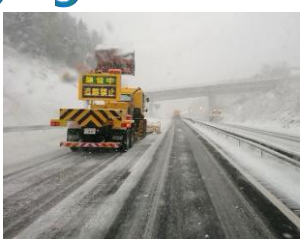
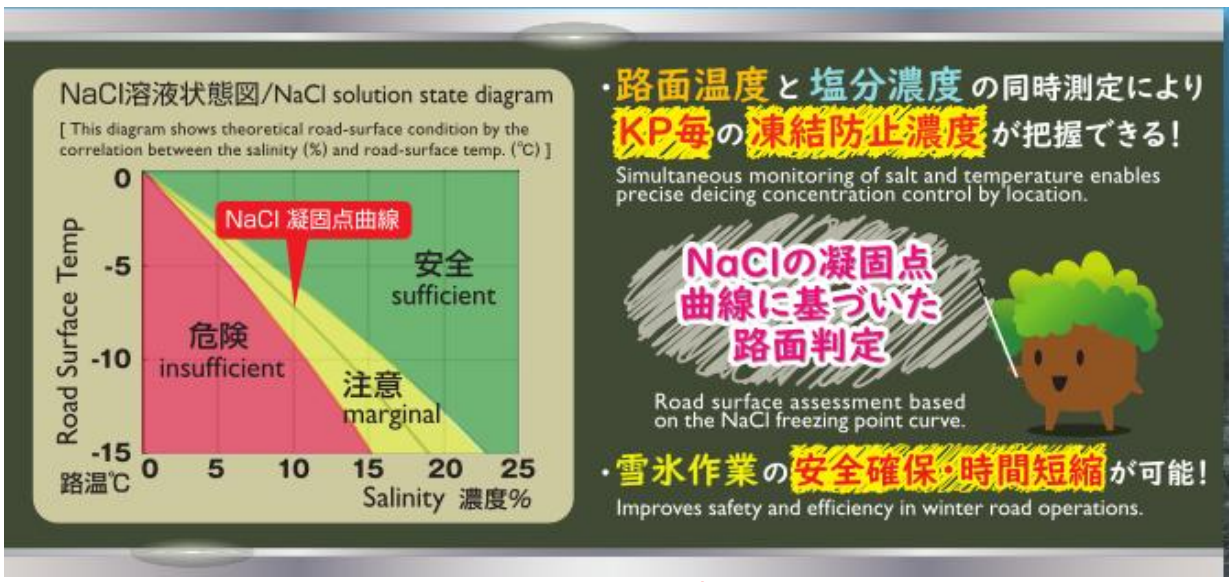
Onboard Salinity Sensor System

Système embarqué de mesure de la salinité de la surface routière

Assisting in optimizing the application of anti-freezing agent!



Enhancing the efficiency and safety of salinity measurement



Functions:

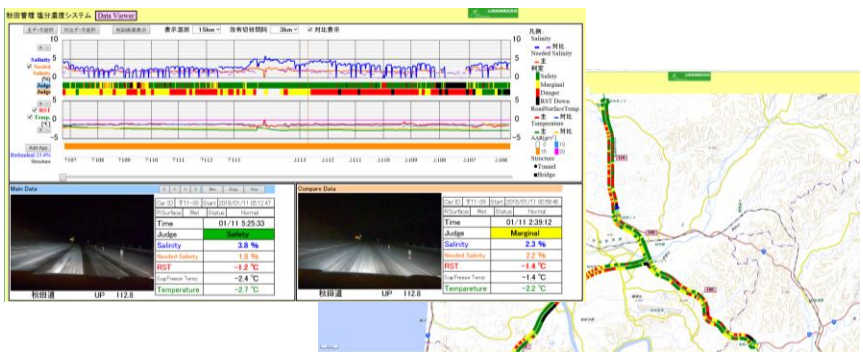
- Kilo-post-by-kilo-post linear measurement of road temperature and salinity
- Colored display of road surface evaluation results
- Checking the road surface condition by using image data

Advantages:

- Assisting in the optimization of anti-freezing application
- Enhancing snow and ice operation efficiency
- Utilization for thermal mapping

Display items:

Kilo post, both directions
Atmospheric temp. (°C)
Road surface temp. (°C)
Salinity (%)
Required salinity (%)
Estimated freezing temp. (°C)
Result (salinity comparison)



