

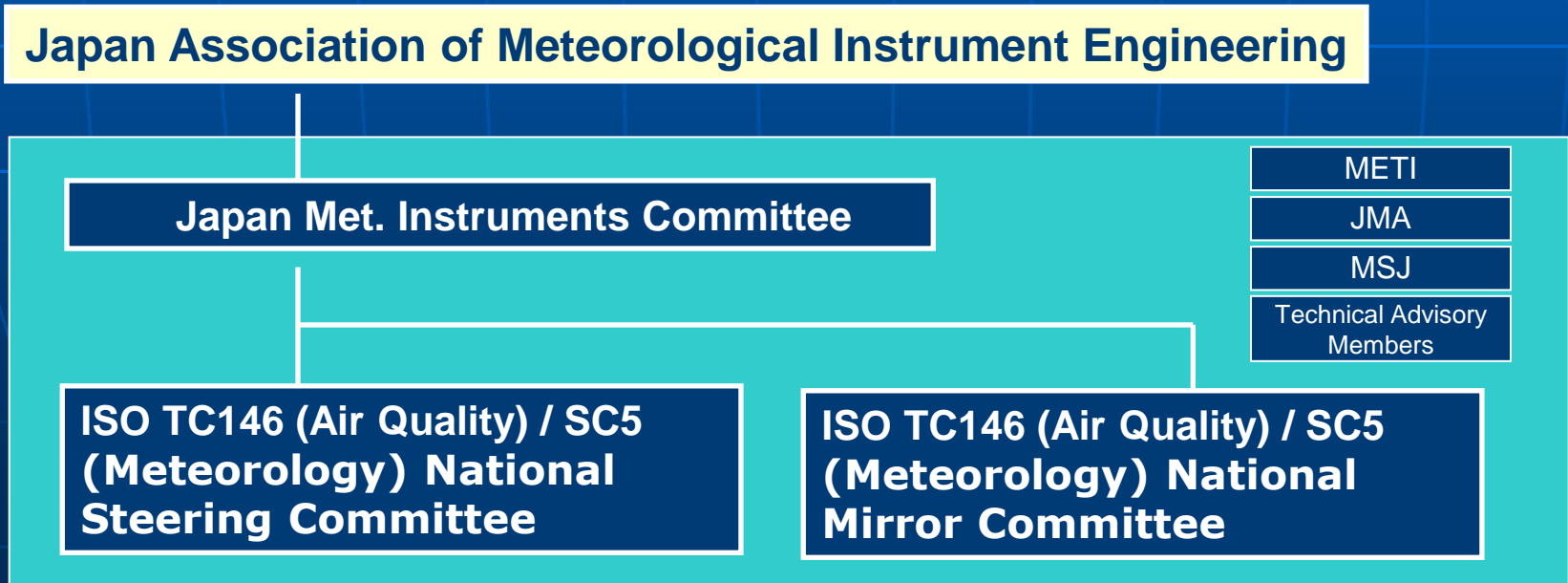
Introduction Japan Association Of Meteorological Instrument Engineering

Japan Met. Instruments Committee

The committee launched on May 10, 2005 as a first association of Japan Association of Meteorological Instrument Engineer. Our goal is to promote observational technique and R&D for contributing to industrial development by;

- 1) collecting information on domestic and overseas industries and academic societies;
- 2) sorting them out towards systematic understanding;
- 3) collaborating with government authorities and other academic societies

The committee has been appointed as approved party of national mirror committee of ISO TC146 (Air Quality) / SC5 (Meteorology) to deliberate ISO standards.



