

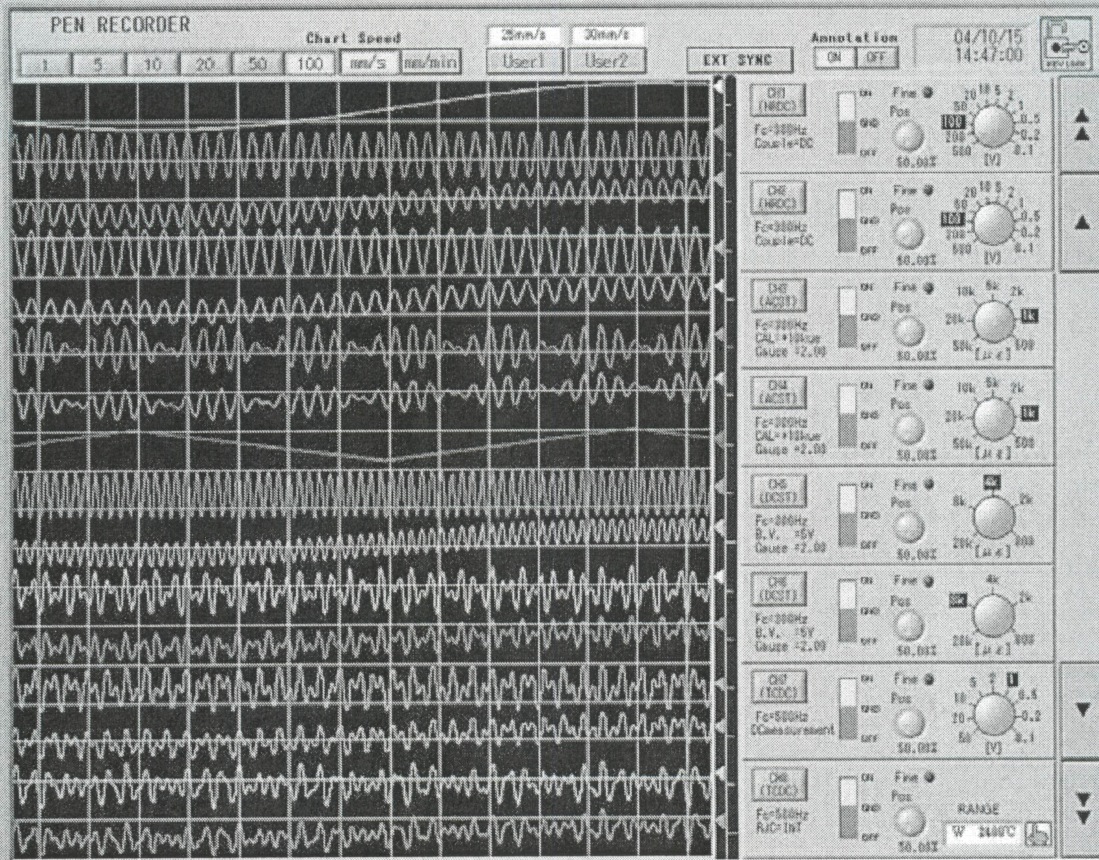
# DATA ACQUISITION SYSTEM OMNIACE III RA2300

# NEC

NEC San-ei



## OMNIACE in NEW GENERATION !!



## “Simple & Quick Operation!”

### Simple “Pen-recorder” Mode

Visualized amp.setting-display & touch panel provide simple operation like Pen-Recorder.

### Dynamic wave form in Wide Display

12.1 inches TFT color display improves visibility of measuring data

### Direct input from Sensors

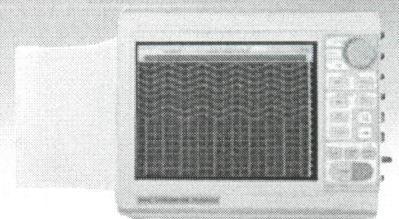
11 types of input amp. are available for Voltage, Strain, Temp, Vibration, Pressure, F/V and other signal input.

### Large size HDD like 120days-recording

Built-in large capacity 40GB HDD enables 120 days-recording (based on sampling speed 10ms, 16ch)

### High-speed thermal printing

Max. 100mm/s high-speed thermal printer is built-in.

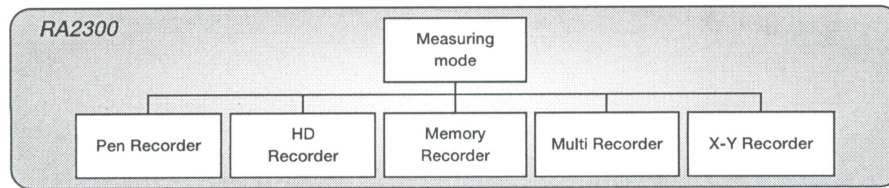




## ■ Features

### ● Select most suitable measurement mode for your application

5 measurement modes are available, such as Pen-Recorder like pen-writing recording, HD-Recorder for long term recording. Each measurement mode is dedicated for each application. OMNICE III RA2300 offers simple and certain operation for exact data acquisition.



### ● Simple Operation

New "Visualized amp.setting menu" and "Auto function" for auto-sense adjustment are added. They realize certain data recording and simple operation, with using reputable touch panel, together.

