CDV-40B card installed)
Operating Temperature	0 to 50°C (EDX-200A-4T: -20 to 65°C)
Operating Humidity	20 to 90% (Non-condensing)
Storage Temperature	-20 to 60°C (EDX-200A-4T: -30 to 70°C)

Vibration Resistant

49.0 m/s^2 (5 G), 5 to 55 Hz 1 cycle 1 min., each axis 15 cycles (Non-operating)

29.4 m/s^2 (3 G), 5 to 55 Hz 1 cycle 1 min., each axis 15 cycles (Operating)

Impact Resistant 196.1 m/s^2 (20 G)/11 ms, 294.2 m/s^2 for EDX-200A-1

Dimensions (Excluding protrusions)

	EDX-200A-4H: 165 W × 132.5 H ×255 D mm
	EDX-200A-2H: 120 W × 132.5 H ×255 D mm
	EDX-200A-4T: 185.2 W × 142.8 H ×255D mm
	EDX-200A-1: 148 W × 53 H × 257 D mm
Weight	EDX-200A-4H: Approx. 2.1 kg (Approx. 2.6 kg with 4 CDV-40B cards installed.)
	EDX-200A-2H: Approx. 1.8 kg (Approx. 2.0 kg with 2 CDV-40B cards installed.)
	EDX-200A-4T: Approx. 3.7 kg (Approx. 4.2 kg with 4 CDV-40B cards installed.)
	EDX-200A-1: Approx. 0.9 kg (Approx. 1.1 kg with 1 CDV-40B card installed.)
Compliance	Directive 2014/30/EU (EMC)
	(EDX-200A-1 only)
	Directive 2011/65/EU, (EU)2015/863
	(10 restricted substances) (RoHS)
	(EDX-200A-1 only)

Standard Accessories

DC power cable P-76
USB cable N-38
Ground wire P-72
CF card (1 GB) inserted in the slot
Fuses (8 A for 4-slot model, 5 A for 2-slot model)
Dummy panel
Installed on the free slots before shipment
  EDX-200A-4H: 3 pcs
  EDX-200A-2H: 1pc
  EDX-200A-4T: None
EDX accessory bag
 Dynamic data acquisition software DCS-100A (DVD)*
*DCS-100A is optional for models with suffix "-0
 Instruction manual (In English & Japanese, in the above DVD)

Optional Accessories

EDX-200A AC adapter 4H, 4T: UEA360-1540 (For U.S.A.: SPU61A-106 15 V)
EDX-200A AC adapter 2H, -1: UIA345-12 (For U.S.A.: UNI345-1238)
Fixing adapter
EDX dummy panel EDX1P-DUMMY
Remote control unit RCU-42A
Battery unit for instantaneous power failure EDB-41B (EDX-200A-2H/4H)
Monitor unit EMON-20A
Synchronous cable N-128

DCS-100A software (standard accessory), specification for control of EDX-200A

(Not included with EDX-200A-4H-0, EDX-200A-2H-0)
*For details of DCS-100A, see chapter 4.

Units	Up to 8 units (up to 256 channels.)
Interfaces	LAN or USB
Saving Format	Saves the measured data in the EDX-200A CF card
	or PC folder in the KS2 format file.
Channel Conditions	Measuring ON/OFF, Measuring mode, Range,
	High-pass filter, Low-pass filter,Balance adjustment
	ON/OFF, CAL range, CAL ON/OFF, Calibr. const.,
	Offset, Unit,Channel name, Measuring range,
	Rated capacity, Rated output, Deci Digits,
	Chk. Val.(Up), Chk. Val. (Down), Internal sensitivity
	compensation ON/OFF, Offset ZERO ON/OFF,
	Digital filter (High-pass filter: Any cutoff frequency,
	Low-pass filter: Any cutoff frequency), Sampling
	frequency (High, Low, High + Low)
	(Display items can freely be selected.)
Loading TEDS Sensor Information	
	Loads the TEDS information automatically and sets
	the channel conditions.
Dual-sampling Measurement	
	The high-speed sampling data and low-speed
	sampling data appear on the Numeric windows/
	Graph windows.
	The high-speed sampling data and low-speed
	sampling data are saved in different files.
Setting Parameter and Loading Parameter	
	Loads and sets the EDX-200A internal parameter.
Collecting Data File	PC collects the KS2 format file saved in the
	EDX-200A CF card, via LAN/USB.
Deleting Data File	PC deletes the KS2 format file saved in the
	EDX-200A CF card, via LAN/USB.
Formatting CF Card	PC formats the EDX-200A CF card via LAN/USB.
Setting Environment	
Setting Hardware Configuration	
	Sets the number of units and device names.
	Loads the hardware configurations from the EDX-200A.
Communication Check	Loads the EDX-200A version.
Setting IP Address	PC sets the EDX-200A via LAN/USB.
	Saves the IP address setting file in the CF card.
Device Confirmation	LEDs, on the EDX-200A front panel, light up.
Others	Oscillator switching (internal/external), operating
	beep sound, balance standard value, AD data
	format (16 bits/24 bits), synchronous operation
	mode (Use or Not in use)