Members

No.	Company	URL
1	株池田計器製作所	IKEDA MANUFACTURING, INC http://www.ikeda-keiki.co.jp/
2	英弘精機(株)	EKO Instruments Co., Ltd http://www.eko-usa.com/
3	株小笠原計器製作所	OGASAWARAKEIKI CO., LTD. http://www.ogasawarakeiki.co.jp/
4	株ソニック	SONIC CORPORATION http://www.u-sonic.co.jp/english/
5	光進電気工業(株)	KOSHIN DENKI KOGYO CO., LYD. http://www.koshindenki.com/en/Default.aspx
6	株小松製作所	KOMATSU FACTORY CO., LTD http://www.komatsuins.co.jp/English/HTML%20All%20Files/top%20English.htm
7	三興通商(株)	SANKO TSUSHO CO., LTD. http://www.sankotsusho.co.jp/
8	タマヤ計測システム(株)	TAMAYA TECHNICS INC. http://www.tamaya-technics.com/index-e.htm
9	株日本エレクトリック・インスルメント	NIPPON ELECTRIC INSTRUMENT , INC. http://www.nei.co.jp/english/index.html
10	明星電気(株)	Meisei Electric Co., Ltd. http://www.meisei.co.jp/english/
11	横河電子機器(株)	Yokogawa Denshikiki Co., Ltd. http://www.yokogawa.com/ydk/

ULTRASONIC METEOROLOGICAL MEASURING EQUIPMENT



AR-410

DOPPLER SODAR

AR / KPA Series

Real-time monitoring of wind profiles in the atmospheric boundary layer

ULTRASONIC ANEMOMETER

DA Series / SAT Series

Observations of 3-dimensional wind, air turbulence, heat flux etc. in the field, wind tunnels, buildings and on the bridges



DA-700



SAT-600/900/550



KPA-200/1000



ULTRASONIC SNOW LEVEL METER

SL-370

Measurement of snow depth by ultrasonic technique Utilized by the Japan Meteorological Agency, Road Information system etc. in Japan.

ULTRASONIC OCEANOGRAPHIC MEASURING EQUIPMENT



SUPER WAVE METER

USW-1000

Principal instrument of Japanese coastal wave observation for height, period and directional spectra of sea waves in real time.

SONIC CORPORATION

19-6 Higashimatsubara, Hakonegasaki, Mizuho,
Nishitama-gun, Tokyo, JAPAN 190-1295
<http://www.u-sonic.co.jp> E-mail info@u-sonic.co.jp
TEL: +81-42-568-3203 FAX: +81-42-568-3305

WAVE HEIGHT METER

Sea bed type sensor

On the air type sensor



CURRENT METER

RC-500



USW-150



US-500

Ultrasonic anemometer

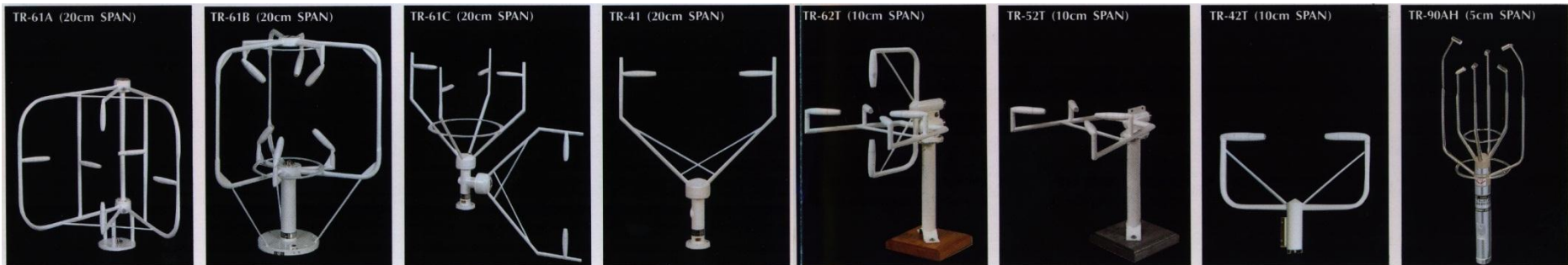


1.Features

- (1) Measurement of wind velocity and sound virtual temperature with fast response (20-50Hz)
- (2) 3-dimensional measurement including vertical component
- (3) Linear measurement from 0m/s
- (4) Free from influence of radiation on temperature measurement



