KYOWA

SENSOR SYSTEM SOLUTIONS

UNIVERSAL RECORDER
EDX-100A

TEDS Compatible

Realize online/offline measurement through high-speed sampling

Available for measurement on 1, 2 or 4 slots, the EDX-100A is a universal recorder that enables flexible configuration and free arrangement while ensuring multiple functions. The wide application range extends from small-scale measurement on 8 channels to large-scale measurement on up to 128 channels by connecting 4 units of 32-channel EDX-100A-4.

For PC connection, LAN and USB ports are provided. The LAN port enables the PC to control up to 4 units of EDX-100A, while the USB port ensures easy connection between the EDX-100A and the PC.

In addition, the EDX-100A can be operated as a stand-alone unit with no PC connected. A compact flash memory card enables condition setting and data collection.

To responde to the need for wide variety of measurement, 6 different types of conditioner cards are available.

Features

- Compact and lightweight
- Available with 1, 2 and 4 slots
- LAN port for establishing multichannel network (Max. 128 channels)
- USB port for easy connection to the PC
- Operable as a stand-alone unit
- High-speed sampling at 100 kHz (10 kHz for 16-channel measurement)
- CAN data recording possible with CAN-40A conditioner card mounted
- Various conditioner cards available
- TEDS compatible
- Voice memo can be recorded by using an optional dedicated remote control unit.
- Dynamic Data Recording Software DCS-100A is included in standard accessories.

EDX-100A

Compact and Lightweight Uni

Hardware Specifications

Model		Number of Conditioner Card Slots	Max. Number of Analog Input Channels
w/o handle grip	with handle grip		
EDX-100A-1	EDX-100A-1H	1	8
EDX-100A-2	EDX-100A-2H	2	16
EDX-100A-4	EDX-100A-4H	4	32

Analog Input
Used by mounting EDX-2000A conditioner cards. For details, refer to the leaflet on EDX-2000A conditioner cards.

CAN Data Input
Accepts the CAN-40A CAN card which is included in EDX-2000A conditioner cards.

Voice Memo Input
1 channel. An optional dedicated remote control unit enables recording of voice memo during measurement in manual mode. Reproduction of recorded voice memo requires an optional Data Analysis Software DAS-100A.

Sampling Method
Simultaneous sampling of all channels

Sampling Frequency (1, 2, 5 system)
1 Hz to 100 kHz for 1-channel measurement
1 Hz to 10 kHz for 16-channel measurement
1 Hz to 5 kHz for 32-channel measurement
1 Hz to 1 kHz for CAN data measurement

Data Storage
Compact flash memory card
(128 MB to 2 GB; 45x speed or higher)
The CF card enables offline data transfer to the PC after completion of data recording.

Setting Condition
Online: From the PC through LAN or USB port
Offline: By mounting the CF card which has measuring conditions written with the DCS-100A Dynamic Data Recording Software

Saving Condition
Amplifier setting conditions and measuring conditions are saved in the internal nonvolatile memory, enabling immediate setup with previous conditions upon power-on.

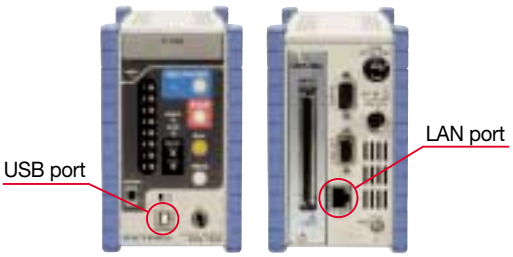
Measuring Modes
Manual: Data recording is manually started/stopped or stopped when data is recorded with the preset number of data. Manual mode allows recording of voice memo during data recording.
Trigger: Data recording is automatically started when the preset trigger condition is satisfied. Note that any CAN data cannot be used as the trigger condition.
Interval: Data recording is periodically made at preset intervals.

Manual Start/Stop of Data Recording
Possible through the PC or by pressing the switch on the front panel or from the dedicated remote control unit

Balance Adjustment
Balance adjustment of strain input channels can be made by pressing the BAL. switch on the front panel or from the dedicated remote control unit or through the PC.

Recording Data Format
KYOWA standard file format KS2, which enables data analysis with optional data analysis software DAS-100A or NI DIAdem

Collecting Data
LAN or USB port enables online data transfer to the PC, while CF card enables offline data transfer.



TEDS Function
Usable when the EDX-100A is under the online control of the PC. Compatible conditioner cards are CDV-40A(-F), DPM-42A (-F) and CCA-40A(-F). The suffix F denotes that the card is equipped with 8th order Butterworth antialiasing filter.

Synchronous Operation
Synchronous cable enables cascade connection of up to 4 units of the EDX-100A. While data is recorded as a separate file in the CF card inserted into each unit, files of all cards can be combined into a single file after online or offline data transfer to the PC

Analog Output
Except for CDV-40A(-F) and CAN-40A, conditioner cards provide an analog output connector, enabling voltage monitoring (±5 V FS).

