EDX-200A-4T
Universal Recorder

Move into the future with reliable measurements
KYOWA

NEW PRODUCT INFORMATION

Usable under high/low-temperature environments

Features

Operating Temperature Range
−20 to 65°C
(cf. EDX-200A-4H: 0 to 50°C)

Strain, Voltage and Acceleration Measurement
(with CVM-40A mounted)

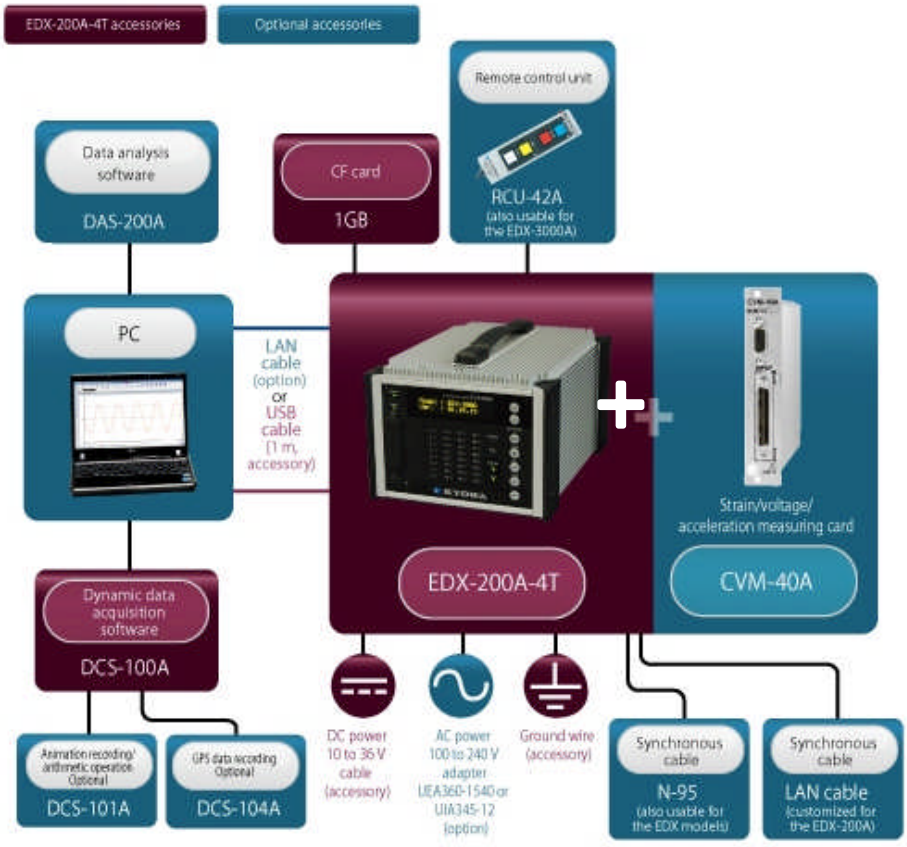
Built-in Real Time Digital Filter
(Attenuation: -48dB/oct.)

Synchronization via One-wire
(up to 8 units)

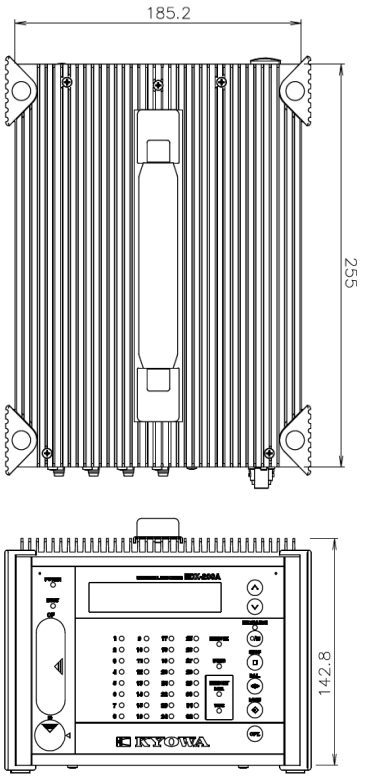
Dual Sampling
(High/low)

Fast-sampling
(100kHz for 3 channels)

