AMX-2200

Digital Fault Recorder

■ KEY FEATURES

Compact "All-in-type" mesurement device

Built-in Printer, Input Unit, LCD display and communication interface.
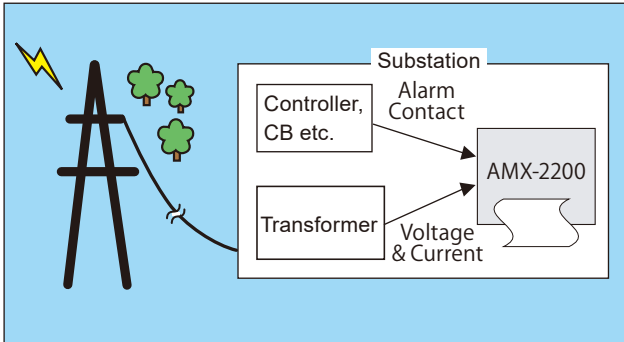
Simplified Operation

Keypads and LED's on the front panel are available for simplified basic setting and daily operation without PC.

Grid Measurement & Solutions

KINKEI SYSTEM CORPORATION
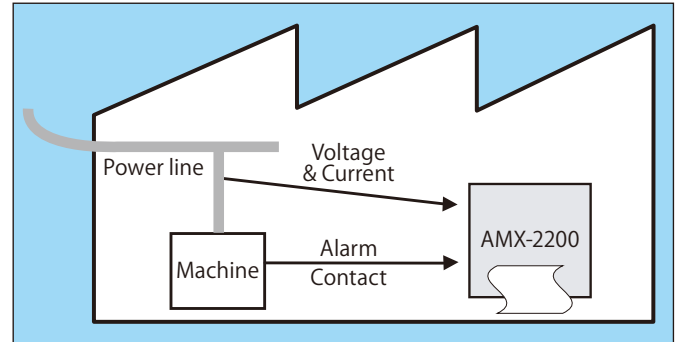
■ OVERVIEW

■ APPLICATIONS

1) Fault data recording for power system
   Checking malfunction of the protection and control system

2) Power quality data recording for power network
   Checking Sags/swells etc. in a factory, or plant

■ Analog and Digital Input circuits in single enclosure

16ch Analog Inputs (CT/ VT)
32ch Digital Inputs

■ Sampling frequency

3,840Hz for 60Hz system / 3,200Hz for 50Hz system

■ Highly operable Human Machine Interface

Keypads and LED's on the front panel are available for simplified basic setting
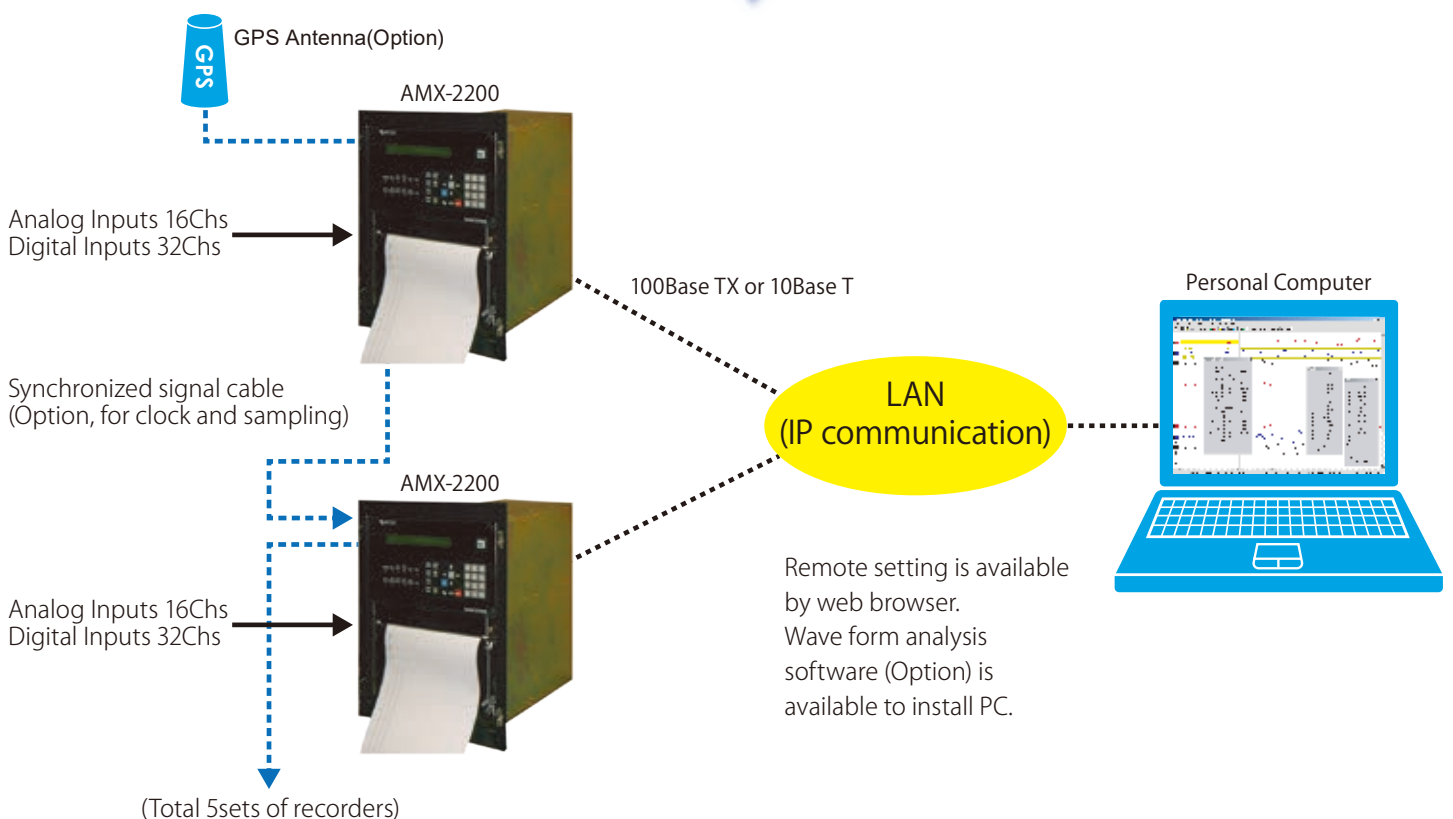Build in web server for web browswe setting

