NIPPON SIGNAL

Software-Defined Radio

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By implementing the core components of the radio—filter, modulation, and demodulation—in software, miniaturization and power saving are achieved.

Challenges of conventional radios

- Large size
- fixed wireless specifications

Introduction of software radio technology enables compact CBTC radios

Software-Defined Radio

Software implementation of filter, modulation, and demodulation

- achieves miniaturization, power saving
- adaptability to various wireless specifications
- functional upgrades.

Software-Defined Radio

Features

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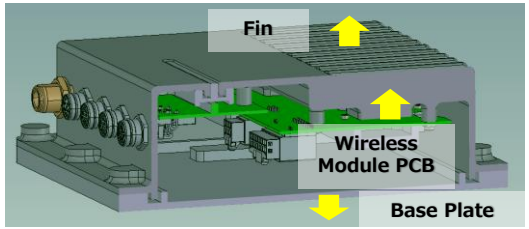
Designed for dusty environments and tight spaces. High environmental resistance achieved through a compact metal housing integrated with a heat sink.

1 Miniaturization and fanlessization



- Where space allows, heat is dissipated from fins into the air.
- In confined spaces, heat is conducted from the base to the mounting enclosure.

No Fan Required Eliminates Maintenance and Limited Lifespan

2 Improved installation flexibility

- Dustproof and Waterproof Performance: IP67
- Operates Across a Wide Temperature Range

Improved Flexibility in Antenna and Radio Installation

3 Enhanced reliability

- Strong circuit protection with metal shielding
- preventing dust and contaminated air from entering the housing.

Adaptable to Various Environments, Ensuring High-Reliability Operation

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Specifications

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Item	Spec.
Frequency	2400 ～ 2484 MHz
Transmit Power	Max +30dBm
Bandwidth	Max 40MHz
Operating Temperature Range	**-20 ～ +70 ℃**
Dimensions	216 x 291 x 68.5 mm
Input Voltage	DC 12 ～ 24 V
Wireless Interface	TX/RX 1port / RX only 1port
External Interface	Ethernet×2 / RS422×4
Power Consumption	20W
Environmental Resistance	**IP67**