Wi-SUN module for FAN

BP35C5 Radio Law Certified External Antenna List

Version 1.0.4

No. 63AN052E Rev.005
2022.07

BP35C5 (Certification No.:MIC:005-102391, FCC:ANSBP35C5)

No.	Part No.	Maker	Connector Type	Antenna Type	Max Gain (dBi)	Polarization [H or V]	Size (mm)	Type	Certification
1	W1063M	Pulse	SMA Plug (Male) SMA Reverse Polarity Plug (Female)	λ/4 Dipole	3.00	Horizontal	198.6xΦ14	A	MIC
2	S321AM-915	NEARSON	SMA Plug (Male)	λ/4 Helix	0.00	Vertical	54xΦ11	A	MIC
3	S331AM-915	NEARSON	SMA Plug (Male)	λ/4 Dipole	1.00	Vertical	88xΦ11	A	MIC
4	S467AM-915R	NEARSON	SMA Plug (Male)	λ/2 Dipole	2.00	Vertical	190.5x Φ12.9	A	MIC
5	S512AM-915R	NEARSON	SMA Plug (Male)	λ/4 Dipole	0.00	Vertical	57.5xΦ7	A	MIC
6	FMSP920A-U068	NISSEI LTD.	MS-156C	λ/2 Collinear	2.22	Circular	27x35x0.4 Cable:100	B	MIC
7	FMS950C-2.5M-BP No.1	NISSEI LTD.	SMA Plug (Male)	λ/2 Collinear	1.45	Vertical	110x40x25 Cable:2500	B	MIC
8	FMS950C-2.5M-BP No.2	NISSEI LTD.	SMA Plug (Male)	λ/2 Collinear	1.14	Vertical	110x40x25 Cable:2500	B	MIC
9	FMS950C-2.5M-BP No.3	NISSEI LTD.	SMA Plug (Male)	λ/2 Collinear	1.14	Vertical	110x40x25 Cable:2500	B	MIC
10	ME-328XSAXX-920	MAP	SMA Plug (Male)	Omni-Directional	0.00	Vertical	46xΦ11	A	MIC
11	MEGHX-341XSAXX-920	MAP	SMA Plug (Male)	Omni-Directional	2.00	Vertical	101xΦ10	A	MIC
12	MEGHX-467XSAXX-920	MAP	SMA Plug (Male)	Omni-Directional	2.00	Vertical	191xΦ12.5	A	MIC
13	1019-008A	Staf	SMA Plug (Male)	λ/2 Monopole	3.00	Vertical	160xΦ12	A	MIC
14	1019-009A	Staf	SMA Reverse Polarity Plug (Female)	λ/2 Monopole	3.00	Vertical	160xΦ12	A	MIC, FCC
15	1019-010A	Staf	SMA Plug (Male)	λ/2 Monopole	3.00	Vertical	164xΦ12	A	MIC
16	1019-011A	Staf	SMA Reverse Polarity Plug (Female)	λ/2 Monopole	3.00	Vertical	164xΦ12	A	MIC
17	MEG-241XSAXX	MAP	SMA Plug (Male)	Omni-Directional	2.00	Vertical	108xΦ10	A	MIC
18	ME-467XSAXX	MAP	SMA Plug (Male)	Omni-Directional	2.00	Vertical	191xΦ12.5	A	MIC
19	MEGWX-241XSAXX-920	MAP	SMA Plug (Male)	Omni-Directional	2.00	Vertical	108xΦ10	A	MIC
20	MEGWX-282XSAXX-920	MAP	SMA Plug (Male)	Omni-Directional	2.00	Vertical	86.3xΦ10	A	MIC
21	MEGHX-328XSAXX-920	MAP	SMA Plug (Male)	Omni-Directional	0.00	Vertical	46xΦ11	A	MIC
22	MEGAF-601XSA3X-920	MAP	SMA Plug (Male)	Omni-Directional	2.00	Vertical	146x20x13 Cable:3000	B	MIC
23	MEGWX-2102SAXX-920	MAP	SMA Plug (Male)	λ/4 Omni-Directional	2.08	Vertical	114xΦ12.9	A	MIC

