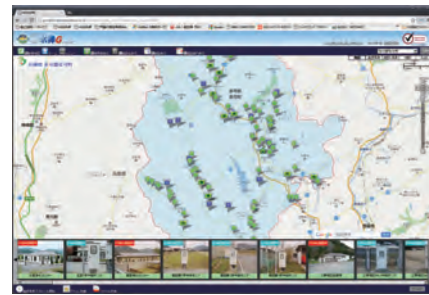
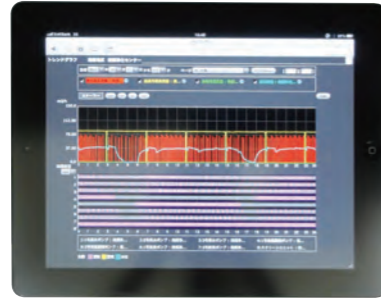


the special software unnecessary for cloud management  
 You can use a usually personal computer, tablet, smart-phone, mobile- phone



management maps



trend-graph



flow-sheet



measurement data



emergency mail

product of Suishin network



manhole pump control panel



exchange unit of manhole pump control panel



the monitoring reporting system



the plant control panel monitoring system



the drinking water facilities management system



the gate management control system



the snow melting facilities



the measurement of water level, flow

Introduction of all Japan prefectures

Hokkaido • Aomori • Akita • Iwate • Miyagi • Fukushima • Niigata • Nagano • Gunma • Ibaraki • Saitama • Tochigi • Chiba  
 Tokyo • Kanagawa • Yamanashi • Shizuoka • Toyama • Ishikawa • Fukui • Gifu • Aichi • Mie • Shiga • Kyoto • Osaka • Nara  
 Wakayama • Hyogo • Okayama • Hiroshima • Tottori • Shimane • Yamaguchi • Ehime • Kochi • Fukuoka • Saga • Nagasaki  
 Kumamoto • Oita • Miyazaki • Kagoshima October, 2011

Human Nature Science Institute Foundation series of "human and water" (novel,comics,juvenile literature,reading tapes)



Yahee Sutoh  
(1651~1752)



Tahee Kiyohara  
(1711~1787)



Shichibee Ookaji  
(1621~1689)



picture-story show  
 "Yahee Sutoh"  
 (PDF file)

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JQA-QM6790

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The optimization of water-related facilities

The Suishin Network



やくも 水神  
 yakumo  
 Suishin

Network

over the 5500 facilities of 240 local government

October, 2011

water management revolution  
 by the cloud computing

safety network of strength  
 against disaster

respond to any requests

- unification for wide area water-related facilities
- automatic version-up of reporting system
- reduction of initial-cost, running-cost
- construction of strength against disaster and high reliability network



hero of river improvement  
 Yahee Sutoh  
 (1651~1752)

We can see a video by  
 smart-phone, tablet



KOMATSU ELECTRIC INDUSTRY CO.,LTD.

