

**NEW**

**NEC**

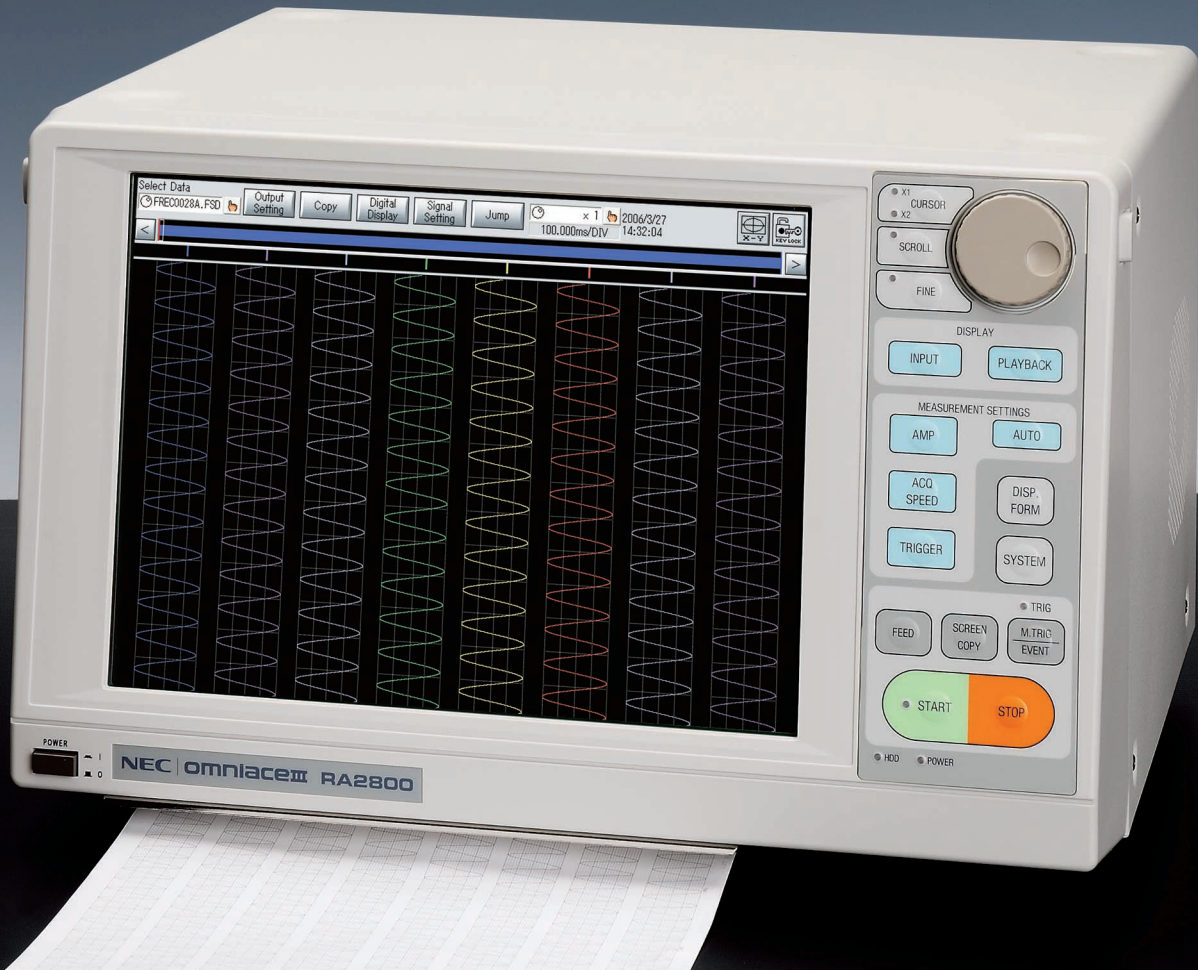
DATA ACQUISITION SYSTEM

**Omniace III**

**RA2800**

Multi-Channel Measurement up to 32 Channels!