SAT-600/900/550



DA-700

2. Applications

- (1) Atmospheric diffusion observation, Environmental observation, Lower atmospheric and Local meteorological observation
- (2) Heat, Vapor flux, Greenhouse effect gas's flux---AWS with other sensors
- (3) Safe management of construction, civil engineering and traffic facilities

1. Features

- (1) Ground-based remote sensing of wind profile up to 1000m altitude,
- (2) Monitoring of temperature stratification's patterns,
e.g. Temperature inversion layer and/or Thermals
- (3) Low cost and high reliability



AR-410



KPA-200/1000

2. Applications

- Meteorological and Wind engineering research
(Wind in the boundary layer and turbulence)
- Monitoring of air diffusion around exhaust gas tower at Power plant
- Wind resources assessment
- Wind shear observation at an airport

AUTOMATIC RAIN SAMPLER US-330



No Need to
See the Weather, Open/Close the Cover,
Rush for the Fridge,
It's all Automated!!



AUTOMATIC RAIN SAMPLER US-330

- **Automatic open/close function** with a precipitation detector
- **A built-in refrigerator** keeps the quality
- **Highly Corrosion-Resisting**
- **Best for atmospheric pollution researches !**



Precipitation Detector



Refrigerator



US-330 is used by...



Acid Deposition Monitoring Network in East Asia (EANET) Many universities and research institutes in Asia.



OGASAWARA KEIKI Co., LTD.

1-5-12 Chuo-cho Meguro-ku Tokyo, Japan

Tel: +81-3-3711-6415

Fax: +81-3-3792-7497

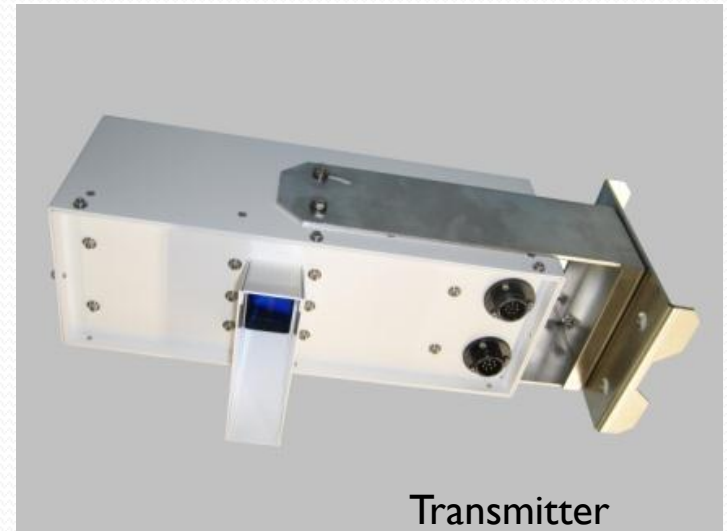
E-mail: info@ogasawarakeiki.co.jp Website:

<http://www.ogasawarakeiki.co.jp>

Laser Scanning Snow Meter

precise and reliable

- **Laser Scanning Max. 342 pts./10 seconds**
- **Eliminates Abnormal Values**
- **Class I Laser**
- **Self-diagnosis**
- **Distinguish Rainfall from Snowfall (Opt.)**