Applicable Optional Cards

Functions / Cards	Recording CAN Data *1	Interval (GPS synchronization) Measurement *1, *2	Point ZERO (Manual) Measurement *1, *2	Recording GPS Data *1, *2	Setting DIO *3
ECAN-40A	Yes				Yes
ETIM-40A		Yes	Yes	Yes	Yes
EGPC-40A	Yes	Yes	Yes	Yes	Yes

*1: When data is saved in CF card
*2: When the card is installed in host EDX
*3: When control signals are from a remote control unit
  A. Data is saved in the CF card.
  B. If synchronous operation, only host EDX is settable.

CAN Data Acquisition	Max. 512 channels/unit of CAN data is possible.
	(In the EDX-200A CF Card, as the E4A file).
Point Zero Manual Measurement	
	In multiple units of EDX-200A, allows acquisition
	to be started at zero second (0 ms) based on clock
	data of GPS satellite.
GPS Synchronous Interval Measurement	
	Allows multiple units of EDX-200A to be started
	acquisition based on clock data of GPS satellite.
GPS Data Acquisition	Monitors and records GPS data such as latitude,
	longitude, direction of movement, speed.
	GPS data is saved to CF card in EDX-200A as
	NMEA format.
DIO Settings	
I/O Points	Max. 8
I/O Settings	Sets every bit of digital input, digital output,
	and remote-control input.
■Measuring Conditions for Saving Data in CF Card	
Sampling Frequencies	1 Hz to 100 kHz
	(1-2-5 series, 2^n series, or external clock)
	(Depends on measuring channels.
	Dual sampling is supported.)
Data File Size	Max. 4 GB
Measuring Modes	Manual, manual (Data points preset), interval,
	analog trigger, external trigger, and composite
	trigger
Manual Measurement	Measurement is made from a press of the REC
	button to a press of the STOP button or by
	completion of recording using a preset number of
	measurements.
Interval Measurement	Measurement is made automatically at preset
	intervals from the preset starting time.
Trigger Measurement	Start/stop recording based upon specified
	trigger conditions.
Common Trigger Conditions	
End Trigger	Settable
Delay	Up to 262144 data for both start and end.
	The delay time varies with the number of channels.
Analog Trigger	
Trigger Channels	Any channel
Trigger Level	Sets in physical quantity.
Trigger Slope	Up, down
External Trigger Conditions	
Trigger Slope	Up, down
Composite Trigger Conditions	
Trigger Source	Select from the analog channels (Any 4 channels of
	the master unit), external trigger, or manual trigger.
	Capable of judging the trigger source by using the
	logical AND and OR operators.
Trigger Level	Sets in physical quantity.
Trigger Slope	Up, down
Repetition Acquisition	In long-term data acquisition, a specified
	amount of data (or time) is saved in KS2 file .
	*Workable in manual mode (Data points preset).
■Measuring Conditions for Saving Data in PC Hard Disk	
Sampling Frequencies	1 Hz to 100 kHz (1-2-5 series, 2^n series,
	or external clock)
Data File Size	Capacity of the hard disk
Measuring Modes	Manual, manual (Data points preset), interval,
	and analog trigger
Manual Measurement	Records data from REC to STOP or from REC to
	the number of data, specified on the Manual
	(Set Record Data).
Interval Measurement	Records data automatically based on the preset
	starting time and recording interval.
Analog Trigger Measurement	
Starts/stops recording data based on the preset trigger conditions.	
End Trigger	Settable
Delay	Up to 262144 data for both start and end.
	The delay time varies with the number of
	channels.
Trigger Channels	Any 1 channel
Trigger Level	Physical quantity
Trigger Slope	Up, down
Static Measurement	Every time the DCS-100A starts recording data,
	the DCS-100A additionally saves the moving-
	averaged measured data in a single CSV format
	file in manual and interval modes.
Repetition Acquisition	In long-term data acquisition, a specified
	amount of data (or time) is saved in KS2 file.
	*Workable in manual mode (Data points preset).