Simple and Excellent Operation!!



**Multi-channel Measurement**

Direct sensor inputs up to 32 channels (16 slots).  
16 digital inputs for measuring various timing signals.

**Unique & Easy "Pen-Recorder" Mode**

Easy operation like a pen recorder by the touch panel and virtual amp controls.  
High-speed and high-quality printout at max 50mm/sec.

**Large 12.1" Display**

12.1" TFT color LCD display for better visibility of measured data.

**Use Same Amps from RA1000 & RA2300**

Same AP amplifiers from conventional RA series. 11 types of amps for various signals like voltage, strain, temperature, vibration, pressure, F/V, etc.

**Long-term Continuous Recording on HDD  
Built-in 40GB HDD Provides 60 days  
Recording**

At 10ms sampling on 32 channels

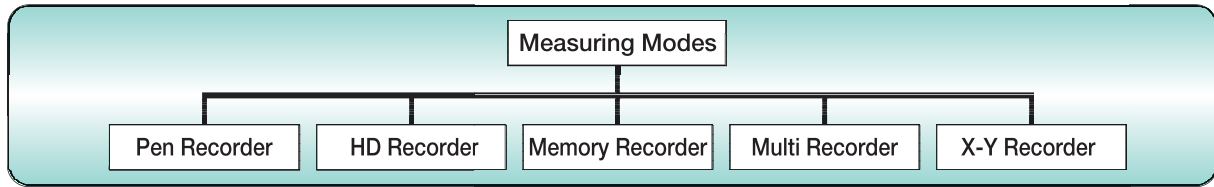


**NEC San-ei Instruments, Ltd.**

## Features

### ● User selectable measurement modes

Users can easily select from five (5) measurement modes—Pen Recorder mode for real time strip chart recording, HD Recorder mode for long term recording of data to a HDD, X-Y Recorder mode for displaying/recording X-Y correlation of two signals, Multi Recorder mode captures transients while recording steady-state signals, and a Memory Recorder mode for recording fast events.



### ● Simple Operation

A "Virtual" Amplifier Control Panel with "Auto Function" automatic adjustment mode combined with our proven reliable touch panel guarantee accurate data recording and simple operation.

### ● Upright Type (easy setup on a bench top or rack)

Parts configuration for measurement on a bench top or rack—control, display and printer units on the front; amplifiers and interfaces on the back.

### ● High-speed & High-quality Printing

Real time selectable chart speeds from 50mm/sec to 1mm/min (resolution: 20 dots/mm).

### ● 32 channels Analog & 16 channels Digital recording

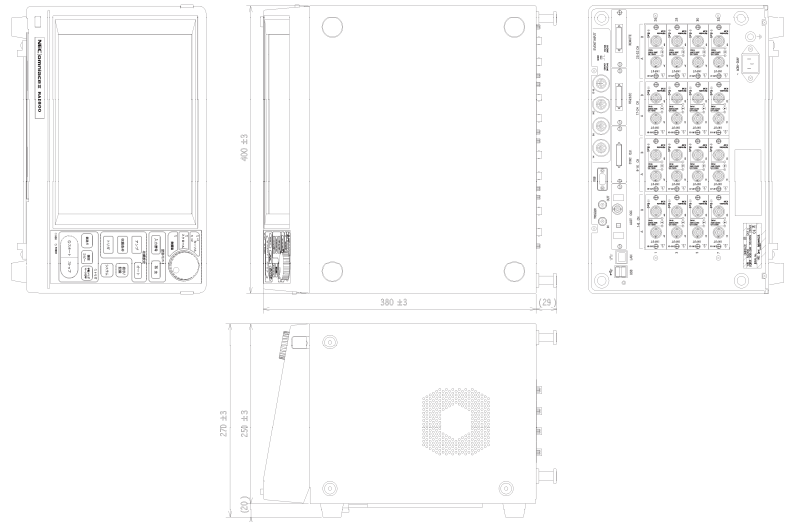
Input up to 32 channels of analog data via isolated, dual channel, plug-in amplifier modules for a wide variety of signals and sensors. Also, 16 digital input channels measure diverse signal timing and contact status.