### ● 16 ch Analog + 16 ch Digital

Max. 16ch signal inputs (8 slots) are prepared for various sensors. And 16ch Digital are available separately from these input slots at option, for measurement of diverse signal-timing and contact-condition.

### ● High-speed, high-quality printing

Chart speed 100mm/s (recording density : 20 dots/mm) to 1mm/min (recording density 80 dots/mm) is selectable.

### ● Standard LAN and USB I/F

LAN (100BASE-T) for data communication, and USB (1.1) for connecting to external storage device are equipped as standard I/F.

## ■ Specifications

### Basic specifications

Display	12.1 inches, TFT Color LCD (1024 x 768) , with Touch Panel
Channel	16ch (8 slots) + Digital input 16 ch (optional)
Memory	
Capacity	2MW / Ch (At using channel 1ch,32MW)
Division	1, 2, 4, 8, 16, 32, 64, 128 divisions
Sampling speed	MAX 1 $\mu$ s (1MS/s)
Printer	
Printing type	Thermal head print on thermal paper
Width of paper	219.5mm
Chart Speed	100mm/s to 1mm/min
Effective printing range	1 division (200mm/FS) to 16 divisions (10mm/FS), arbitrary divisions and ranges settings are available
Memory	Built-in HDD 40GB (Including system domain 5GB) External : Such as USB memory, MO through USB (1.1) I/F
Interface	LAN(100BASE-T) .....control with communication command : Standard USB (1.1 host) .....external storage device connection : Standard RS-232C .....control by communication command or UPS shut-down : Option
Measuring mode (Recorder function)	Memory Recorder .....Recording high speed event with trigger setting HD Recorder .....Recording input-signal into built-in HDD directly Pen Recorder .....Recording input-signal by thermal paper printing Multi Recorder .....Combined recording of Memory, HDD and/or Pen Recording are available X-Y Recorder .....Display and recording X-Y graph by arbitrary setting of 1ch for X axis and 3chs for Y axes
Operating Environment	Temperature : 5 to 40°C Humidity: 35 to 80% RH (without condensation)
Power Supply	90 to 264VAC, Frequency 50 to 60Hz Power consumption : 400VA max ( at max load condition)
Dimensions	Approx. 369.5 (W) x 150.5 (H) x 301 (D) mm
Weight	7.0 kg or less (Main body only) 7.8 kg or less ( Main body with AP11-101 amp. X 4 sets installed)

## ■ Configuration

### Main Unit

Description	Model	Specification
OMNICE III	RA2300	Main Unit

### Optional Unit

Description	Model	Specification
Remote Unit	RA23-112	For start/stop and paper feeding control by external signal
Event Unit	RA23-113	For 16ch logic unit for contact/voltage
RS-232C Unit	RA23-114	For control by communication command or UPS Shut-down
AC Bridge Power Unit	RA23-116	Bridge power unit for 2ch AC Strain amp

### Input Amplifier

Description	Model	Specification
2ch high resolution DC Amp.	AP11-101	Input: $\pm 100$ mv to $\pm 500$ V, A/D resolution:16bit,sampling:10 $\mu$ s
2ch FTT Amp	AP11-102	Anti-Aliasing filter : 72dB/OCT, with power supply for sensor
2ch High-speed DC Amp	AP11-103	Input: $\pm 100$ mv to $\pm 500$ V, A/D resolution:12bit, sampling:1 $\mu$ s
2ch AC strain Amp *1	AP11-104	Frequency characteristic : 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 ( $\pm 100$ mv to $\pm 500$ V), A/D resolution: 15bit
TC/DC Amp	AP11-107	Input : R / T / J / K ( $\pm 100$ mv to $\pm 50$ V), A/D resolution: 14bit
F/V Converter	AP11-108	Input : 1Hz to 10kHz
2ch Vibration/RMS Amp	AP11-109	Input : $\pm 100$ mv to $\pm 500$ V, sampling: 10 $\mu$ s, ;with power supply for sensor
2ch DC strain Amp	AP11-110	Input : 800 $\mu$ e to 20k $\mu$ e (BV=5V, 2k $\mu$ e to 50k $\mu$ e (BV=2V)
2ch Zero suppression Amp	AP11-111	Input: $\pm 100$ mv to $\pm 500$ V, A/D resolution:16bit, sampling:10 $\mu$ s

\*1 Requires RA23-116 AC bridge power unit.

### Optional Software

Description	Model	Specification
OMNI VIEWER	NS2100	Displaying data, CSV conversion

Contents of this catalog including specification are subject to change without notice.



**CAUTION  
FOR SAFETY**

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

NEC San-ei Instruments, Ltd.  
1-25-12, Akebono-cho, Tachikawa-shi,  
Tokyo 190-8537, Japan  
Phone : +81-42-522-0529  
Fax : +81-42-522-0538  
E-mail : osd@necsan-ei.co.jp  
Web : http://www.necsan-ei.co.jp/osd/

### Distributor

Metrum Information Storage Limited  
2 Weller Drive  
Finchampstead  
Berkshire  
RG40 4QZ  
Tel: +44 (0)118 973 3000 Fax: +44 (0)118 973 4363  
E-mail: sales@metrum.co.uk www.metrum.co.uk

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Cat No.043