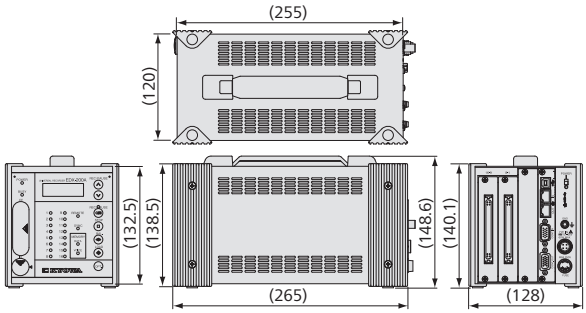
●Remote Control Unit RCU-42A

The front panel operation of the mainframe can be performed on this remote control unit. With a buzzer from the unit, an alarm sound can be clearly heard even when the sound from the device is missed.

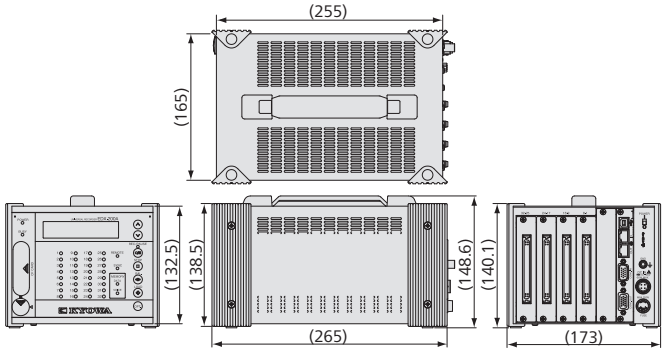
Control Functions	REC/PAUSE : Starts/pauses data acquisition
	STOP : Stops data acquisition
	BAL : Balancing
	OPT. : Optional function
	VOICE MEMO :Recording with the built-in microphone
Indication	Recording, pausing and balancing are indicated with LED.
Buzzer	Equivalent to the EDX recorder unit buzzer
Cable Length	Approx. 1.5 m
Dimensions	35 W× 125 H×22 D (mm) *Excluding protrusions
Weight	Approx. 220 g

