

## A message from the Director of the Center

In recent years, imbalance of power supply and demand has become an issue. Future House, which can use electricity wisely by utilizing IT and can help leveling power consumption (Smart House/ HEMS) has attracted attention.

We at Kanagawa Institute of Technology have opened the Certification Support Center (CSC), where you can interconnect and test equipment using ECHONET Lite standard which is an official standard interface of HEMS. The CSC is one of the projects by the Smart House/Building Standardization and Business Promotion Study Group. The two main purposes of the center are:

-Providing interconnectability environment and supporting the acceleration of the development speed for companies, which are already developing or planning to develop equipment.

-Providing the training place for setting and maintaining equipment and at the same time further promoting the service.

Now is the time when we create a new business based on an open platform. I am convinced that the opening of the center marks the dawn of a new era. I hope that this center is widely used and plays a part in creating things of unprecedented value.



Director of HEMS (ECHONET Lite) Certification Support Center  
MASAO Isshiki

## A message from the Ministry of Economy, Trade and Industry

The Ministry of Economy, Trade and Industry's goal is making a social system where mainly the consumers create and use energy efficiently, e.g. the Smart House.

When that happens, the key point is to connect each consumer's home electronics and HEMS.

We decided to recommend ECHONET Lite, an official standard interface, in February 2012 and are embodying it at the Smart House/Building Standardization and Business Promotion Study Group.

HEMS Certification Support Center will support certification through the results from the group. It will be the place to support manufacturing process and systems to realize the

Smart House.

To widespread the Smart House, it is important for small and medium sized enterprises to participate. Our free HEMS Development Support Kit will help these companies enter the market more easily. We are sure there are many who are eager to join us.

We expect many companies to enter the Smart House market and make a success in a variety of businesses. We are glad to be your partner to support your challenges.



Director, Information Economy Division, Commerce and Information Policy Bureau, METI,  
KIYOSHI Sawaki

## A message from the ECHONET Consortium

Since 1997, ECHONET Consortium has proceeded with the development of infrastructure software and hardware for home network in order to reduce CO2 levels and to sophisticate home security and home health care.

ECHONET Lite standard obtained the recommendation from the government as an official standard interface. It is positioned as a platform for the Smart House and is now spreading. This is because ECHONET Lite was made with considering the demands of the times, for example, it is connectable to the global standard protocol, energy saving

equipment, solar systems or storage batteries, such as energy generating devices and energy storage devices.

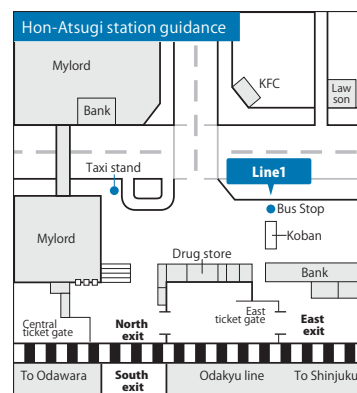
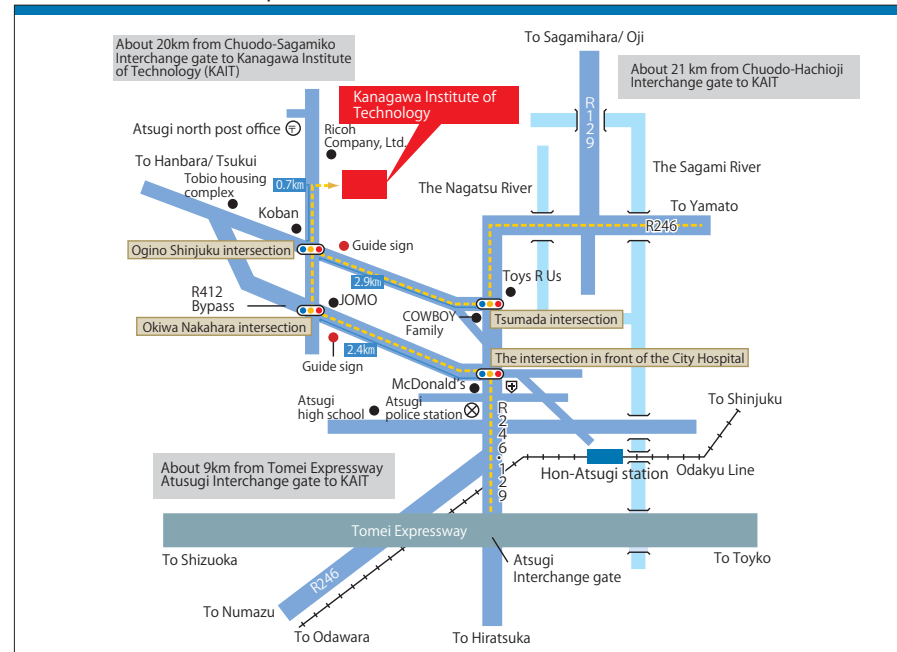
HEMS Certification Support Center will help to certify interconnectability and develop equipment or services more easily. We expect this will accelerate the spreading speed of the ECHONET Lite standard.