System configuration

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NEW TECHNOLOGY

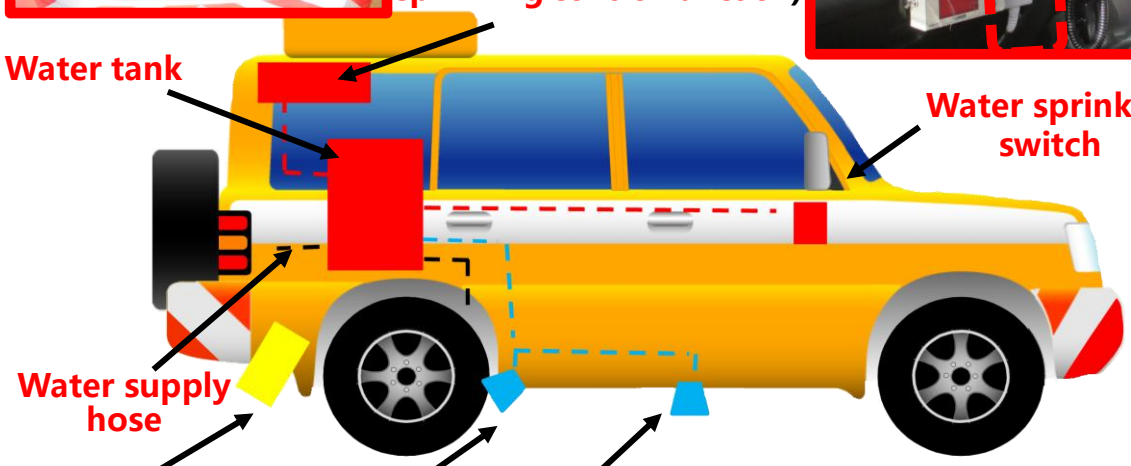
Onboard Dry Surface Salinity Sensor System

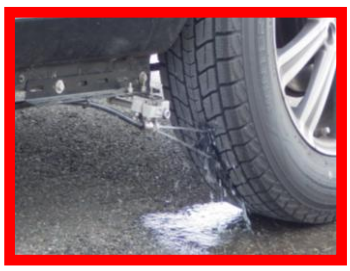
Système embarqué de mesure de la salinité des chaussées, utilisable sur surfaces sèches et mouillées

Measuring salinity on dry road surfaces!

A newly developed system capable of measuring salinity even if the road surface is dry

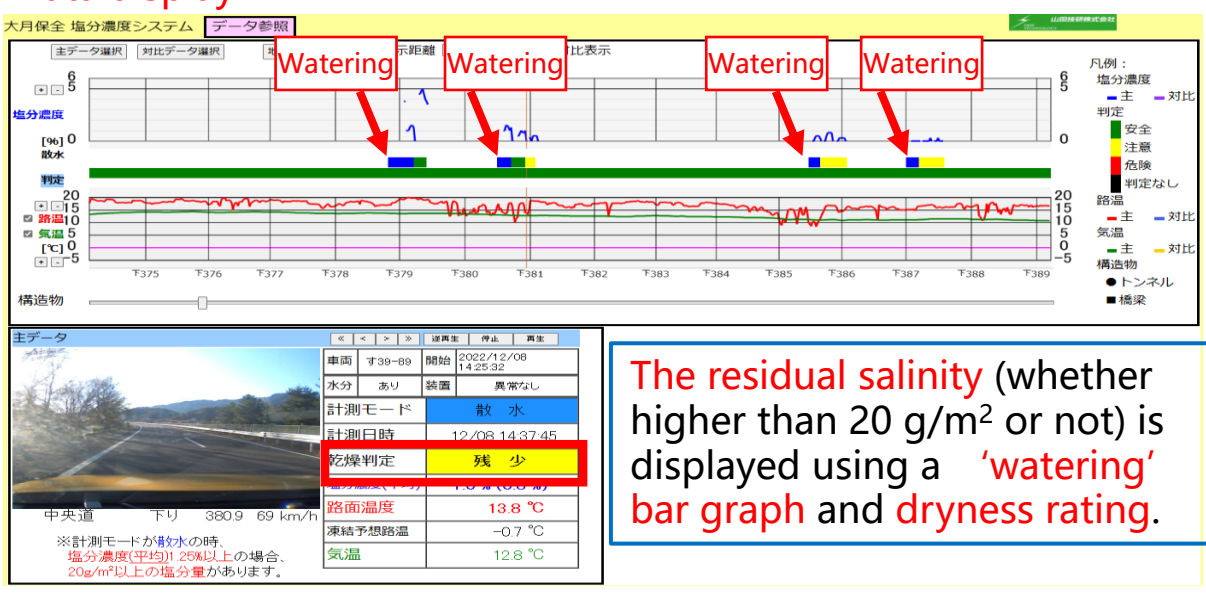
ECU
(with a newly added water sprinkling control function)





- A water sprinkler unit is installed to a standard onboard salinity sensor system.
- The salinity sensor is the same as the standard sensor.
- The ECU is equipped with a water sprinkler control system.
- Pressing the water sprinkler switch discharges water for 30 seconds.

Data display



The residual salinity (whether higher than 20 g/m² or not) is displayed using a 'watering' bar graph and dryness rating.

