

Field Data Transmission Service

SESAME

Sensory Data Transmission Service Assisted by Midori Engineering

Field data in your hands
Anytime, anywhere

*A simple, maintenance-efficient solution for
Continuous field data monitoring*



Field Data Transmission Service

SESAME

SESAME provides simple, maintenance-efficient solutions for...

Global Environmental Problems

by automatically collecting environmental data (temperature, precipitation, groundwater level, etc.) from domestic and overseas monitoring sites.

Weather Hazards Prevention

by emergently showing current situation in the upstream area (river water level, rainfall, wind direction and velocity, etc.).

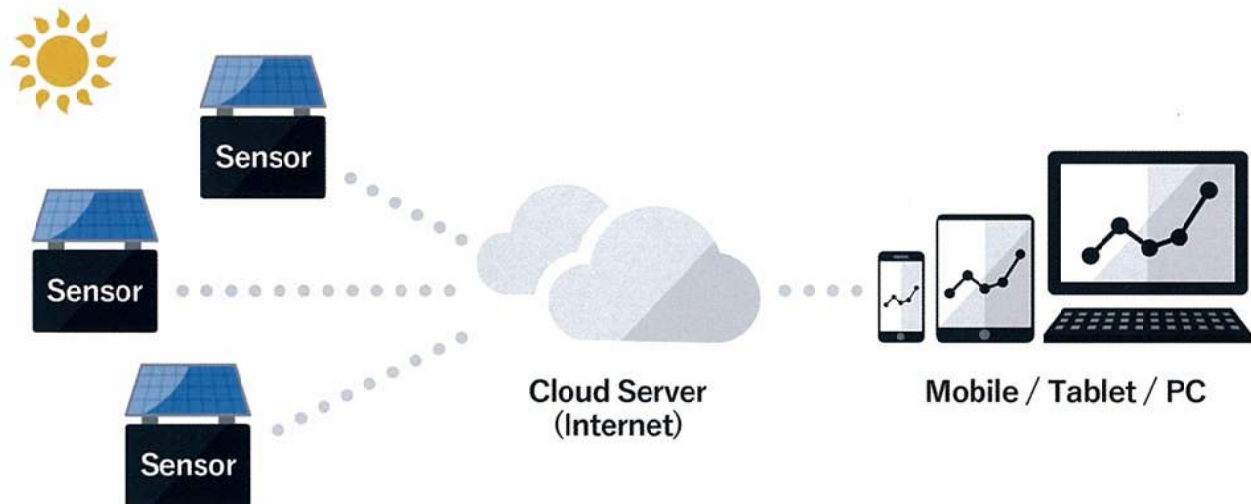
Advanced Agriculture Promotion

by concurrently monitoring field conditions (air temperature, relative humidity, soil moisture, etc.) and growing conditions of crops (by photos).



*Measure it,
Report it,
Use it.*

SESAME is a Field Data Transmission Service, which records field data measured with various sensors, transmits the data to a cloud server via mobile phone network, and provides the data to the users via a web-based data manager.



Five Major Advantages of **SESAME**

Real-time monitoring of remote field data

- A built-in 3G modem
- Periodic data transmission
- Seeing is believing—camera image
- Alert by e-mail

Flexible to various situations

- Adaptive to various sensors
- Driven by solar cell and rechargeable battery
- Domestic and overseas mobile phone network available
- CSV file for analysis on a local PC
- Data visualization on multi-devices

Easy operation

- Easy operation of web-based data manager
- Access to all data from a portal page

Reliable system

- Data storage to a secure cloud server
- Carefully selected durable devices
- Maintenance-efficient system

Cost-friendly service

- Low running costs

SESAME Series

SESAME II -02d

Designed for
water level, rainfall, and various devices

Concurrent measurement up to 5 devices
Water level, rain gauge, and various sensors available

Standard solution of
water level monitoring

A built-in SIM-free modem

Adaptive to GSM/GPRS,
3G (WCDMA)



Measured Items

- Water level
- Rainfall
- Temperature
- Humidity
- Soil moisture
- Ground surface level
- Turbidity
- Tree growth
- Etc.