We will continue to carry on the development of the ECHONET Lite standard. Your cooperation and support would be very much appreciated.



Chairman of ECHONET Consortium  
MOTOTAKA Taneya

## Access Map



### Odakyu Line "Hon-Atsugi Station"

58min from Shinjuku Station, 48min from Yokohama station, 46min from Odawara Station

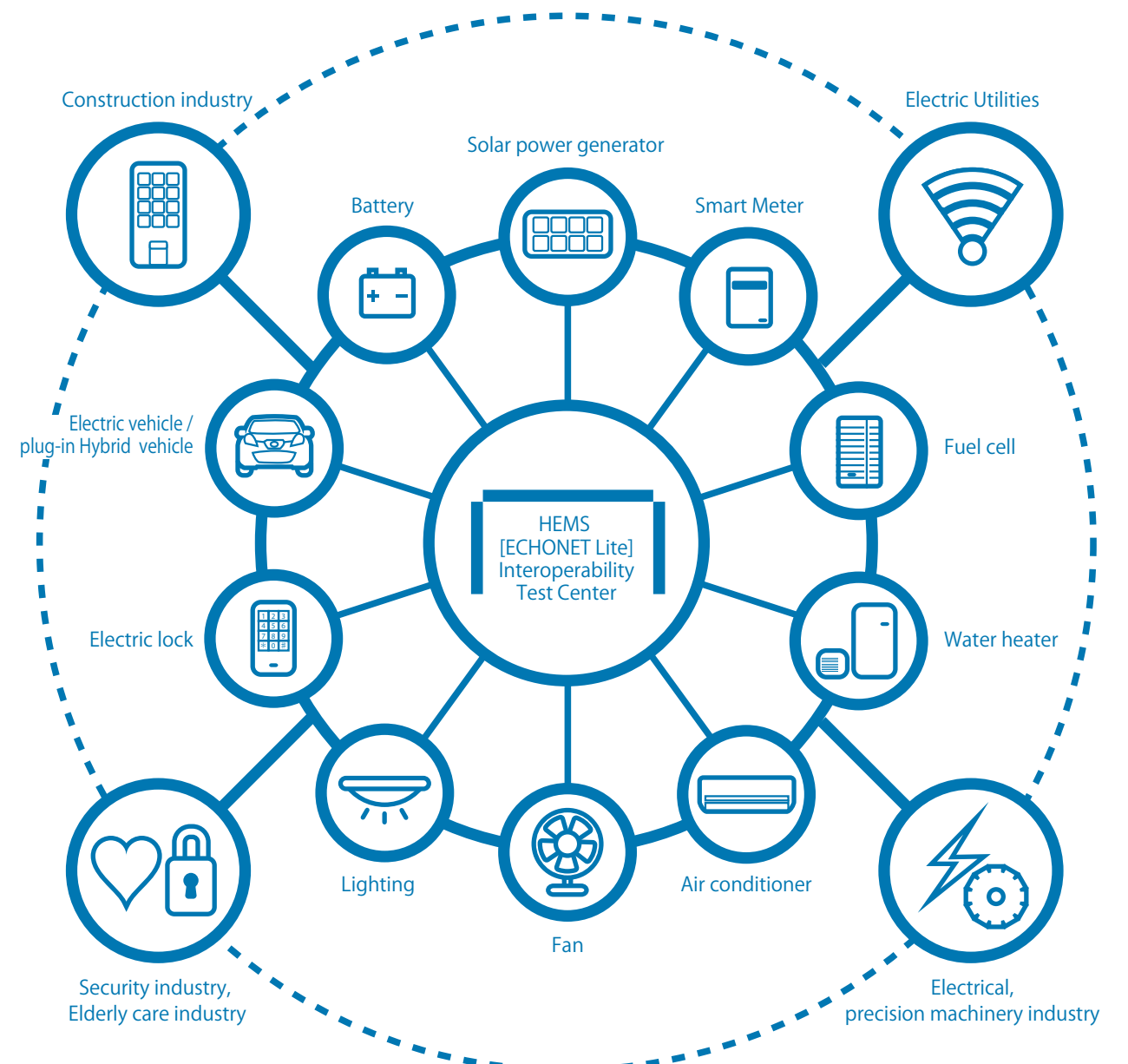
● Hon-Atsugi Station (North Exit, Kanagawa Chuo Kotsu bus stop no.1) to "Seinen no ie" or "Kanagawa Kouka Daigaku Keiyu, Tobio Danchi (Tobio housing complex via KAIT)" (Bus Stop: Kanagawa Kouka Daigaku Mae (in front of KAIT) / approx. 23min) Or, the bus to "Kamioyogino Shako", Hanbara", "Matsukagedai" or "Tobio Danchi" (Bus Stop: Ogino Shinjuku / approx. 21min and 7 walk)



