2023 Edition

By Category PDF

Category Wireless Modules

Modules

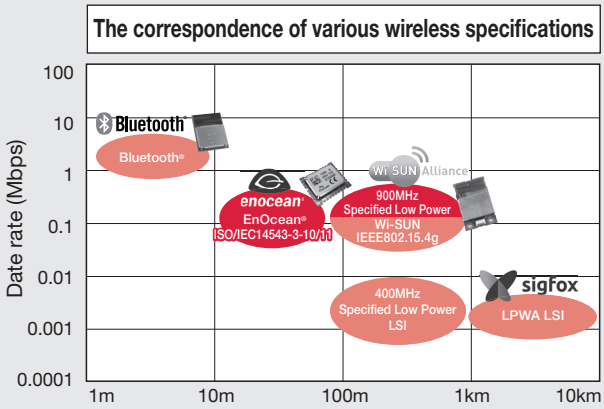
Wireless Modules

Includes LAPIS Technology products

Wireless Modules

ROHM Wireless Module Technologies

ROHM group is developing Wireless Communication devices in a broad range of fields.



Wi-SUN Communication Modules (Specified Low Power Radio Modules)

- 920MHz specified low-power wireless module
- Excellent receiver sensitivity
- Built-in antenna eliminates the need for high-frequency designs
- Transmitting power pre-adjusted
- MAC address included
- Japan radio law certified
- Built-in system LSI that made in LAPIS Technology

Built-in antenna	Surface mount
 BP35A1	 BP35C0  BP35C0-J11  BP35C5

Wi-SUN Communication Modules (Specified Low Power Radio Modules)

Part No.	Supply Voltage (V)	Operating Temperature (°C)	Host I/F	Compatible Standards	Radio law Certification	Dimensions (mm)	Pakcage
BP35A1	2.7 to 3.6 (Single power)	−20 to +80	UART	Wi-SUN Route-B	TELEC	22.0×33.5×3.9	Connector joint type 0.5mm pitch, 20pin
BP35C0	2.6 to 3.6 (Single power)	−30 to +85	UART	Wi-SUN Route-B/HAN	TELEC	15.0×19.0×2.6	SMD 1.27mm pitch, 28pin
BP35C0-J11	2.6 to 3.6 (Single power)	−30 to +85	UART	Wi-SUN Route-B/HAN/ Enhanced HAN	TELEC	15.0×19.0×2.6	SMD 1.27mm pitch, 28pin
BP35C5	2.6 to 3.6 (Single power)	−30 to +85	UART	Wi-SUN FAN	TELEC/FCC	15.0×19.0×2.6	SMD 1.27mm pitch, 30pin

Bluetooth® Modules

- Low power consumption and the best solution for the instruments required a long-life of coin type/button battery
- Bluetooth® low energy single mode module
- Built-in pattern antenna and RF characteristic adjusted before shipment
- Certified radio regulation: TELEC, FCC, ISED (IC), CE

MK71511-NNN

Bluetooth® low energy Modules (LAPIS Technology products)

Part No.	Supply Voltage (V)	Operating Temperature (°C)	Host I/F	Bluetooth Certification	Radio law Certification	Module Specification	Include Flash/RAM	Include Crystal Oscillator	Include Antenna	Dimension (mm)	Package
MK71511-NNN	1.7 to 3.6	−40 to +85	UART SPI	Ver5.2 (Single mode) QDID: 146733 (RF-PHY Component)	TELEC/FCC/ ISED/CE	Role: Master/Slave Application: Blank	Flash: 192KB RAM: 24KB	32MHz 32.768kHz	Pattern	9.7×13.4×2.0	M-FLGA54-9.7X13.4-0.80-9Y
MK71511A-NNN								32MHz			M-FLGA54-9.7X13.4-0.80-9Y
MK71521-NNN				Ver5.2 (Single mode) QDID: 146740 (RF-PHY Component)			Flash: 512KB RAM: 64KB	32MHz 32.768kHz			M-FLGA54-9.7X13.4-0.80-9Y
MK71521A-NNN								32MHz			M-FLGA54-9.7X13.4-0.80-9Y

Bluetooth® is a registered trademark of Bluetooth® SIG.

