

Prototype 920 MHz Band Radio Communication Equipment With A Large 250 mW Output Receives Japanese Technical Regulations Conformity Certification

Control and data acquisition implemented
by radio over a range of several kilometers



【Achievement】

Hitachi, Ltd. and Hitachi Industrial Equipment Systems Co., Ltd. today announced that their prototype 920 MHz band radio communication equipment with a large output of 250 mW has received Japanese Technical Regulations Conformity Certification. This equipment allows control and data acquisition to be implemented by radio over a range of several kilometers. It can also switch between three levels of output power - 250 mW, 20 mW and 1 mW, allowing it to facilitate low-power data communication with reduced power consumption when communicating over short ranges.

■Characteristics

1. Radio interference suppression in 250 mW high-power output
With the cooperation of Hitachi Media Electronics Co., Ltd., a new SAW filter(4) that achieves sharp frequency technology that can suppress the output of neighboring frequencies while maintaining the output in the 920 MHz band, was developed.
2. Output switching technology - 250 mW, 20 mW and 1 mW
With the prototype 920 MHz band radio communication equipment, the circuitry is configured to enable switching between three output power levels of 250 mW, 20 mW and 1 mW. This technological advancement makes it possible to switch the output power when communicating over short ranges so that power consumption can be decreased appropriately to suit each radio communication application.

■Plan

In the future, the goal is to apply this radio communication equipment to a diverse range of fields, including smart grids and smart cities as well as industrial systems where there is a need for control and data acquisition using radio communication.