## HEMS [ECHONET Lite] Interoperability Test Center

'endorsed by Smart House International Standardization Research Program at Ministry of Economy, Trade and Industry, Japan

<http://sh-center.org/en/>



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ECHONET Consortium <http://www.echonet.gr.jp/>



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※1: This brochure was published in April 2013.

※2: The contents may be changed without any notice.



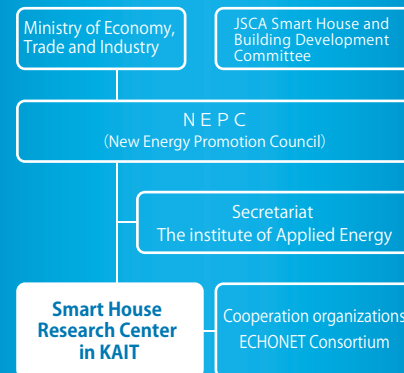
Smart House Research Center at Kanagawa Institute of Technology

# ECHONET Lite brings network access to all home appliances. This test center has ensured interoperability in new EMS, invented in Japan.

## What is HEMS [ECHONET Lite] Interoperability Test Center?

HEMS [ECHONET Lite] Interoperability Test Center aims at providing interoperable test environment for all ECHONET Lite users with supervision from Smart Home International Standardization Research Program at Ministry of Economy, Trade and Industry, Japan. Not only providing with the test environment where all EMS (ECHONET Lite) system and device developers including overseas can use in R&D, but this center has delivered free Software Development Kit [SDK] for supporting new entrants to EMS business with adopting ECHONET Lite device and ware.