■Dimensions

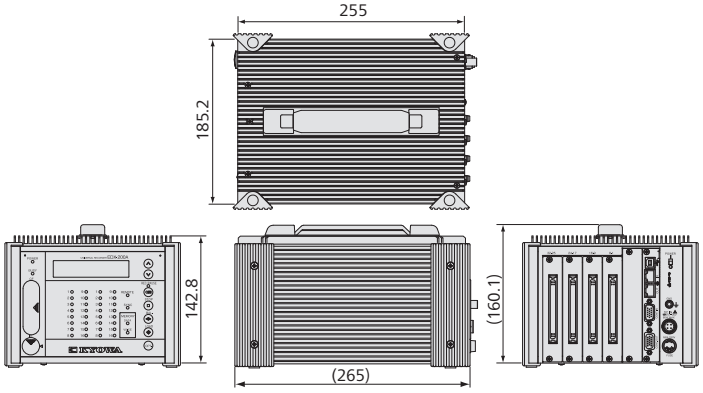
EDX-200A-2H



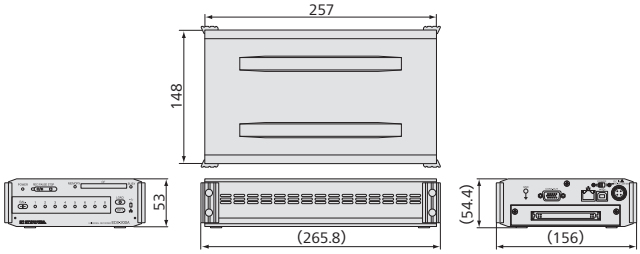
EDX-200A-4H



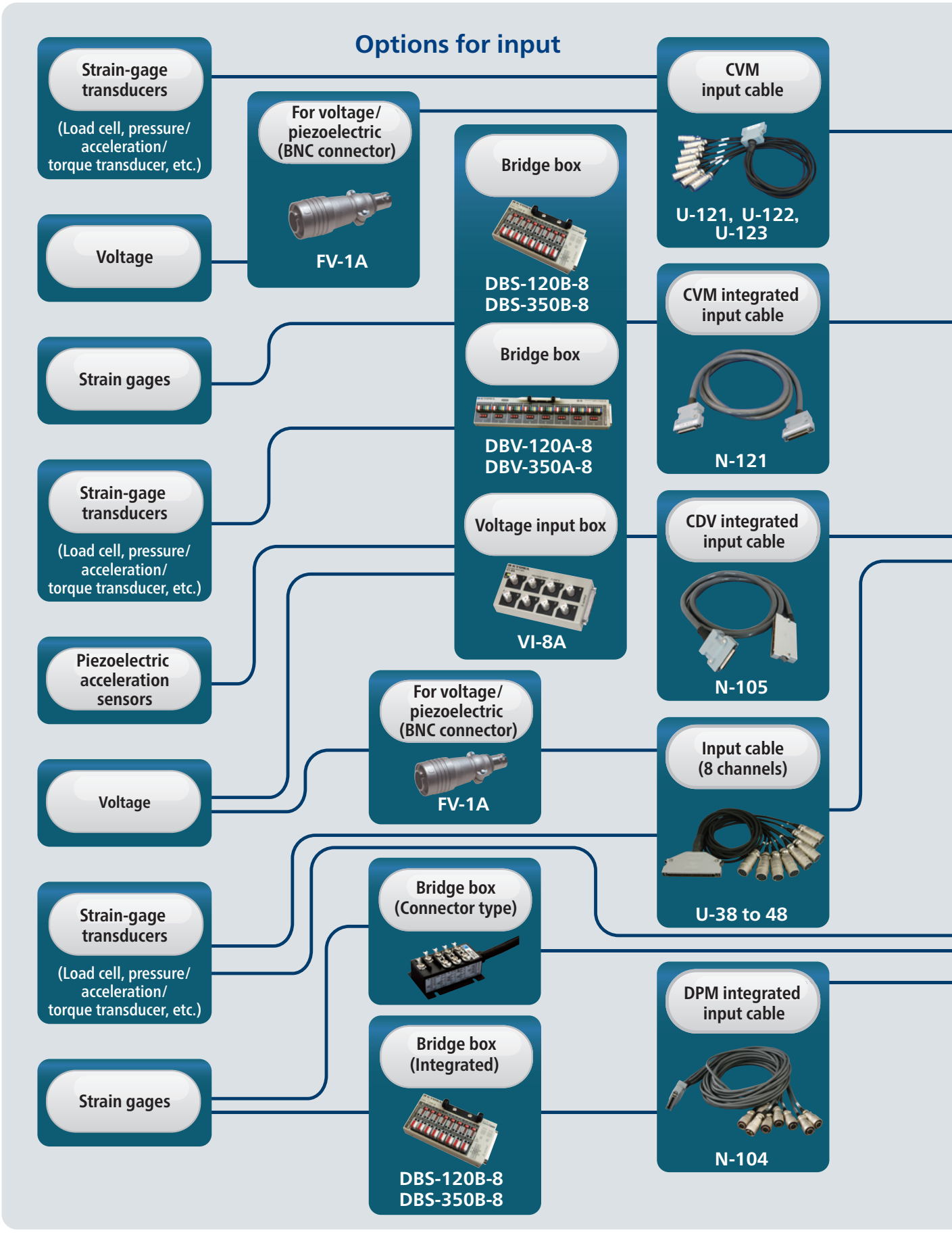
EDX-200A-4T

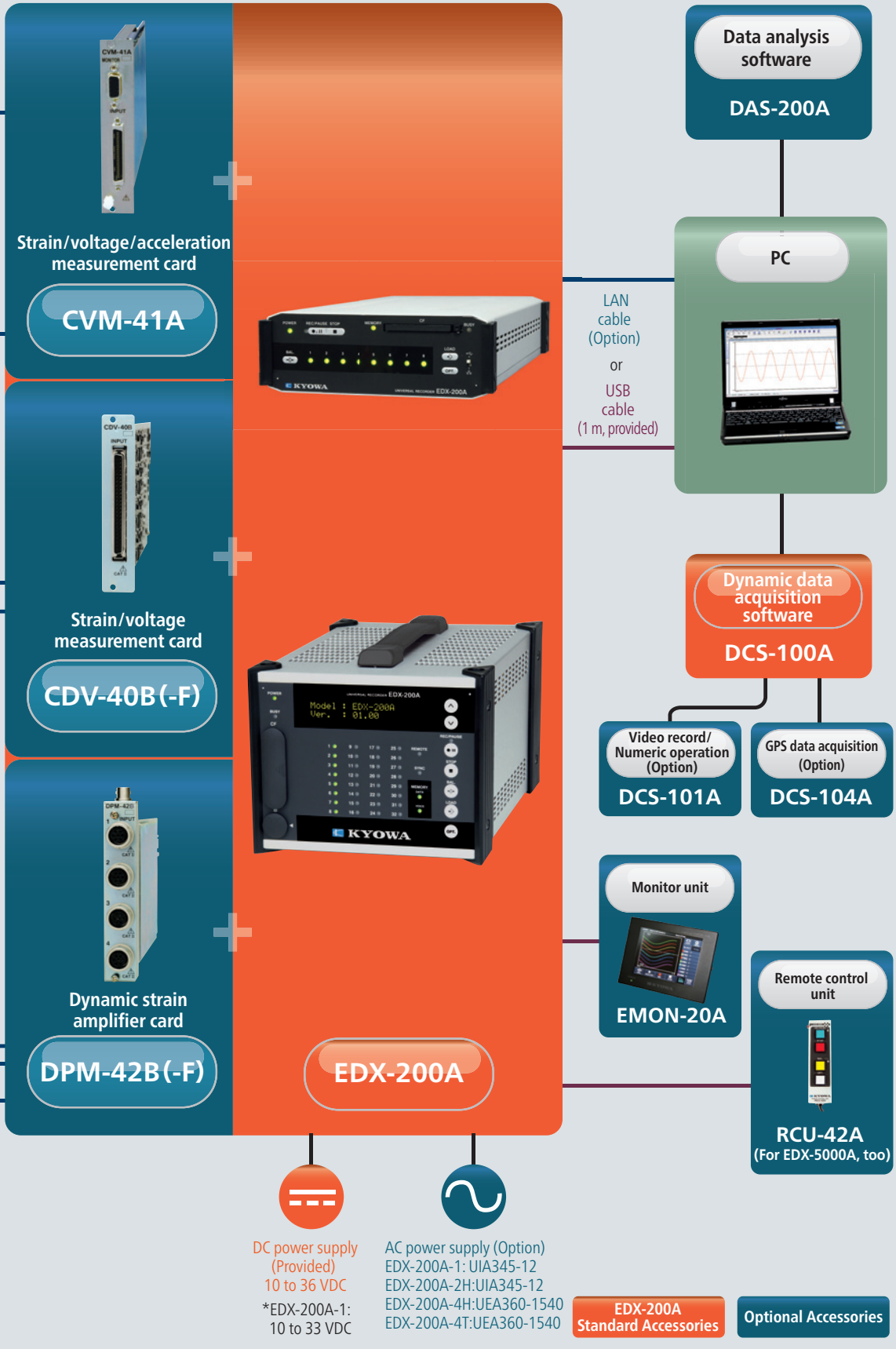


EDX-200A-1



Simplified configuration of the EDX-200A




Strain/voltage/acceleration measurement card
CVM-41A
Strain/voltage measurement card
CDV-40B(-F)
Dynamic strain amplifier card
DPM-42B(-F)
EDX-200A
Data analysis software
DAS-200A
PC
LAN cable (Option)
or
USB cable (1 m, provided)
Dynamic data acquisition software
DCS-100A
Video record/ Numeric operation (Option)
DCS-101A
GPS data acquisition (Option)
DCS-104A
Monitor unit
EMON-20A
Remote control unit
RCU-42A
(For EDX-5000A, too)
DC power supply (Provided)
10 to 36 VDC
*EDX-200A-1:
10 to 33 VDC
AC power supply (Option)
EDX-200A-1: UIA345-12
EDX-200A-2H:UIA345-12
EDX-200A-4H:UEA360-1540
EDX-200A-4T:UEA360-1540
EDX-200A Standard Accessories
Optional Accessories

EDX-200A-2H/4H/4T Option Cards

ECAN-40A ETIM-40A EGPC-40A

CE

The option cards for EDX-200A which can measure CAN data and GPS information.