No.	Part No.	Maker	Connector Type	Antenna Type	Max Gain (dBi)	Polarization [H or V]	Size (mm)	Type	Certification
24	MEGAF-121XSAX X-920	MAP	SMA Plug (Male)	Omni-Directional	2.00	Vertical	80xΦ27	A	MIC
25	MEGAF-350XSA3 X-920	MAP	SMA Plug (Male)	Omni-Directional	2.00	Vertical	58.1x Φ50x9.8 Cable:3000	B	MIC
26	1019-026	Staf	MS-156C	λ/2 Monopole	3.00	Vertical	165.3xΦ12	A	MIC
27	ANT1204F005R0915A	YAGEO	On board	Omni-Directional	1.59	Horizontal	12.2x4x1.6	C	MIC
28	AM11DP-ST01	Mitsubishi Material	On board	Omni-Directional	1.70	Horizontal	10.5x3x0.8	C	MIC
29	ANT160920ST-1204A1	TDK	On board	Multilayer antenna	0.50	Horizontal	1.6x0.8x 0.4	C	MIC
30	T16-068-1021	Staf	SMA Plug (Male)	λ/4 Monopole	3.00	Vertical	104xΦ12	A	MIC
31	T16-068-1037	Staf	SMA Plug (Male)	λ/4 Monopole	3.00	Horizontal	100xΦ12	A	MIC
32	13-023	Staf	U.FL	λ/2 Dipole	3.00	Horizontal	120x20x1 Cable:130	B	MIC
33	T13-023-1001	Staf	MHF4L	λ/2 Dipole	3.00	Horizontal	120x20x1 Cable:131	B	MIC
34	T13-023-1002	Staf	MHF4L	λ/2 Dipole	3.00	Horizontal	120x20x1 Cable:195	B	MIC
35	T16-062-1022	Staf	U.FL	λ/2 Dipole	3.00	Horizontal	77x20x1 Cable:140	B	MIC
36	T16-062-1024	Staf	MHF4L	λ/2 Dipole	3.00	Horizontal	77x20x1 Cable:141	B	MIC
37	T16-062-1025	Staf	MHF	λ/2 Dipole	3.00	Horizontal	77x20x1 Cable:150	B	MIC
48	I50-S	TEKFUN	SMA Plug (Male)	λ/2 Omni-Directional	※3.55	Vertical	135.6x20.1x Φ10.1	A	MIC
49	RFDPA480700SMCBM01	Walsin Technology	SMA Plug (Male)	Omni-Directional	2.60	Vertical	48xΦ7.8	A	MIC
50	T16-066-1062	Staf	SMA Plug (Male)	λ/2 Dipole	3.00	Vertical	50x100x30 Cable:3000	B	MIC
52	TG.09.0113	TAOGLAS	SMA (Male)	Monopole	2.50	H+V	72xΦ10	A	MIC
53	TG.09.0113W	TAOGLAS	SMA (Male)	Monopole	2.50	H+V	72xΦ10	A	MIC
54	TG.10.0113	TAOGLAS	SMA (Male)	Omni-Directional	0.22	H+V	168x12.97x 18	A	MIC
55	TG.22.0112	TAOGLAS	SMA (Male)	Monopole Helical	1.93	H+V	44xΦ7.8	A	MIC
56	TG.30.8113	TAOGLAS	SMA (Male)	Omni-Directional	※4.2	H+V	186x49x10	A	MIC
57	TG.30.8113W	TAOGLAS	SMA (Male)	Omni-Directional	※4.2	H+V	186x49x10	A	MIC
58	TLS.01.305111	TAOGLAS	SMA (Male)	Omni-Directional	※3.15	Vertical	79.45xΦ42 Cable:300	B	MIC
59	G30.B.108111	TAOGLAS	SMA (Male)	Omni-Directional	1.20	Vertical	48xΦ50 Cable:1000	B	MIC
60	GA.107.201111	TAOGLAS	SMA (Male)	Omni-Directional	※5	H+V	116xΦ29.5 Cable:2000	B	MIC