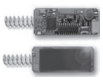
EnOcean® Communication Modules

EnOcean® products are based on energy harvesting battery-less/wireless telecommunication technology.

Feature
- EnOcean® Wireless Standard (ISO/IEC 14543-3-10/11)
- Built-in antenna eliminates the need for high-frequency designs
- Japan radio law certified

*This product (928MHz frequency band) is permitted as "specified low-power radio station" in Japanese radio law.

EnOcean® Communication Modules/Devices

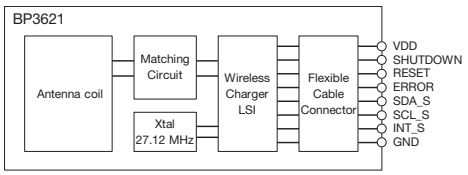
Frequency Band	Use Target Area	Products								
		Energy converter for motion energy harvesting (for the switch module)	Transmitter module (for switch module)	Push button multi-channel switch module	Energy harvesting wireless transceiver module	Programmable transceiver module	Energy harvesting magnet contact module	Energy harvesting temperature sensor module	Humidity sensor module	Receiver USB module
										
928MHz	Japan	ECO 200/ New ECO 260	PTM 535J	PTM 215J	STM 400J	New TCM 410J/ New TCM 515J	STM 429J	STM 431J	HSM 100	New USB 400J/ New USB 500J
868MHz	Europe·China	ECO 200/ New ECO 260	PTM 535	PTM 210/ PTM 215	STM 300	TCM 310	STM 329	STM 331	HSM 100	USB 300
902MHz	North America	ECO 200/ New ECO 260	PTM 535U	PTM 215U	STM 300U	TCM 310U	STM 320U	STM 331U	HSM 100	USB 500U
921MHz	Asia	ECO 200/ New ECO 260	–	–	–	–	–	STM 431T	HSM 100	USB 500T

*EnOcean® is a registered trademark of EnOcean GmbH.

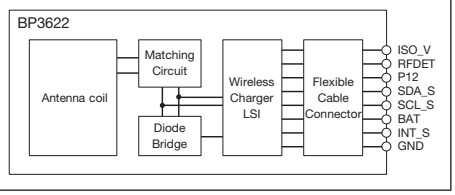
13.56MHz (NFC) Wireless Charger Modules

ROHM's 13.56MHz wireless charger module is a board-integrated module with an antenna. Since the development man-hours for antenna design and matching adjustment can be significantly reduced, the wireless charging function can be easily realized. It contributes to the compact, connectorless, waterproof and dustproof housing design required for wearable devices and IoT devices.

BP3621
(Transmitter Module)



BP3622
(Receiver Module)



Extensive feeding type 13.56MHz Power Transmitter Wireless Charger Modules

Part No.	Transmitter/ Receiver	Module type	Module size (mm)	Weight (g)	Supply Voltage (V)	Output Power (Max) (mW)	Feeding Distance (d) (mm)	Operating Temperature (°C)	Interface
BP3621	Power Transmitter	Wide Range type	35.0×26.0×1.5	0.80	4.5 to 5.5	–	10	−10 to +50	8pin, 0.5mm pitch, FPC connector

Extensive feeding type 13.56MHz Power Receiver Wireless Charger Modules

Part No.	Transmitter/ Receiver	Module type	Module size (mm)	Weight (g)	Supply Voltage (V)	Output Power (Max) (mW)	Feeding Distance (d) (mm)	Operating Temperature (°C)	Interface
BP3622	Power Receiver	Wide Range type	24.0×17.0×1.5	0.38	–	200	10	−10 to +50	8pin, 0.5mm pitch, FPC connector