### Organizational Structure



### What is ECHONET Lite?

ECHONET Lite is the communication interface to connect multiple home appliances over IP network and operated by ECHONET Consortium, whose memberships exceed over 200 companies and institutions in Japan and overseas. Currently, more than 80 devices, including air conditioner, solar panel, power meter, and electric vehicle power station [EVPS], are applicable to ECHONET Lite, and that number is increasing. Since February 2012, when ECHONET Lite was recommended as the standardized communication interface in Japanese EMS by Japan Smart Community Alliance [JSCA], which is organized by 400 companies and institutions, including Japanese government. Not only implementing domestic adoption, ECHONET Lite is in process to receive international standard at ISO and IEC, in succession to ECHONET protocol, which is technical origin of ECHONET Lite.



## Visitation

THEMS [ECHONET Lite] Interoperability Test Center welcomes your visitation. Registration is at the following web site: <http://sh-center.org/en/>

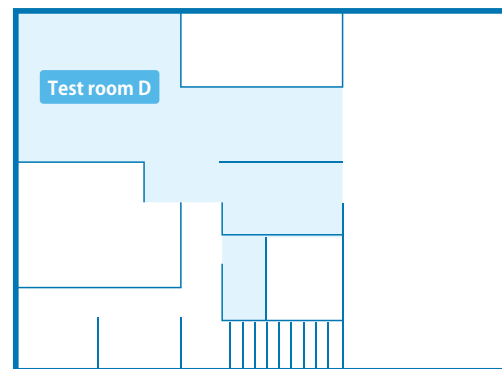
### The layout of the HEMS [ECHONET Lite] Interoperability Test Center

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#### Exhibits

Display HEMS products, which are already on the market.

All displayed HEMS products enable to use training environment, where new entrants set up invented new HEMS.



#### related products and equipment



#### other products and equipment

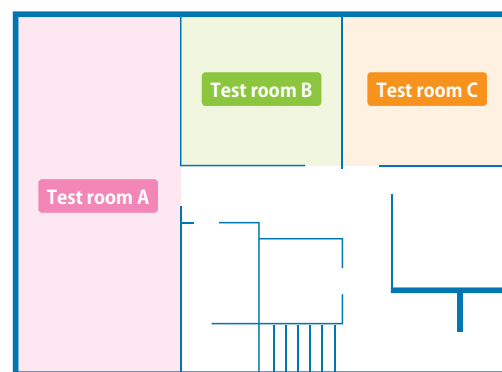
Electric blinds, Electric curtain, Electric toilet seats, Home elevators, Cooking heater, Intercom

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#### Test room

There are three test rooms with the environment to test interconnectability.

Provide environment with doing operation tests and monitoring configuration process over ECHONET Lite