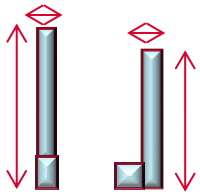
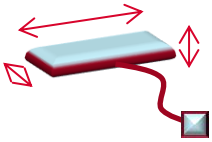
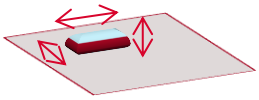
No.	Part No.	Maker	Connector Type	Antenna Type	Max Gain (dBi)	Polarization [H or V]	Size (mm)	Type	Certification
61	GA.110.101111	TAOGLAS	SMA (Male)	Omni-Directional	2.60	H+V	298xΦ50 Cable:1000	B	MIC
62	GA.130.201111	TAOGLAS	SMA (Male)	Omni-Directional	※3.1	H+V	143x72x53 Cable:2000	B	MIC
63	G21.B.301111	TAOGLAS	SMA (Male)	Omni-Directional	2.70	H+V	29xΦ49 Cable:1000	B	MIC
64	G24.A.305111	TAOGLAS	SMA (Male)	Omni-Directional	1.80	H+V	30xΦ55 Cable:3000	B	MIC
65	GSA.8821.B.301111	TAOGLAS	SMA (Male)	Omni-Directional	2.60	H+V	106.7x14.7x5.8 Cable:3000	B	MIC
66	GSA.8822.B.301111	TAOGLAS	SMA (Male)	Omni-Directional	2.70	H+V	106x13x6.7 Cable:3000	B	MIC
67	GSA.8827.A.101111	TAOGLAS	SMA (Male)	Omni-Directional	2.93	H+V	105x30x7.7 Cable:1000	B	MIC
68	GSA.8830.A.201111	TAOGLAS	SMA (Male)	Omni-Directional	0.77	H+V	90x20.8x4.6 Cable:2000	B	MIC
69	PA.25A	TAOGLAS	On board	Omni-Directional	2.00	H+V	35x5x6	C	MIC
70	PA.700.J	TAOGLAS	On board	Omni-Directional	-0.50	H+V	40x6x5	C	MIC
71	FXP14.07.0100A	TAOGLAS	U.FL (IPEX MHFI)	Omni-Directional	1.50	H+V	70x20x0.1 Cable:100	B	MIC
72	FXP40.07.0085A	TAOGLAS	U.FL (IPEX MHFI)	Omni-Directional	-3.25	H+V	42.6x12.1x0.15 Cable:85	B	MIC
73	FXUB66.07.0150C	TAOGLAS	U.FL (IPEX MHFI)	Omni-Directional	2.70	H+V	120.4x50.4x0.2 Cable:150	B	MIC
74	PC104.07.0165C	TAOGLAS	U.FL (IPEX MHFI)	Omni-Directional	0.99	H+V	80x20.8x1 Cable:164.9	B	MIC
75	PC30.07.0100A	TAOGLAS	U.FL (IPEX MHFI)	Omni-Directional	2.00	H+V	74.7x8.2x0.8 Cable:100	B	MIC
76	PCS.06.A	TAOGLAS	On board	Omni-Directional	0.61	H+V	42x10x3	C	MIC
77	PCS.07.A	TAOGLAS	On board	Omni-Directional	-1.77	H+V	35x7x3	C	MIC
78	FXP290.07.0100A	TAOGLAS	U.FL (IPEX MHFI)	Omni-Directional	1.50	H+V	75x45x0.1 Cable:100	B	MIC
79	PC91.07.0100A.db	TAOGLAS	U.FL (IPEX MHFI)	Omni-Directional	2.67	Horizontal	34x7x0.8 Cable:100	B	MIC
80	T18-037-1116	Staf	On board	λ/4 Monopole	3.00	Vertical	35x9x3.2	C	MIC
81	1018-474A (*1)	Staf	On board	λ/4 Monopole	3.00	Horizontal	35x9x3.2	C	MIC
82	T18-029-1102	Staf	SMA (Male)	λ/2 Dipole	3.00	Horizontal	80x40x20 Cable:2500	B	MIC
83	T18-029-1103	Staf	SMA (Male)	λ/2 Dipole	3.00	Horizontal	80x40x20 Cable:2500	B	MIC
84	T18-077-1107	Staf	SMA (Male)	λ/2 Dipole	3.00	Horizontal	80x40x20 Cable:5000	B	MIC