### ● Outstanding Search Function

Max/Min, time and other search functions are available for finding required data points fast and easily after long term measurement.

### ● Standard LAN and USB I/F

LAN (100BASE-T) for data communication and USB for connecting to external storage devices are equipped as standard interfaces.



## Specifications

Display	12.1" TFT color LCD (1024x768) with touch panel
Channel	32 channels(16 s lots) + 16 channel digital inputs (built-in on mainframe)
Memory	
Capacity	1MW/ch (32MW when using 1 channel)
Division	1, 2, 4, 8, 16, 32, 64, 128 divisions
Sampling speed	MAX 2 μs (500ks/s) ~
Printer	
Printing method	Thermal head printer on thermal paper
Width of paper	219.5mm
Chart Speed	50mm/s to 1mm/min
Effective printing range	1 division (200m m /FS) to 16 divisions (10m m /FS) or arbitrary divisions and range settings
Storage device	Built-in HDD 40GB (including system domain 5GB) External: USB memory, MO through USB standard I/F
Interface	LAN (100BASE-T) ---control with communication command: Standard USB ---external storage device connection: Standard RS-232C ---control by communication command or UPS shut-down: Option
Measuring mode	Pen Recorder ---Records real time signal directly on chart paper HD Recorder ---Records input signal on built-in HDD directly Memory Recorder ---Records high speed events initiated by set trigger Multi Recorder ---Combined recording modes of Memory, HDD and/or Pen Recording X-Y Recorder ---Displays and records X-Y graph by arbitrary 1ch f or X and up to 3ch f or Y axis
Dimensions	Approx. 400 (W) x 270 (H) x 380 (D) mm excluding projections

\*\*Specifications are subject to change without prior notice.

## Models

### Main Unit

Item	Model	Specification
Omnice III	RA2800	Mainframe only

### Input Amplifiers

Item	Model	Specification
2ch High Res DC Amp	AP11-101	Input: ±100mV to ±500V, A/D: 16-bit
2ch FFT Amp	AP11-102	Anti-aliasing filter: 72dB/OCT, w/ power supply for sensor
2ch High-speed DC Amp	AP11-103	Input: ±100mV to ±500V, A/D: 12-bit
2ch AC Strain Amp *1	AP11-104	Frequency characteristics: 2kHz, Bridge power: 5kHz
Event Amp	AP11-105	Input: 8 logic (voltage/contact)
2ch TC/DC Amp	AP11-106	Input: R, T, J, K, W (±100mV to ±50V), A/D: 15-bit
TC/DC Amp	AP11-107	Input: R, T, J, K (±100mV to ±50V), A/D: 14-bit
F/V Converter	AP11-108	Input: 1Hz to 10kHz
2ch Vibration/RMS Amp	AP11-109	Input: ±100mV to ±500V, w/ power supply for sensor
2ch DC Strain Amp	AP11-110	Input: 800 με to 20k με (BV=5V), 2k με to 50k με (BV=2V)
2ch Zero Suppression Amp	AP11-111	Input: ±100mV to ±500V, A/D: 16-bit

\*1: Optional AC Bridge Power Unit (RA23-116) is required.

### Options

Item	Model	Specification
Remote Unit	RA23-112	Use external signals to start/stop recording and paper feed
RS-232C Unit	RA23-114	Control by communication commands or UPS shut-down
AC Bridge Power Unit	RA23-116	Bridge power unit for 2ch AC Strain Amp (AP11-104)



## CAUTION FOR SAFETY

Please read "WARNING" & "CAUTION" in the operation manual attached to the product carefully for proper operation before using the product.

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