CF Card Slot
1 (for data recording and condition setting)

Communication Ports
LAN and USB (for control and data transfer), switchable
LAN Port: 10BASE-T/100BASE-TX
Connector: RJ45 modular jack
USB Port: Conforms to USB 2.0 (high speed).
Connector: Series B receptacle

Operation Switches

REC/PAUSE	Start/pause data recording.
STOP	Stop data recording.
BAL.	Execute balance adjustment.
READ	Read and set conditions.
ID	Set ID No. of EDX-100A.
LAN/USB	Communication port

Indicators
Operation status indicator LEDs: 7
Channel status indicator LEDs: The number corresponds to the number of channels provided.

External Control Connectors
CONT IN and CONT OUT (for remote control and synchronous operation)

Operating Temperature Range
0 to 50°C

Operating Humidity Range
20 to 90% RH (noncondensing)

Storage Temperature Range
–20 to 60°C

Vibration Resistance
±29.42 m/s^2 (3 G), 5 to 55 Hz (when operating)
±49.03 m/s^2 (5 G), 5 to 55 Hz (when not operating)

Shock Resistance
196.1 m/s² (20 G)/11 ms

Power Supply
10 to 18 VDC
Connector: RM12BRD-4PH (Hirose)
DC power supply or dedicated AC adaptor (option) is used.
(Since the EDX-100A does not provide any backup function against instantaneous power failure, an external counter-measure against power failure is required.)

Current Consumption, Approx.
EDX-100A-1: 0.9 A (when operated on 12 VDC with one CDV-40A card mounted and full load applied)
EDX-100A-2: 1.4 A (when operated on 12 VDC with two CDV-40A cards mounted and full load applied)
EDX-100A-4: 2.2 A (when operated on 12 VDC with four CDV-40A cards mounted and full load applied)

Dimensions (excluding protrusions)
EDX-100A-1: 70.0 (W) x 132.5 (H) x 255 (D) mm
EDX-100A-2: 92.5 (W) x 132.5 (H) x 255 (D) mm
EDX-100A-4: 137.5 (W) x 132.5 (H) x 255 (D) mm

Mass, Approx.
EDX-100A-1: 1.6 kg (1.7 kg with one CDV-40A card mounted)
EDX-100A-2: 1.8 kg (2.0 kg with two CDV-40A cards mounted)
EDX-100A-4: 2.0 kg (2.6 kg with four CDV-40A cards mounted)

Standard Accessories
Power cable P-57
Dynamic Data Recording Software DCS-100A

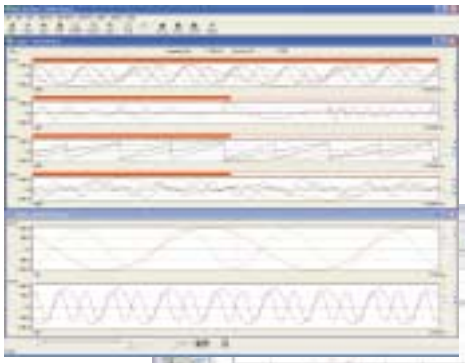
Optional Accessories
AC adaptor UIA 345-12
Synchronous cable

Software

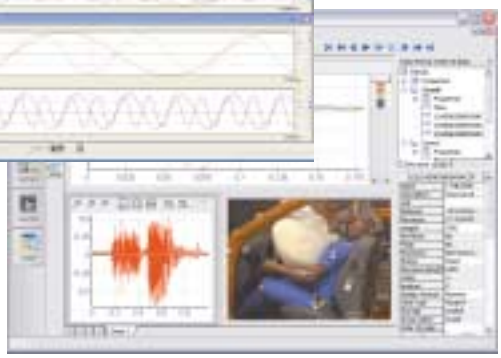
Dynamic Data Recording Software DCS-100A
Provided standard for the EDX-100A, the DCS-100A enables:
- Presentation of various graph and numeric windows in free combinations
- Monitoring real-time variables while reviewing reproduced data
- Direct saving of measured data to the hard disk of the PC
- Activation of optional data analysis software from the toolbar

For details, refer to the leaflet on the DCS-100A.

Optional Data Analysis Software DAS-100A/NI DIAdem
These software programs enable analysis of recorded data for verification of test results and generation of test reports. For details, refer to the leaflet on the DAS-100A/NI DIAdem.



DAS-100A



NI DIAdem (National Instruments, USA)

Optional Remote Control Unit RCU-41A

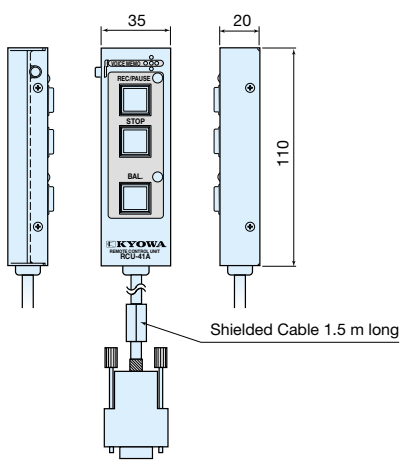
Control Buttons
REC/PAUSE Start/pause data recording.
STOP Stop data recording.
BAL. Execute balance adjustment.
VOICE MEMO Record voice memo.