■Multichannel CAN Card ECAN-40A

- ●CAN input of up to 512 channels
- ●Capable of CAN data output
- ●With software DCS-105A to read CANdb files.

With this card installed in the option slot, CAN input of up to 512 channels can be added without sacrificing the number of analog input channels.

■Time Synchronization Card ETIM-40A

- ●Enable synchronized interval measurement between remotely-placed EDX-200A units by receiving clock data from GPS satellite.
- ●GPS sensor (Standard Accessory)

ETIM-40A inserted to the option slot enables synchronous interval measurement among multiple units of EDX-200A based on clock data of GPS satellite. GPS data including position data, also can be acquired.

■GPS/Multichannel CAN Card EGPC-40A

- ●Simultaneous acquisition of GPS & CAN data (Up to 512 channels)
- ●GPS data acquisition without using a PC

EGPC-40A inserted to the option slot enables simultaneous acquisition of CAN and GPS data or synchronous start of multiple units of EDX-200A.

ECAN-40A Specifications

Applicable Models	EDX-200A-4H EDX-200A-2H
	(Installed in option slot)
	*For EDX-200A-4T, please use ECAN-40A M72.
CAN Ports	2 (High-speed CAN/low-speed CAN selectable)
Channels	Up to 512 (Total for 2 ports)
Compatible CAN Input Channels	CAN2.0A/B (Conforming to ISO-11898, ISO-11519-2)
Baud Rates	High speed CAN
	1000, 800, 500, 250, 125, 100, 83.3, 62.5, 50, 33.3, 25, 20, and 10 [kbps]
	Low speed CAN
	125, 100, 83.3, 62.5, 50, 33.3, 25, 20, and 10 [kbps]
CAN Data Output	
Output at start: Output any given CAN data when AD conversion starts	
Output at stop: Output any given CAN data when AD conversion stops	
Manual output: Output any given CAN data at an arbitrary timing.	
Interval output: Output any given CAN data in a predetermined fixed cycle.	
Digital I/O	
I/O Points	Max. 8
I/O Settings	Switch among digital input, digital output and remote-controlled input for each bit (Common applied to all).
	*Remote control input: Start and stop measuring, execute BAL, etc.
Input Type	Isolated type, TTL level input
Input Voltage	Max. 5 VDC
Isolation Methods	Digital isolator
Output Type	Isolated type, open collector type output (With 10 kΩ internal pull-up resistors)
Output Voltage	5 VDC
Output Current	25 mA max. (Per point)
Isolation Methods	Digital isolator
Connector Type	CAN port D-sub connector (Male) 9-pin
	Digital I/O port MDR connector (Female) 14-pin
Operation Temperature	0 to 50°C, ECAN-40A M72 is -20 to 65°C
Operation Humidity	20 to 90% (Non-condensing)
Storage Temperature	-20 to 60°C, ECAN-40A M72 is -30 to 70°C
Dimensions	22.0 W × 128.0 H × 221.5 D mm
Weight	Approx. 170 g
Compliance	Directive 2014/30/EU (EMC)
	Directive 2011/65/EU, (EU)2015/863 (10 restricted substances) (RoHS)

Note: When using EDX-200A and DCS-101A for arithmetic operation, no CAN measurement is possible.

Standard Accessories: Connector plug for digital I/O ports
Shell case
CANdb File Read Optional Software DCS-105A

ETIM-40A Specifications

Applicable Models	EDX-200A-4H, EDX-200A-2H
	(Installed in the option slot)
	*For EDX-200A-4T, please use ETIM-40A M72.
Synchronization	Synchronizes the recording start time of remote
	EDX-200A units by using the time data received
	from GPS satellites.
GPS Data	Latitude, longitude, elevation, course over ground,
	speed, time, receiving conditions, the number
	of satellites in use, etc.
	Saving format: NMEA format
Digital I/O	
I/O Points	Max. 8
I/O Settings	Switch among digital input, digital output and
	remote-controlled input for each bit
	(Common applied to all).
	*Remote control input: Start and stop measuring,
	execute BAL, etc.
Input Type	Isolated type, TTL level input
Input Voltage	Max. 5 VDC
Isolation Methods	Digital isolator
Output Type	Isolated type, open collector type output
	(With 10 kΩ internal pull-up resistors)
Output Voltage	5 VDC
Output Current	25 mA max. (Per point)
Isolation Methods	Digital isolator
Connector Type	GPS sensor port D-sub connector (Male) 9-pin
	Digital I/O port MDR connector (Female) 14-pin
Operation Temperature	0 to 50 °C
	ETIM-40A M72 is -20 to 65°C
Operation Humidity	20 to 90% (Non-condensing)
Storage Temperature	-20 to 60 °C
	ETIM-40A M72 is -30 to 70°C
Dimensions	22.0 W × 128.0 H × 221.5 D mm
Weight	Approx. 160 g
Compliance	Directive 2014/30/EU (EMC)
	Directive 2011/65/EU, (EU)2015/863
	(10 restricted substances) (RoHS)