Jatiluhur Dam



Curug Weir



paddy field



Sarobetsu Mire



larch in Tokachi Plain

Available sensors



Water level sensor
(Pressure type)

STS Sensor Technik Sirmach AG



Rain gauge(Metallic)
KOSHIN



Rain gauge(Plastic)
Ota keiki seisakusho



Pyrheliometer
PREDE



Soil moisture sensor
(ADR type)
Delta-T Devices



Soil moisture sensor
(Tensiometric) Sensez



Dendrometer
Environmental
Measurement Japan



Thermohygrometer
(active ventilation) MEL



Ground surface
level sensor MEL



Turbidity meter
OPTEX

SESAME II -05d

Designed for
Vaisala Weather Transmitter WXT530

Wind, rain, and various weather parameters with one probe
For early warning system of weather hazards

Real-time monitoring system
with a small intelligent
weather station



paddy field



Barugbug

Measured Items

- Wind direction
- Wind velocity
- Rainfall
- Air temperature
- Relative humidity
- Air pressure
- Solar radiation
- Etc.

SESAME II -06d

Designed for
Horiba Multi-parameter Water Quality Meter U-53

Various water quality parameters detected with one probe
For water management in rivers, dams, and culture ponds

Real-time monitoring system
with a compact multi water
quality sensor



Bekasi Weir



Barugbug Weir

Measured Items

- Turbidity
- Water temperature
- Water depth
- pH
- ORP
- Dissolved oxygen
- Electric conductivity
- Etc.

SESAME-CAMERA

Still image camera

Photo-shooting at programmed intervals and(by moving detection)
For monitoring general situation(and anti-theft)



vegetable field



the growing process of a plant

Specifications

- Up to 5 M pixels
- Programmable shooting intervals
- LED Flash light
- Moving body detection*
- Infrared images*

* Under development

Web-based field data manager Multi-language*, multi-device adaptive

* Bahasa Indonesia, English, and Japanese (Sep. 2016)

Locations are plotted in the map
Network conditions are listed

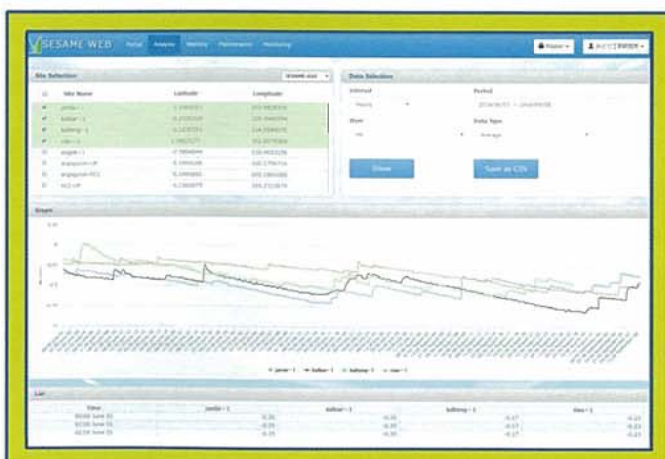
Timeline of
measured values

Portal page

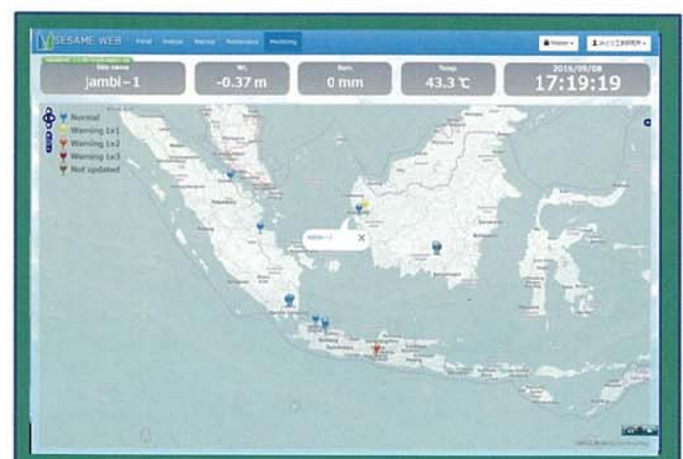


Latest information
at a selected site

Recent data are shown in these graphs
Warning thresholds of water levels also shown



Data selection, comparison, and
download in Analysis page



Auto-patrol of latest information and
warning levels in Monitoring page



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※Product specifications are subject to change without notice for improvement purposes