LED Indicators
REC/PAUSE, BAL.

Cable Length
Approx. 1.5 m (to be connected to the CONT IN connector of EDX-100A)

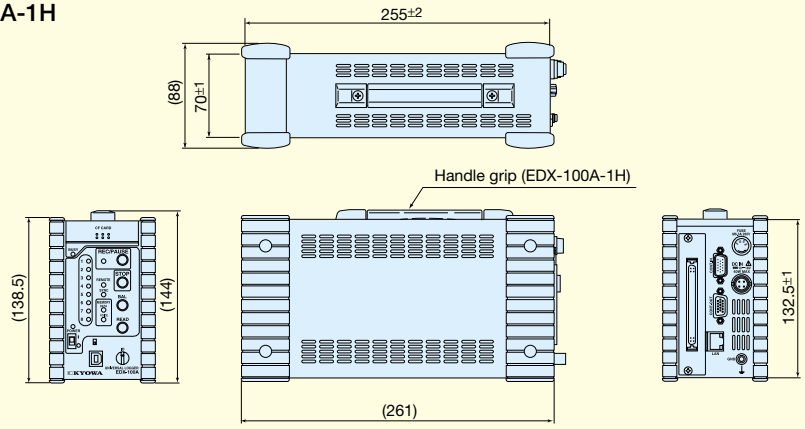
Dimensions
35 (W) x 110 (H) x 20 (D) mm, excluding protrusions

Mass
Approx. 200 g

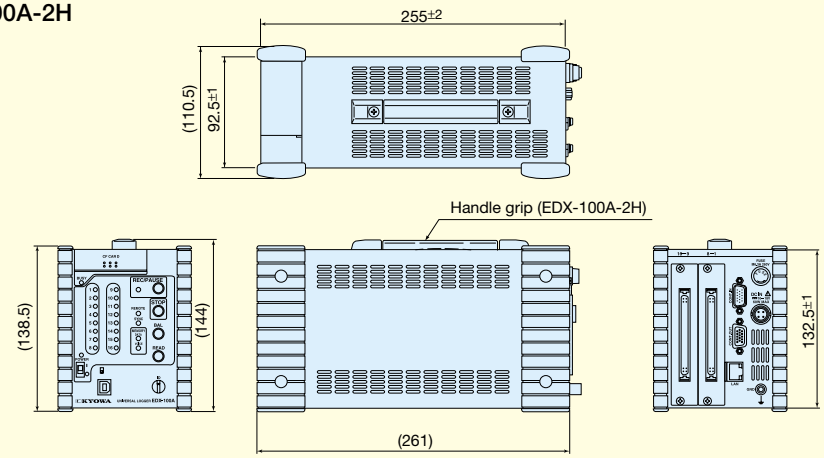


Dimensions

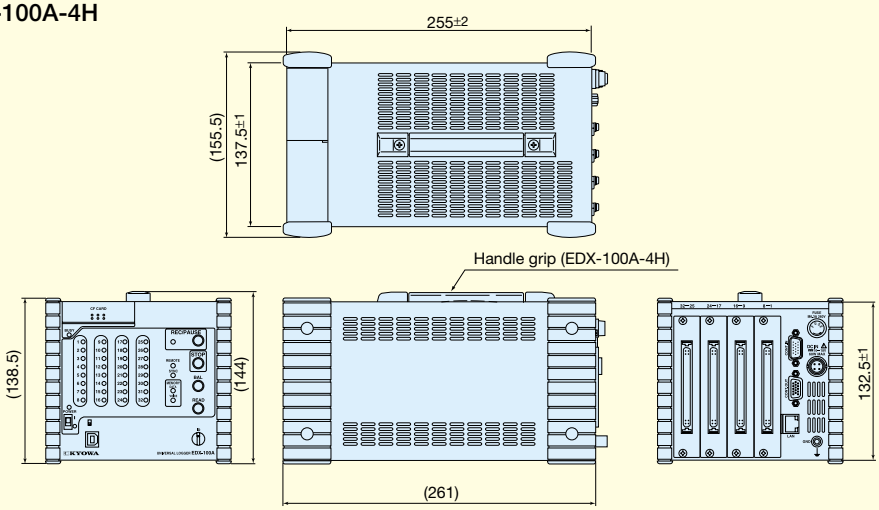
EDX-100A-1/EDX-100A-1H



EDX-100A-2/EDX-100A-2H



EDX-100A-4/EDX-100A-4H



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.

JQA-0821
JQA-EM4824

Reliability through integration

KYOWA

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