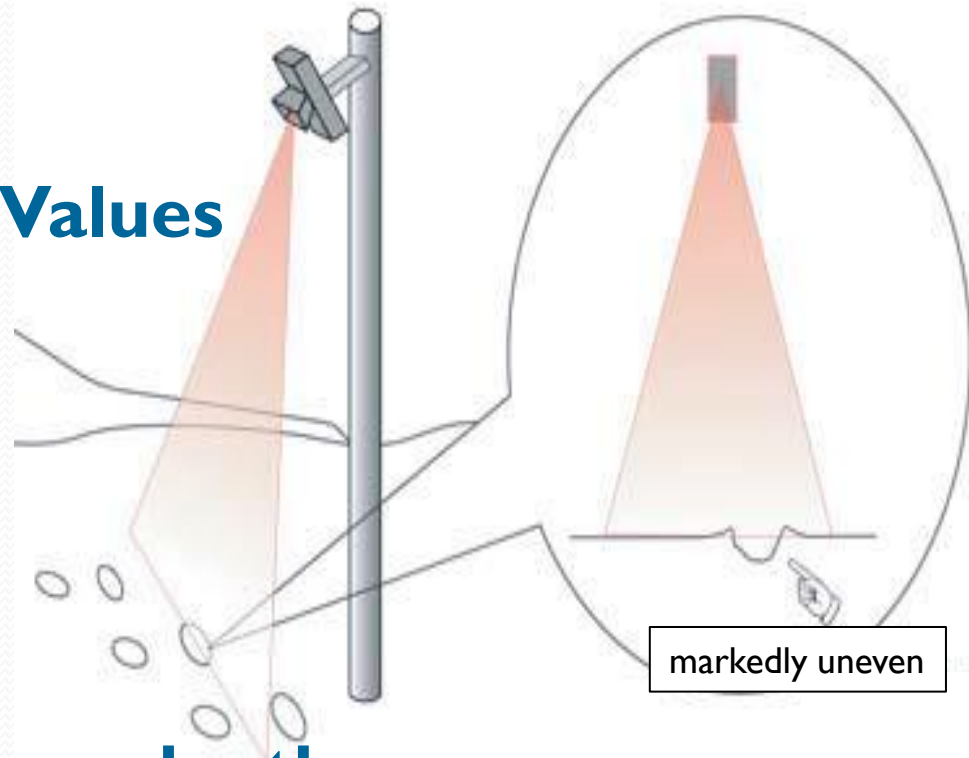
How laser scanning works ?

1. Scans the Surface

2. Eliminates Abnormal Values

caused by...

- **Animals**
 - **Stamps**
 - **Flying Dead Leaves**
 - **Over-grown Weeds**
- etc.**



3. Calculates average snow depth

Other Specs

Analog Outputs	0-1V 4-20mA (Opt.)
Serial Output	RS-232C (1min. 10min. 60min. Interval)
Resolution	1 mm
Range	0-6m
Accuracy	± 1cm
Scanning Angle	Max 60 Degrees



NIPPON ELECTRIC INSTRUMENT, INC.

1-5-12 chuo-cho Meguro-ku Tokyo, Japan

TEL: +81-3-5768-8251 FAX: +81-3-5768-8261 Email: info@nei.co.jp

Website: <http://www.nei.co.jp/english/index.html>



The Weather Balloon Mfg. Co., Ltd.
株式会社 気球製作所

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COSMOPRENE

Excellent balloon for Meteorological Observation



- ✓ COSMOPRENE is an excellent balloon for Meteorological Observation, easy to handle, can be released under any weather condition and capable of fast rising, both daytime and night use without any pre-heating.
- ✓ COSMOPRENE that is made from natural rubber (Latex) or synthetic rubber is high efficiency and reliable.
- ✓ COSMOPRENE has been accepted by the Japan Meteorological Agency, Ministry of Japan Defense and World Meteorological Society as an approved product for meteorological use.
- ✓ COSMOPRENE leads the world by its proven performance.



1. COSMOPRENE
2. Captive Balloon KY
3. Captive Balloon KYS
4. Color Balloon

The Weather Balloon Mfg. Co., Ltd.

<http://www.weatherballoon.co.jp/>
e-mail : info@weatherballoon.co.jp

Products

« For All Types of Natural Hazard »

Space



「KAGUYA」

Defense



N502



Emergency
EQ Alert

QCAST system

Road Visibility

Road visibility
sensor



Earthquake



Nowcast Intensity
meter

Landslide



Landslide monitoring
system

MEISEI
meisei electric co.,ltd.
www.meisei.co.jp

Tsunami

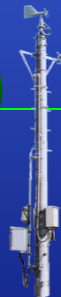


Tsunami Early warning
system

Typhoon



AWS network system



Upper Air



GPS Radiosonde



Obstacles



Micro wave radar

Flood



Rainfall
information
system

Water level gauge

GPS Upper Air Sounding System

Meisei is the only one Japanese radiosonde manufacturer measuring upper-air weather up to 20-30 km with GPS technology.