■ Available Options

Waveform Analysis Software   (Option)
GPS Antenna (Option)   : GPS Sync. is available
Compability Panel(Option) :   Adaptor panel for AMX-1600 is available.

■ FAULT RECORDER SYSTEM (Example)

GPS Antenna(Option)

AMX-2200

Analog Inputs 16Chs
Digital Inputs 32Chs

100Base TX or 10Base T

Personal Computer

Synchronized signal cable
(Option, for clock and sampling)

LAN
(IP communication)

AMX-2200

Analog Inputs 16Chs
Digital Inputs 32Chs

Remote setting is available
by web browser.
Wave form analysis
software (Option) is
available to install PC.

(Total 5sets of recorders)

■ FUNCTIONS

■ Digital Fault Recorder

Minitoring Analog and Digital Input elements and recording data by tiggered sistuation in electric power systems.

- ● Triggering
  - ・Analog Input: Under / Over voltage, Over current
  - ・Digital Input: NO or NC for each channel
  - ・Others: External/ Programmable, Remote control, Manual
- ● Recording
  - ・Length Pre-fault : 0.2 -1.0 sec / Post-fault 1.0 - 10 sec Total 5-10 sec
 - ・Number of Record: 100 data (Cyclic recording)

■ About "SAGS" (VOLTAGE DIPS)

Voltage sags are most often a result of faults on the power system. Characterizing voltage sag performance has become increasingly important, as industries have automated their processes and become more dependent on sophisticated electronic equipment.

- ● Voltage dip data for PC
  - ・Line voltage (RMS value) before triggering (Preceding 3 cycles before detection)
  - ・Min. RMS value during failure
  - ・Voltage drop rate (%)
  - ・Failure duration (ms and cycles)
  - ・Trigger detection time

■ PRINT-OUT
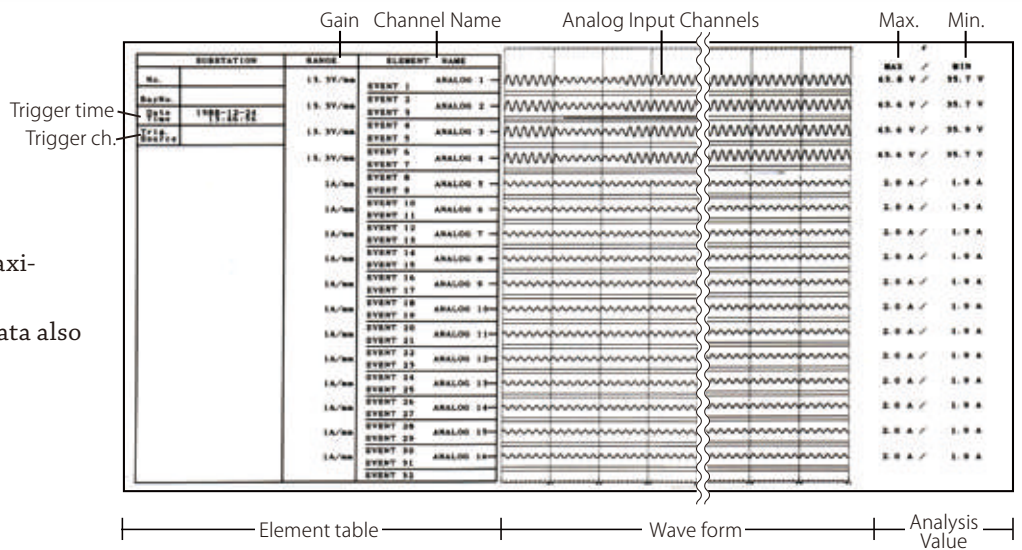
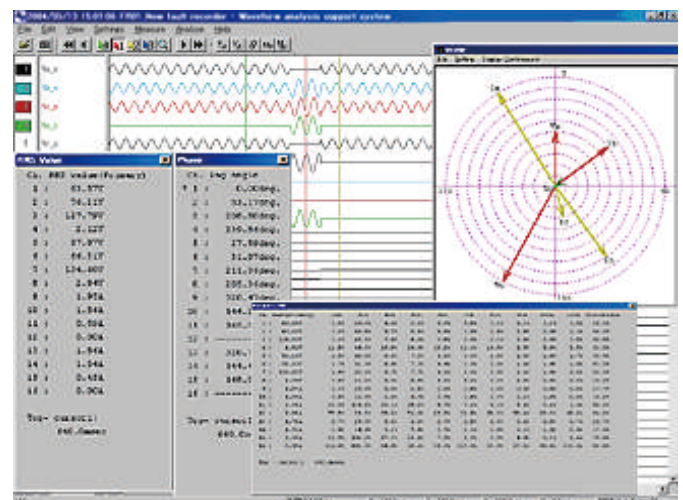Fault data with elements table and maximum/minimum value.
By option, numerical print of "sags" data also available.