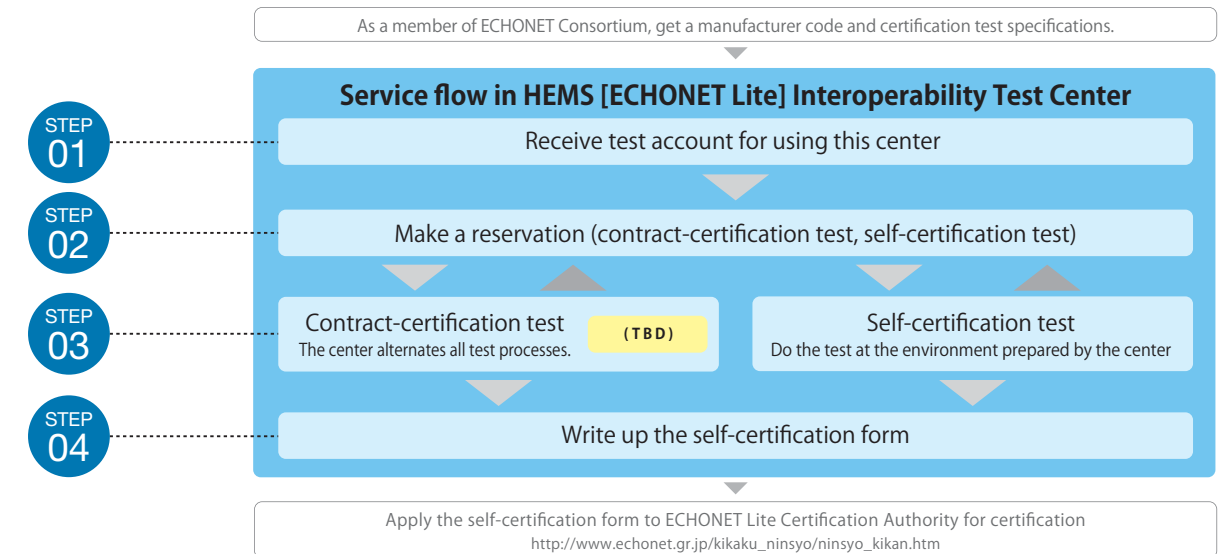
#### related products and equipment



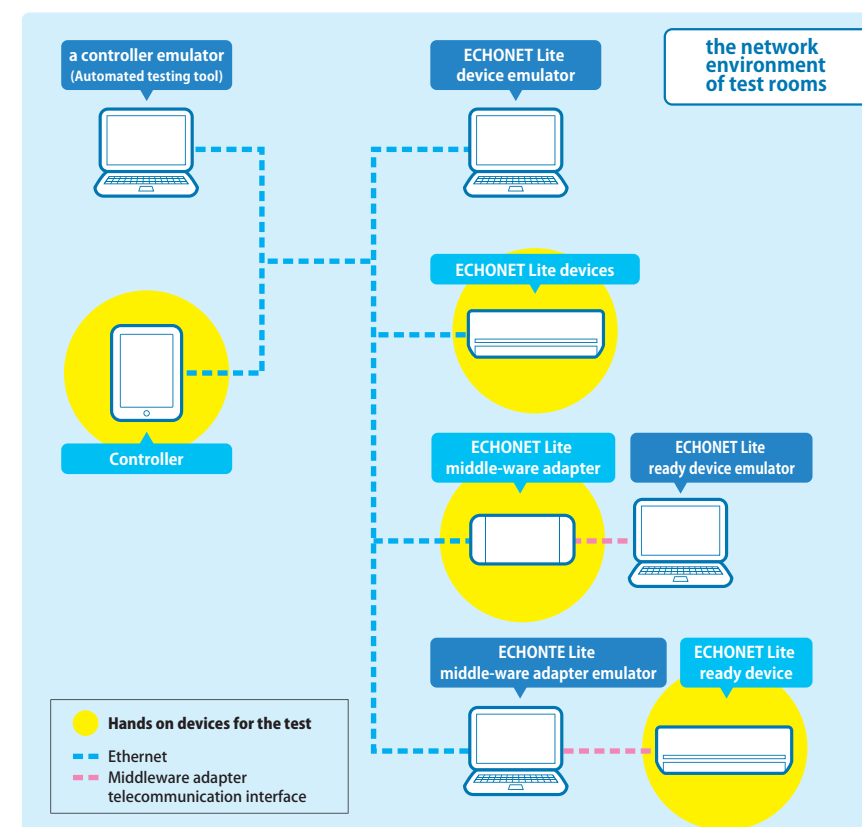
## Test

This center aims at providing the member of ECHONET Consortium with the test environment. Entry to ECHONET Consortium is conducted at the ECHONET Consortium web [<http://www.echonet.gr.jp/english/membership/index.htm>] For using the center, reservation is recommended at the center web [<http://sh-center.org/en/>]

### Interoperability testing process for ECHONET Lite equipment.



### Four kinds of interoperability test are ongoing. And test process is automated by a controller emulator.



- 1 Interoperability test for EMS controller  
Test interoperability for EMS controller such as gateway by using ECHONET Lite device.
- 2 Interoperability test for the ECHONET Lite device
- 3 Interoperability test for ECHONET Lite middle-ware adapter
- 4 Interoperability test for ECHONET Lite Ready Device