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

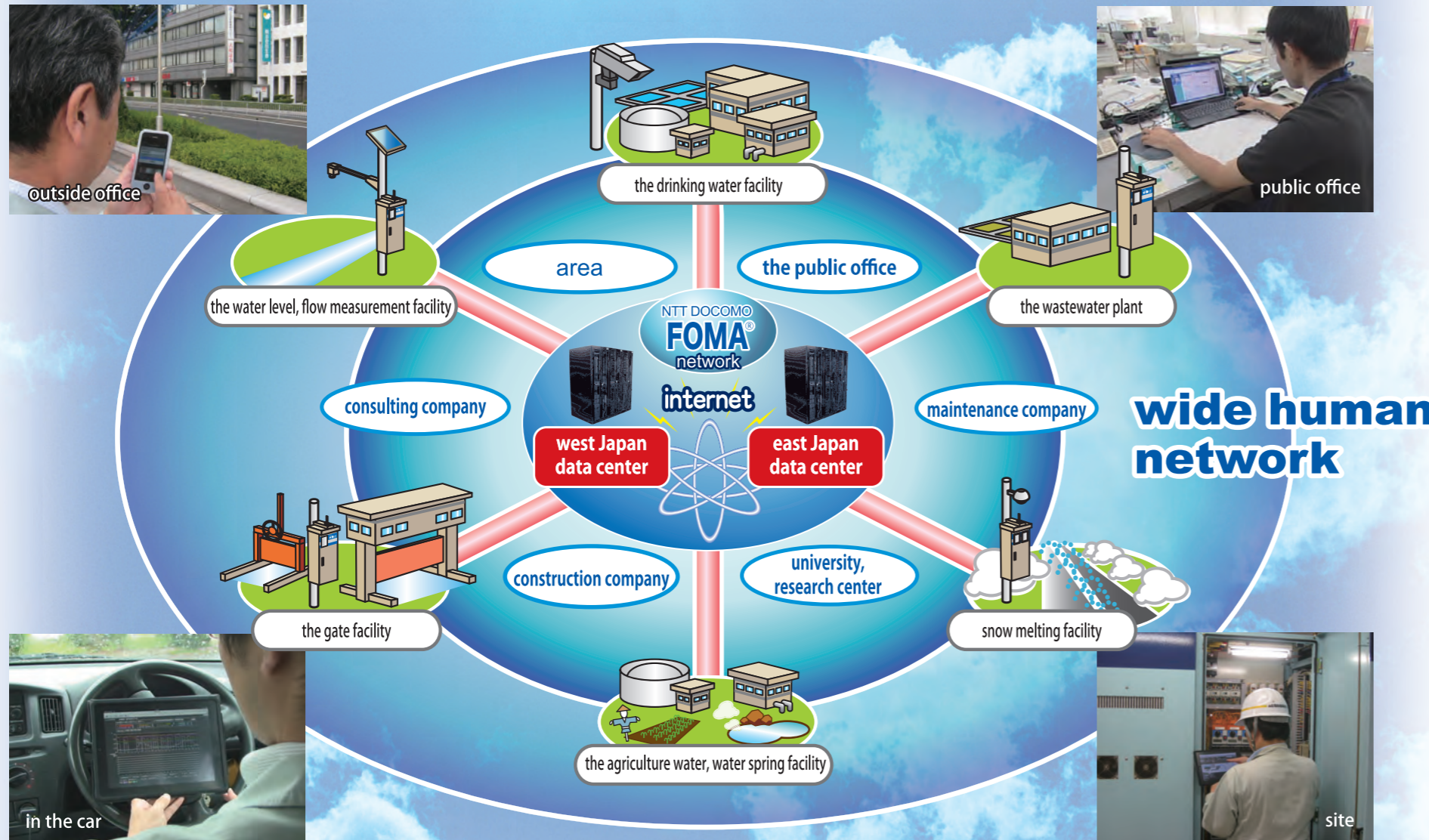
No.

1

# Aim for sustainable water management Creation reliability management network of integral of knowledge and technology based on strength cloud system against disaster



## realization of wide-area management by Suishin network



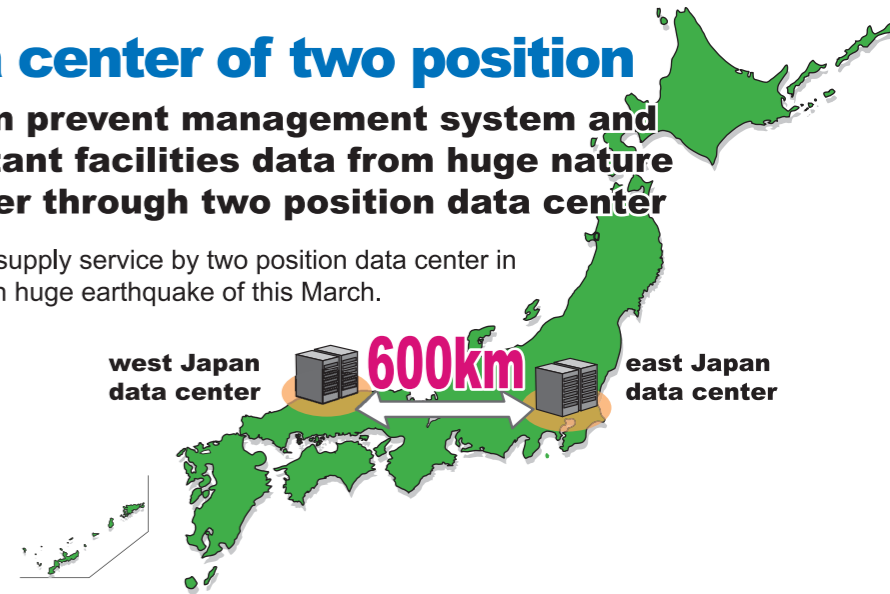
To share site information, reliability everywhere facility management

FOMA is a registered trademark of NTT DOCOMO

### data center of two position

We can prevent management system and important facilities data from huge nature disaster through two position data center

We could supply service by two position data center in east Japan huge earthquake of this March.



At Niigata earthquake of October, 2004, twenty pump station continued to send data until battery down. After electronic restoration, monitoring system started same time. Under the situation of impossible moving, we could know a site situation through remote control system.