No.	Part No.	Maker	Connector Type	Antenna Type	Max Gain (dBi)	Polarization [H or V]	Size (mm)	Type	Certification
85	T18-077-1108	Staf	SMA (Male)	λ/2 Dipole	3.00	Horizontal	80x40x20 Cable:5000	B	MIC
86	1018-456A	Staf	On board	λ/4 Monopole	3.00	Vertical	45x8x8	C	MIC
87	T18-018-1098	Staf	On board	λ/4 Monopole	3.00	Horizontal	45x8x8	C	MIC
88	T18-049-1129	Staf	SMA-J (Female)	λ/2 Dipole	3.00	Horizontal	80x40x20 Cable:5000	B	MIC
89	T18-078-1127	Staf	SMA (Male)	λ/2 Dipole	3.00	Horizontal	80x40x20 Cable:2500	B	MIC
90	T18-079-1128	Staf	SMA (Male)	λ/2 Dipole	3.00	Vertical	80x40x20 Cable:5000	B	MIC
91	RFA-S1-T42-U-M70	Aristotle	SMA (Male)	Omni-Directional	2.00	Vertical	115x18.8	A	MIC
92	MEGWX-1511SABX-920	MAP	SMA (Male)	λ/2 Dipole	3.00	Vertical	Φ12.9x 204±4	A	MIC
93	ANT2472-161CA/U-920	NISSEI ELECTRIC	U.FL	λ/2 Dipole	3.00	Vertical	94x13x1 Cable:120	B	MIC
94	ANT2473-161CW/U-920	NISSEI ELECTRIC	U.FL	λ/2 Dipole	3.00	Vertical	94x13x1 Cable:120	B	MIC
95	ANT2240-FWMV25SP-L-3000	NISSEI ELECTRIC	SMA (Male)	λ/2 Dipole	3.00	Vertical	100x25x10 Cable:3000	B	MIC
96	ANT2240-FWMV25SP-L-5000	NISSEI ELECTRIC	SMA (Male)	λ/2 Dipole	3.00	Vertical	100x25x10 Cable:5000	B	MIC
97	ANT2240-FWMV25SP-L-2500	NISSEI ELECTRIC	SMA (Male)	λ/2 Dipole	3.00	Vertical	100x25x10 Cable:2500	B	MIC
98	ANT2240-FWMV25SP-L-1000	NISSEI ELECTRIC	SMA (Male)	λ/2 Dipole	3.00	Vertical	100x25x10 Cable:1000	B	MIC
99	ANTP0450-C0534-STD	NISSEI ELECTRIC	SMA (Male)	λ/2 Dipole	3.00	Vertical	100x25x20 Cable:1000	B	MIC
100	ANTP0450-C0535-STD	NISSEI ELECTRIC	SMA (RP-Male)	λ/2 Dipole	3.00	Vertical	100x25x20 Cable:1000	B	MIC
101	ANT2005-161B/U-W	NISSEI ELECTRIC	U.FL	λ/2 Dipole	3.00	Vertical	50x43x1 Cable:50-	B	MIC
102	ANT2013-161B/U-W	NISSEI ELECTRIC	U.FL	λ/2 Dipole	3.00	Vertical	75x15x1 Cable:50-	B	MIC
103	ANTP0417-P1035-PCB	NISSEI ELECTRIC	U.FL	λ/2 Dipole	3.00	Vertical	120x9x1 Cable:300	B	MIC
104	ANT2309-231B/U-W-L-50	NISSEI ELECTRIC	U.FL	λ/2 Dipole	3.00	Vertical	60x10x1 Cable:50	B	MIC
105	ANT2309-231B/U-W-L-100	NISSEI ELECTRIC	U.FL	λ/2 Dipole	3.00	Vertical	60x10x1 Cable:100	B	MIC
106	ANTP0451-C0532-STD	NISSEI ELECTRIC	SMA (Male)	λ/2 Dipole	3.00	Vertical	74x74x23 Cable:1000	B	MIC
107	ANTP0451-C0533-STD	NISSEI ELECTRIC	SMA (RP-Male)	λ/2 Dipole	3.00	Vertical	74x74x23 Cable:1000	B	MIC
108	T18-051-1117	Staf	U.FL	λ/4 Monopole	3.00	Vertical	50x25 Cable:140	B	MIC
109	T18-051-1118	Staf	MHF	λ/4 Monopole	3.00	Vertical	50x25 Cable:150	B	MIC
110	T18-051-1119	Staf	MHF4L	λ/4 Monopole	3.00	Vertical	50x25 Cable:141	B	MIC

