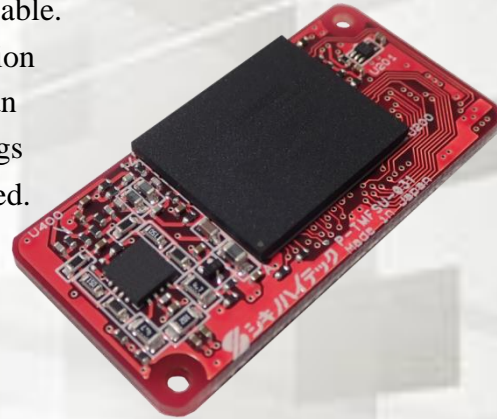


< IoT PLC Communication Module >
 ~ IEEE1901-2010 Compliance "HD-PLC™" ~

[Power Line Communication] What is Shikino's IoT PLC Communication Module?

- High-speed data communication becomes possible using existing wiring such as power lines. By utilizing existing wiring, it is possible to construct a wired network without laying a new communication cable.
- The multi-hop function is equipped and can extend the communication distance by relaying multiple PLC modules. With this function, it can be introduced in a wide range of scenes, including factories, buildings and construction sites where long-distance communication is required.
- In addition to the data encryption function, the product also has the channel estimation function to study the state of transmission paths between modules, thus maintaining high security communication.
- The module shape is compact and can accommodate multiple wire shapes, it can be easily embedded into high-speed communication equipment that uses existing wiring.



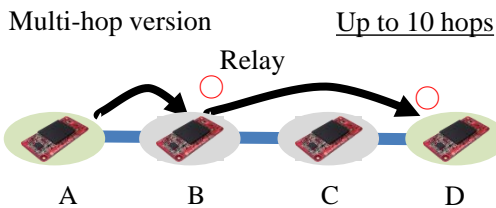
P-TMFSU-031

[Four Characteristics]

- 1) Long-distance
- 2) Any wiring (Twisted pair, Telephone line, Coaxial, etc.)
- 3) High-speed
- 4) Security

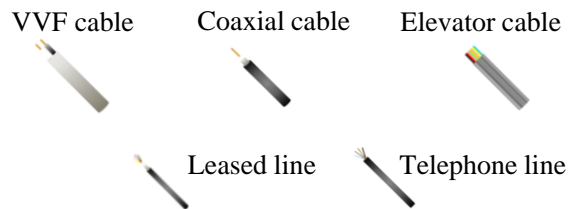
Long-distance

Several Km can be transmitted by relaying



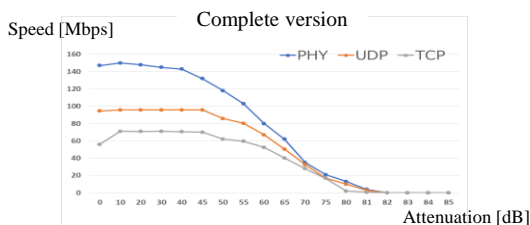
Any wiring

Compatible with various wiring



High-speed

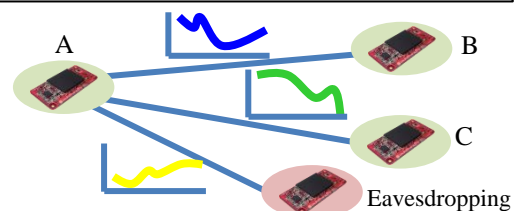
PHY: Max. 150Mbps, TCP: Max. 70Mbps



Security

+ AES cipher

Eavesdropping is impossible due to different transmission line conditions



Advantages of using IoT PLC Communication Module

**Wired connection
 (Combined use with wireless)**

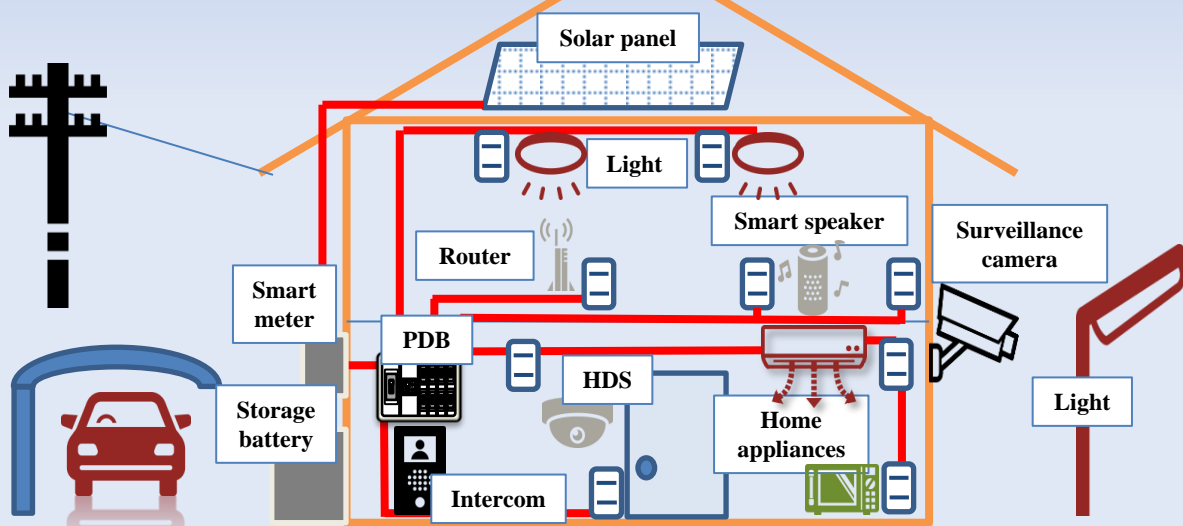
Use of existing wiring

Wire saving

- Wireless do not reach some areas.
- Even the area is connected by wireless, there is a possibility that radio waves will be depleted and communication will be impossible in the future.
- Construction costs are incurred for new construction and expansion of Ethernet.
- Ethernet branch requires HUB and must be maintained.
- Various laid lines have been wired to the facility.
- Stationary equipment always has power lines.
- Multiple communication lines are grouped together for high-speed communication.

Case of IoT PLC utilization

Network building using power lines stretched throughout in the house



※ Using it outside Japan, it is necessary to apply the law of the country of use and obtain approval / certification if necessary.

For any inquiries, please feel free to contact below.

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