Simplified configuration of the EDX-200A-4T CVM-40A conditioner card



Dimensions



Specifications

Number. of measuring channels	Up to 32 (with four 8-channel input conditioner cards mounted)
Number of slots	Number of conditioner card slots: 4 Number of optional card slots: 1
Weight	Approx. 3.7 kg (mainframe only) Approx. 4.2 kg (with 4 CDV-40B cards mounted)
Dimensions	185.2 (W) x142.8 (H) x255 (D) mm (excluding protrusions)
Measuring targets	Analog input conditioner cards and applicable sensors CVM-40A: Strain gages, strain-gage transducers, voltage-output sensors, piezoelectric acceleration transducers with built-in amplifier CDV-40B/A(-F): Strain gages, strain-gage transducers, voltage-output sensors Note: EDX-200A-4T accepts only CVM-40A, CDV-40B/A and CDV-40B/A-F for which temperature expansion measures are taken. Once mounted, the conditioner cards cannot be replaced. CAN data input conditioner cards CAN-40A: 1 port, max. 128 channels CAN-41A: 2 ports, max. 256 channels Note: Either CAN-40A or CAN-41A can be mounted to the last slot. Note: EDX-200A-4T accepts only CAN-40A or CAN-41A for which temperature expansion measures are taken. Once mounted, the CAN card cannot be replaced.
Voice memo input	1 channel (Input voice memo can be recorded together with measured data.) For voice memo recording, the optional RCU-42A remote control unit is required. For reproduction of recorded voice memo, the optional DAS-200A data analysis software is required.
Sampling	Sampling method: Simultaneous sampling of all channels Sampling modes Normal: Data acquisition is made at the same sampling frequency in all channels. Dual: Data acquisition is made at high and low sampling frequencies in preset high and low-speed sampling channels, respectively. Sampling frequency 1-2-5 system 1 Hz to 100 kHz for data acquisition in up to 3 channels 1 Hz to 50 kHz for data acquisition in up to 6 channels 1 Hz to 20 kHz for data acquisition in up to 16 channels 1 Hz to 10 kHz for data acquisition in up to 32 channels 2^n system 2 Hz to 65536 Hz for data acquisition in up to 3 channels 2 Hz to 32768 Hz for data acquisition in up to 9 channels 2 Hz to 16384 Hz for data acquisition in up to 19 channels 2 Hz to 8192 Hz for data acquisition in up to 32 channels For CAN data acquisition 1 Hz to 2 kHz (1-2-5 system), up to 24 channels + CAN data channels 2 Hz to 2048 Hz (2^n system), up to 24 channels + CAN data channels • For dual sampling mode, a selectable low sampling frequency is equal to, or less than, one-fourth the high sampling frequency.
Digital filter	8^{th} order Butterworth low-pass filter (not adapted to CAN data) Amplitude ratio at cutoff point : -3 dB Attenuation : -48 dB/oct. Note: Usable in combination with the low-pass filter mounted to the conditioner card. Digital filter cannot be applied to CAN data.
Data storage	CF card (recommended by KYOWA) Capacity: 128 MB to 16 GB Maximum data file size (available for data acquisition) 4 GB for 1-time measurement 1 GB for repetitive measurement, 2 times or more
Indicators	Channel status indicator LEDs: 32 Operating status indicator LEDs: 7 Organic EL display for mainframe status indication: 1

Operation switches	UP, DOWN: Switch the screen page on the organic EL display. REC/PAUSE: Start/pause data acquisition. STOP: Stop data acquisition. BAL: Execute balance adjustment. LOAD: Load and set conditions from CF card. OPT.: Execute preset optional function. ID: Set ID number of the EDX-200A-4T. POWER: Turn the power on/off. USB/LAN: Switch communication port.
External control connectors	CONT.IN, CONT.OUT (for remote control or synchronous operation)
Communication ports	USB (USB 2.0 High Speed), 1 port Connector: Series B receptacle LAN (10/100BASE-T), 2 ports LAN IN: For communication with PC LAN OUT: For synchronous operation Connector: RJ45 modular jack
Synchronous operation	A maximum 8 units can be synchronized by connecting unit to unit via N-95 synchronous cable or LAN cable.
Condition setting method	Online: From PC via LAN or USB port Offline: From the inserted CF card in which measuring conditions are written using the DCS-100A
Saving conditions	Conditioner setting conditions and measuring conditions are saved in internal nonvolatile memory. When restarting, the EDX-200A-4T is placed in the previous conditions just before turning off, thereby enabling immediate data acquisition.
Measuring modes	Manual /trigger/interval Manual measurement Data acquisition is started and stopped manually or stopped automatically when data is acquired to a preset number of data points. Voice memo recording is possible in the manual mode. Trigger measurement Data acquisition starts automatically according to preset trigger conditions. Interval measurement Data acquisition is made periodically at preset intervals. Combinations of measuring modes in dual sampling mode

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

Start/stop of data acquisition	Through the PC or by pressing the front panel switch or from the dedicated remote control unit.
Balance adjustment	Strain input channels can be balanced through the PC or by pressing the front panel switch or from the dedicated remote control unit.
Saved data format	KYOWA standard format KS2, which enables data analysis with the optional DAS-200A data analysis software
Data collection	Online to the PC Offline from CF card to the PC
TEDS functions	Usable only under online control of the PC Compatible conditioner cards: CDV-40B/A(-F), CVM-40A
Power supply	10 to 36 VDC Connector: RM12BRD-4PH (HIROSE) DC power supply or optional AC adapter
Current Consumption	Approx. 2.6 A (12 VDC, with 4 CDV-40B cards mounted)
Operating temperature range	-20 to 65°C
Operating humidity range	20 to 90% RH (non-condensing)
Storage temperature range	-30 to 70 °C
Vibration resistance	49.0 m/s² (5 G), 5 to 55 Hz, 1 minute/cycle, 15 cycles for each axis (when not operating) 29.4 m/s² (3 G), 5 to 55 Hz, 1 minute/cycle, 15 cycles for each axis (when operating)
Shock resistance	196.1m/s², (20G)/ 11ms

Specifications are subject to change without notice for improvement.

Safety precautions Be sure to observe the safety precautions given in the instruction manual, in order to ensure correct and safe operation.

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KYOWA ELECTRONIC INSTRUMENTS CO.,LTD.
Overseas Department:
3-5-1, Chofugaoka, Chofu-shi, Tokyo 182-8520, Japan
Phone:+81-42-489-7220 Facsimile:+81-42-488-1122
URL:http://www.kyowa-ei.com Email:overseas@kyowa-ei.co.jp

Manufacturer's Representative