Gain Channel Name Analog Input Channels Max. Min.

Trigger time
Trigger ch.

Element table — Wave form — Analysis Value

■ OPTION

■ Waveform Analysis Software

Waveform data are displayed, measured and analyzed, by a personal computer connected to local area network.
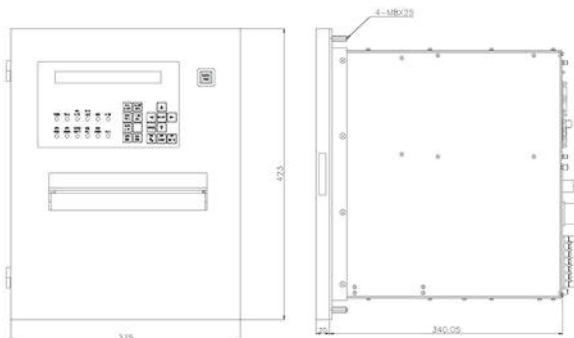Printing the waveform data are also available through the computer.

■ SPECIFICATIONS

Model		AMX-2200　(w/printer)
Number of Input Channels		Analog Inputs: 16ch.　Digital Inputs: 32ch.
A/D resolution		16bit
Sampling frequency		3840Hz (60Hz area), 3200Hz (50Hz area)
Data Storage	Buffer area	32MB
	Data area	256MB Silicon disk （100 data for faults, 200 data for voltage dips）
Recording length		Pre-fault: 0.2 〜 1.0 sec. Post-fault: 1.0 〜 10 sec. Total: 5 〜 10 sec.
Printer	Method	Thermal type dot-line printer
	Resolution	8 dots / mm
	Paper	216mm(W)×100m roll、Thermal sensitive paper
Triggering	Analog input	Analog Input Digital Input
	Event input	NO or NC for each channel
	Other	External, Programmable, Remote control, Manual
Communication	Interface	LAN：100/10Mbps(100BaseTX, or 10BaseT) IEEE802.3 compatible
	Data	Element table, waveform data, Data index
Clock	Display	Year to second, 24hours, automatic calendar, Accuracy : 4sec./week
	Adjustment	Manual : By time signal sent from personal computer Automatic : By external input, By GPS signal(optional)
Display	LCD	40 characters×2Line, Clock, input monitor, setting data
	LED	Power, trigger, communication, alarm, memory full
Self-diagnostic		Automatically, watch dog timer
External I/F	Network	LAN （100BaseTX, or 10BaseT）
	Time sync.	Connecter I/O （Using GPS by option ）
	Sampling sync.	Connecter I/O
Alarm output		Alarm signal, Operation signal Dry contact (1a) output
Power supply		DC110V(88 〜 143V)、AC100V （85 〜 130V） 150W or less
Dielectric strength and Insulation		Among input, power supply, and case AC2000V 50/60Hz for 1 minute, and 50MΩ or over
EXTERNAL DIMENSIONS and MASS		335(W)×423(H)×340(D) mm, 25kg or less
Option	Voltage dips	RMS value (pre trigger, and minimum value) and dips ratio for line voltage, Time period, trigger time
	Terminal adapter	For wiring in panel (By ordering specifications)

■ REQUIREMENTS FOR PERSONAL COMPUTER

Software for remote PC	Setting AMX:Internet Explorer Ver.6 or later (Using Web browser)
	Analyzing wave-form Data :WAVE-FORM ANALYZER (Kinkei System Corp.)
Network	LAN （100BaseTX, or 10BaseT）
Connection	By cross cable of 100BaseTX directly, or via Ethernet LAN

■ DIMENSIONS

● AMX-2200 external view

● PANEL CUT-OUT