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NEW TECHNOLOGY

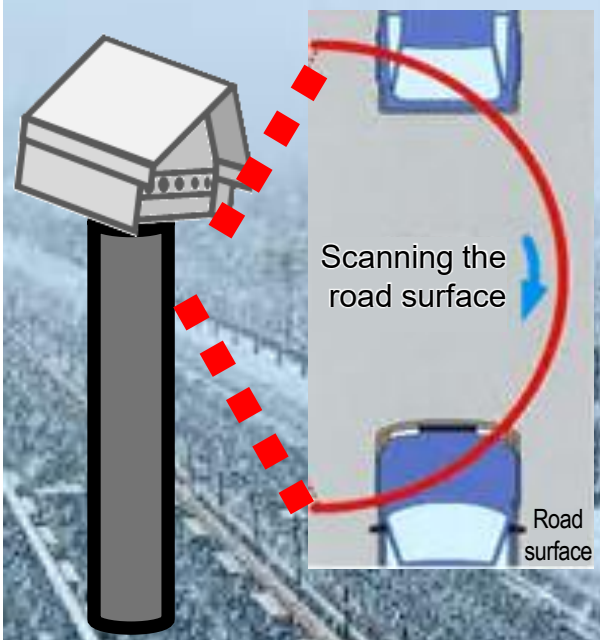
Road Surface Sensor
<ROAD EYE S>

Capteur de surface routière
<ROAD EYE S>

Determining the road surface condition in winter in real time!

Former Road Eye

Performing snow cover depth measurement, road surface temperature measurement and determining the road surface condition by scanning the road surface!



Comprehensive road surface sensor with road surface image display function

- **Measuring the road surface at 50 points to obtain a comprehensive assessment of road conditions.**
- **Visualizing rutting and non-rutting areas of snow cover on the road surface**
- **Accurate determination of the site condition by combining measurements with image data obtained from the camera system**
- **Optimizing (for safety and efficiency) the operation of snow-melting and anti-freezing equipment based on the road surface condition data transmitted in real time**

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NEW TECHNOLOGY

Road Surface Sensor
<ROAD EYE S>

Capteur de surface routière
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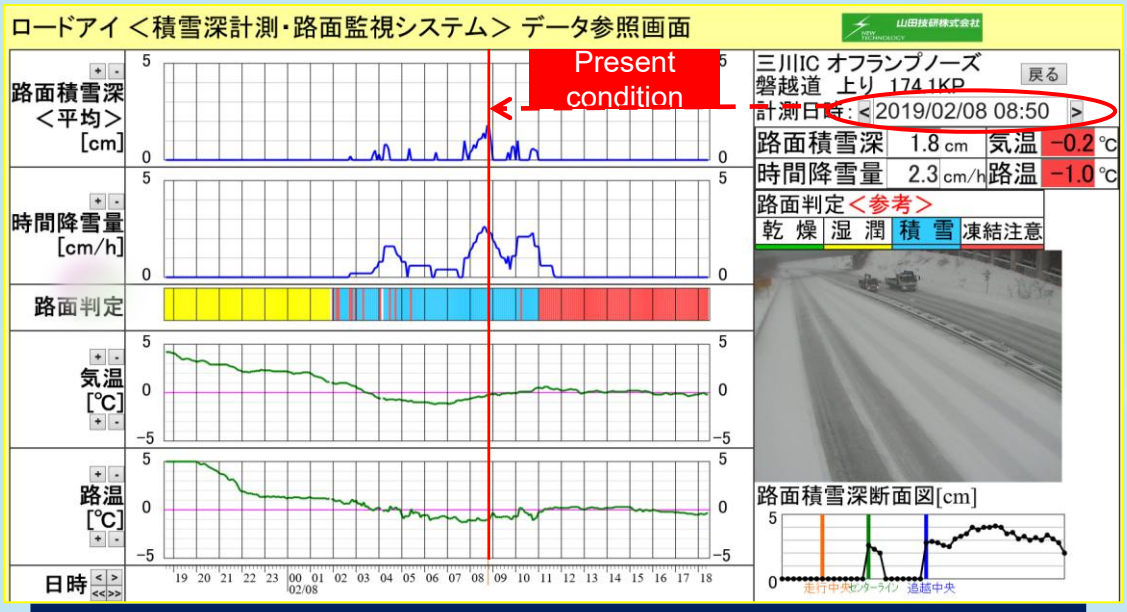

24-hour time history chart
Past data and images are searchable.

[Specifications]

Sensor head	
Power supply voltage	**100 VAC 50/60 Hz**
Power consumption	**150 W or less**
Ambient temperature in storage	**−10 to +50°C**
Ambient temperature in use	**−20 to +50°C**
Weight	**Approx. 12 kg**
Dimensions	**220 (W) × 355 (D) × 481 (H)**

[Measurement items　* Transmitted every 5 or 10 minutes

	Item	Description
Measuring items	**Atmospheric temperature (°C)**	**−20 to 80°C (0.1°C increments)**
	Result	**Snow cover/ice formation warning, wet, dry**
	Road surface temperature	**−20 to +60°C (0.1°C increments, transverse 50-point arc)**
	Snow cover depth (option)	**0.1 cm increments (transverse 50-point arc)**
	Image (option)	**Still image**

Delivery record of ROAD EYE current model: 113 sets to NEXCO (East, Central), 8 sets to MLIT, 48 sets to prefectural governments, 23 sets to municipal governments, and 2 sets to JR

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