### earthquake resistant/fire/ power down/security measure

Data center has a high quality security and disaster prevention



T-Cho, Hyogo Prefecture



O City, Tochigi Prefecture

## products list



## specification of controller

		MA series		XP series					PA series		
		MA-S	MA-M	XP-01	XP-02	XP-03	XP-04	XP-05	PA-S	PA-M	PA-L
input	digital input	12 points	15 points	12 points	28 points	52 points	140 points	264 points	576 points	1152 points	2304 points
	analog input	2 points	2 points (insulation)	2 points	6 points	10 points	18 points	26 points	16 points	32 points	64 points
	pals integration input	2 points	2 points	2 points	6 points	12 points	12 points	12 points	8 points	12 points	16 points
	AC current sensor	—	2 points	—	—	—	—	—	—	—	—
output	remote control output	3 points (open corrector)	4 points <sup>※2</sup> (relay)	3 points (open corrector)	19 points (open corrector)	35 points (open corrector)	43 points (open corrector)	83 points (open corrector)	256 points	512 points	1024 points
	power down compensation	after power down, reporting during 30min. : battery life 5 years <sup>※1</sup>							after power down, reporting during 3 min. : battery life 4 years <sup>※1</sup>		
long time record		—	—	—	○	○	—	—	—	—	—
communication		built- FOMA modules	built- FOMA adapter	built- FOMA modules				another FOMA adapter			
external dimensions		W255×H195×D60	W255×H354×D72	W255×H195×D61	W255×H195×D80	W255×H195×D61		W374×H325×D134			
power		AC/DC12V	AC100V/AC200V select at order	AC/DC12V				AC100V			
accessories		—	AC source sensor	—	terminal block	sequencer, terminal block, uninterruptible power supply		sequencer, terminal block, uninterruptible power supply, switching power supply			
use conditions	permission ambient temperature	0 ~ +50°C (at running)									
	permission ambient humidity	80%Rh (at running)									

## Human Nature Science Institute Foundation series of "human and water" (novel,comics,juvenile literature,reading tapes)



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picture-story show  
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application to any water-related facilities

The monitoring reporting system



監視通報装置

yakumo やくも  
Suishin

水神

realization of unification management  
and, wide area management



realization Cloud management  
by a simple short work

many lineup for purpose and plant

Cheap version-up for the monitoring  
and reporting system



hero of river improvement  
Yahee Sutoh  
(1651~1752)

We can see a video by  
smart-phone, tablet



No.

2

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# unification management of water-related facilities, start Cloud management at same time introduction



high quality function by a simple introduction  
cloud management many facilities



drinking water facilities

wastewater treatment plant



manhole pump

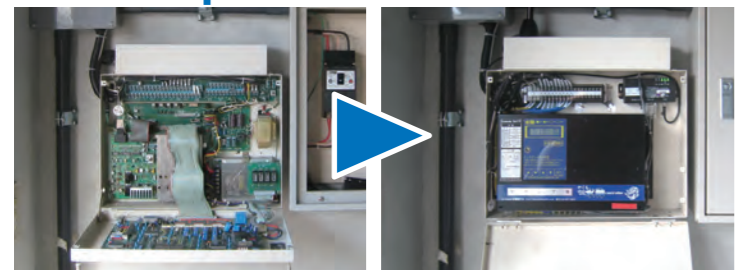
snow melting control system



gate control system

dust treatment plant

simple built-in to existing control panel



existing monitoring system

complete built-in

existing system to XP type complete by working **2 hours**

## many lineup for purpose and plants

Transfer without big refurbishment,



MA series



XP series

Wide type line-up from small monitoring points to many monitoring points



PA series

Use Personal computer in case of high quality management

## many function, equipment

- ① high quality thunder protection
- ② simple maintenance
- ③ Intuitive action for high quality management



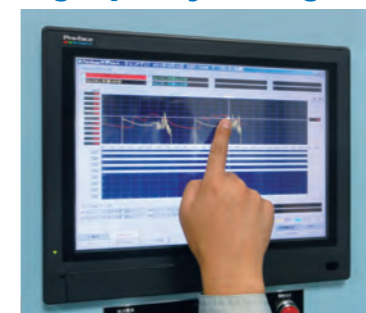
thunder units

5years compensation for thunder



record chip

Simple change



facility management by PC/mobile

see facility information at site high efficiency of maintenance works



use in site equivalent function and screen of PC

## management screen



management maps



flow-sheet



trend graph



situation view



A City, Kouchi Prefecture



T City, Saitama Prefecture