GPS Sonde

RD-08AC Ground Receiving station

- Selected design intended for operational & research purposes and price reduction

- A4 size receiver with 2 kg weight
- 100 to 240 VDC for worldwide use

- Safety function for sudden shutdown of PC: audio data reproduction function enables data restoration

RS-06G GPS Radiosonde

- Lighter weight: 150g including batteries

- Long life battery (240 min) allows leisurely preparation work.

- Expendability to Additional Sensors 8 A/D and serial ports provides the extensive sensor connection; OZONE, CFH, CO2, MTR, HYVIS, OPC, FLASH-B etc.

RD-08AC Ground Receiving Station

TRACKING CONTROL

1680 MHz tracking antenna control for HYVIS

ANALOG INTERFACE

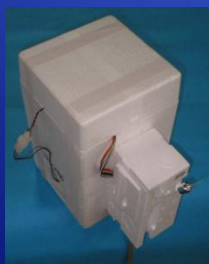
- ECC Ozone
- A/D Input (Max 6 ch)

DIGITAL INTERFACE

- MTR temperature sonde
- CO2 sonde
- OPC aerosol sonde
- FLASH-B water vapor sonde
- CFH Frostpoint Hygrometer
- Free format board (Max 21byte/sec)



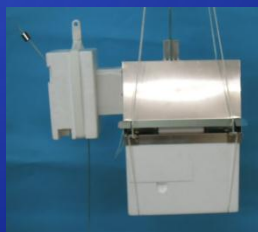
MTR



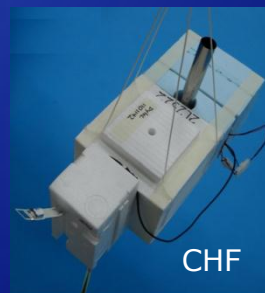
ECC Ozonesonde



CO2 sonde



HYVIS



CHF



OPC

Nowcast Earthquake Observation

The Nowcast Earthquake Observation Equipment

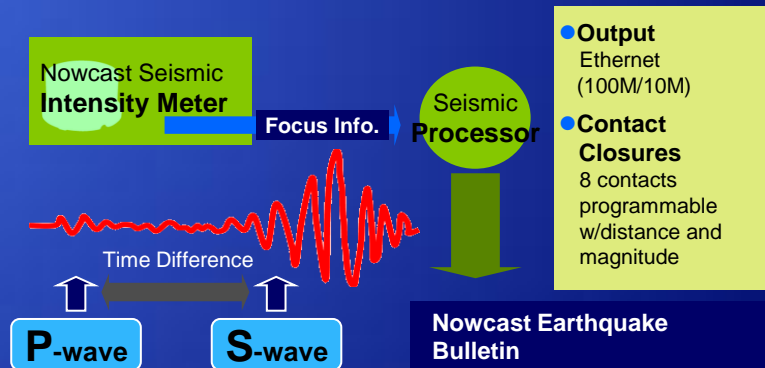
Is comprised of a Nowcast Seismic Intensity Meter and Seismic Processor to detect and process seismic data derived from an earthquake before strong motion occurs. "Knowing it before feeling it" allows people to take quick action to prevent or mitigate damages caused by earthquake.



Nowcast Earthquake Information

Displays the following information at the place where the seismic intensity meter is installed.

- Estimated intensity scale and motion
- Magnitude
- Distance from epicenter
- Countdown to arriving
- Using [B-ΔLaw + Primary Components Analysis] method



Instrumental Seismic Intensity Scale

It measures the intensity scale of 0-7 established by Japan Meteorological Agency.

- Collects earthquake information in real time
- Provides stable measurement and wave information
- Computes intensity and intensity scale, maximum acceleration and SI value