No.	Part No.	Maker	Connector Type	Antenna Type	Max Gain (dBi)	Polarization [H or V]	Size (mm)	Type	Certification
111	T18-051-1120	Staf	On board	λ/4 Monopole	3.00	Vertical	50x25	C	MIC
112	T18-051-1141	Staf	U.FL	λ/2 Dipole	3.00	Vertical	100x13 Cable:136.2	B	MIC
113	T18-051-1142	Staf	MHF	λ/2 Dipole	3.00	Vertical	100x13 Cable:146.7	B	MIC
114	T18-051-1143	Staf	MHF4L	λ/2 Dipole	3.00	Vertical	100x13 Cable:137.7	B	MIC
115	T20-030-1184	Staf	SMA (Male)	λ/2~λ Dipole	3.00	Vertical	170.6x19.2x 3.5	A	MIC

*1: This product is difficult to obtain.

Type

A	B	C
Rod antenna type	Antenna unit + Cable type	Chip antenna PCB mounting type
		
Gain=High Compact type: Gain=Low	Gain=High Compact type: Gain=Low Installation flexibility	Gain=Low Built-in equipment

* If the antenna gain exceeds 3dBi, between the wireless module and the antenna, Insert an attenuator more than the value obtained by subtracting 3 dB from the antenna gain, and use it so that the antenna gain is 3 dBi or less

Revision History

Ver.	Date	Details
1.0.0	2020/06/16	Initial version
1.0.1	2021/11/11	Changed the status of No.81 Staf 1018-474A to difficult to obtain.
1.0.2	2022/05/09	Update Antenna Type
1.0.3	2022/05/10	Add No.92 - 107
1.0.4	2022/07/21	Add No.108 - 115

Notes

1) The information contained herein is subject to change without notice.

2) Before you use our Products, please contact our sales representative and verify the latest specifications :

3) Although ROHM is continuously working to improve product reliability and quality, semiconductors can break down and malfunction due to various factors.
Therefore, in order to prevent personal injury or fire arising from failure, please take safety measures such as complying with the derating characteristics, implementing redundant and fire prevention designs, and utilizing backups and fail-safe procedures. ROHM shall have no responsibility for any damages arising out of the use of our Poducts beyond the rating specified by ROHM.

4) Examples of application circuits, circuit constants and any other information contained herein are provided only to illustrate the standard usage and operations of the Products. The peripheral conditions must be taken into account when designing circuits for mass production.

5) The technical information specified herein is intended only to show the typical functions of and examples of application circuits for the Products. ROHM does not grant you, explicitly or implicitly, any license to use or exercise intellectual property or other rights held by ROHM or any other parties. ROHM shall have no responsibility whatsoever for any dispute arising out of the use of such technical information.

6) The Products specified in this document are not designed to be radiation tolerant.

7) For use of our Products in applications requiring a high degree of reliability (as exemplified below), please contact and consult with a ROHM representative : transportation equipment (i.e. cars, ships, trains), primary communication equipment, traffic lights, fire/crime prevention, safety equipment, medical systems, servers, solar cells, and power transmission systems.

8) Do not use our Products in applications requiring extremely high reliability, such as aerospace equipment, nuclear power control systems, and submarine repeaters.

9) ROHM shall have no responsibility for any damages or injury arising from non-compliance with the recommended usage conditions and specifications contained herein.

10) ROHM has used reasonable care to ensure the accuracy of the information contained in this document. However, ROHM does not warrants that such information is error-free, and ROHM shall have no responsibility for any damages arising from any inaccuracy or misprint of such information.

11) Please use the Products in accordance with any applicable environmental laws and regulations, such as the RoHS Directive. For more details, including RoHS compatibility, please contact a ROHM sales office. ROHM shall have no responsibility for any damages or losses resulting non-compliance with any applicable laws or regulations.

12) When providing our Products and technologies contained in this document to other countries, you must abide by the procedures and provisions stipulated in all applicable export laws and regulations, including without limitation the US Export Administration Regulations and the Foreign Exchange and Foreign Trade Act.

13) This document, in part or in whole, may not be reprinted or reproduced without prior consent of ROHM.

ROHM SEMICONDUCTOR

Thank you for your accessing to ROHM product informations.
More detail product informations and catalogs are available, please contact us.

ROHM Customer Support System

http://www.rohm.com/contact/