Standard Accessories
Connector plug for digital I/O ports
GPS sensor (Cable length: 5 m)
Shell case

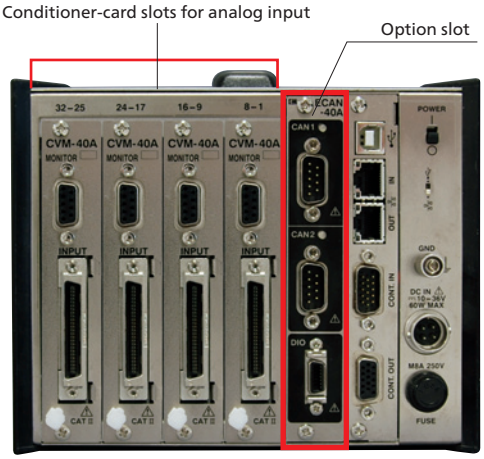
EGPC-40A Specifications

Applicable Models	EDX-200A-4H, EDX-200A-2H
	(Installed in option slot)
	*For EDX-200A-4T, please use EGPC-40A M72.
I/O Ports	GPS/CAN Shared Port 1 Dsub connector 9 pins (male)
	CAN only port 1 Dsub connector 9 pins (male)
	Digital I/O port 1 MDR connector 14 pins (female)
Channels	Up to 512
Compatible CAN Versions	CAN2.0A/B (Conforming to ISO-11898,
	ISO-11519-2)
Baud Rates	High speed CAN
	1000, 800, 500, 250, 125, 100, 83.3, 62.5, 50, 33.3,
	25, 20, and 10 [kbps]
	Low speed CAN
	125, 100, 83.3, 62.5, 50, 33.3, 25, 20, and 10 [kbps]
CAN Data Output	
Output at start: Output any given CAN data when AD conversion starts	
Output at stop: Output any given CAN data when AD conversion stops	
Manual output: Output any given CAN data at an arbitrary timing.	
Interval output: Output any given CAN data in a predetermined fixed cycle.	
GPS Data	Latitude, longitude, elevation, course over ground,
	speed, time, receiving conditions, the number
	of satellites in use, etc.
	Saving format: NMEA format
Synchronization	Synchronizes the recording start time of remote
	EDX-200A units by using the time data received
	from GPS satellites.
Digital I/O	
I/O Points	Max. 8
I/O Settings	Switch among digital input, digital output and
	remote-controlled input for each bit
	(Common applied to all).
	*Remote control input: Start and stop measuring,
	execute BAL, etc.
Input Type	Isolated type (Digital isolator), TTL level input
Input Voltage	Max. 5 VDC
Output Type	Isolated type (Digital isolator)
	Open collector type output
	(With 10 kΩ internal pull-up resistors)
Output Voltage	5 VDC
Output Current	25 mA max. (Per point)
Operation Temperature	0 to 50 °C
	EGPC-40A M72 is -20 to 65°C
Operation Humidity	20 to 90% (Non-condensing)
Storage Temperature	-20 to 60 °C
	EGPC-40A M72 is -30 to 70°C
Dimensions	22.0 W × 128.0 H × 221.5 D mm
Weight	Approx. 170 g
Compliance	Directive 2014/30/EU (EMC)
	Directive 2011/65/EU, (EU)2015/863
	(10 restricted substances) (RoHS)

Note: When using EDX-200A and DCS-101A for arithmetic operation, no CAN measurement is possible.

Standard Accessories
Connector plug for digital I/O ports
GPS sensor (Cable length: 5 m)
Shell case
CANdb File Read Optional Software DCS-105A

Example



Equipped on EDX-200A-4H