



MPE Report

Report No.:STS2512339H01

Issued for

Bird Home Automation GmbH

Uhlandstr. 165,10719 Berlin, Germany

Product Name: IP Video Indoor Station

Brand Name: DoorBird

Model Name: A1103

Series Model(s): A1104

FCC ID: 2AD99-A1103

Test Standard: FCC 47CFR §2.1091

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the ShenZhen STS Test Services Co., Ltd.

**TEST REPORT**

Applicant's Name: Bird Home Automation GmbH
Address: Uhlandstr. 165, 10719 Berlin, Germany
Manufacturer's Name: Bird Home Automation GmbH
Address: Uhlandstr. 165, 10719 Berlin, Germany

Product Description

Product Name: IP Video Indoor Station
Brand Name: DoorBird
Model Name: A1103
Series Model(s): A1104

Test Standards: FCC 47CFR §2.1091
447498 D01 Interim General RF Exposure Guidance v06

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Date of Test

Date of receipt of test item: 13 Oct. 2025
Date (s) of performance of tests: 13 Oct. 2025 to 17 Dec. 2025
Date of Issue: 17 Dec. 2025
Test Result: **Pass**

Testing Engineer :

(Aaron Bu)

Technical Manager :

(Skylar Li)

Authorized Signatory :

(Bovey Yang)





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**Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	17 Dec. 2025	STS2512339H01	ALL	Initial Issue



1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF THE EUT

Product Name	IP Video Indoor Station	
Brand Name	DoorBird	
Model Name	A1103	
Series Model(s)	A1104	
Model Difference	All the models have the same circuitry and radio frequency modules, only the model names and appearances are different.	
Product Description	The EUT is IP Video Indoor Station	
	Operation Frequency:	802.11b/g/n 20: 2412~2462 MHz 802.11n40:2422~2452MHz
	Modulation Type:	802.11b(DSSS):CCK,DQPSK,DBPSK 802.11g(OFDM):BPSK,QPSK,16-QAM,64-QAM 802.11n(OFDM):BPSK,QPSK,16-QAM,64-QAM 802.11b/g/n Support SISO
	Bit Rate of Transmitter:	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6Mbps 802.11n(20MHz): 65/58.5/52/39/26/19.5/13/6.5Mbps 802.11n(40MHz): 135/121.5/108/81/54/40.5/37/13.5Mbps
	Number of Channel:	802.11b/g/n20: 11CH 802.11n40: 7CH
	Antenna Type:	Internal antenna
	Antenna Gain (dBi):	2
Power Rating	DC 15V from adapter/ DC 48 V from POE	
Adapter	MODEL: UT20S-150100I INPUT: 100-240V~50/60Hz 0.4A OUTPUT: DC 15V 1.0A	
Battery	N/A	
Hardware Version	N/A	
Software Version	N/A	

1.2 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add. : 101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01



2. FCC 47CFR §2.1091 REQUIREMENT

2.1 TEST STANDARDS

The limit for Maximum Permissible Exposure (MPE) specified in FCC 1.1310 is followed. The gain of the antennas used in the product is extracted from the Antenna data sheets provided and also the maximum total power input to the antenna is measured. Through the Friis transmission formula and the maximum gain of the antenna, we can calculate the distance, away from the product, where the limit of MPE is reached.

Although the Friis Transmission formula is far field assumption, the calculated result of that is an over-prediction for near field power density. It is taken as worst case to specify the safety range.

2.2 LIMIT

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environmental impact of the human exposure to radio-frequency (RF) radiation as specified in 1.1307 (b)

Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)
Limits for Occupational / controlled Exposures			
300 - 1500	--	--	F/300
3.0-30	1842/f	4.89/f	*(900/f ²)
1500 – 100000	--	--	5.0
Limits for General population / Uncontrolled Exposure			
300 - 1500	--	--	F/1500
1.34-30	824/f	2.19/f	*(180f ²)
1500 – 100000	--	--	1.0

F= Frequency in MHz

Friss Formula

Friss Transmission Formula: $P_d = (P_{out} * G) / (4 * \pi * r^2)$

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = Distance between observation point and the center of radiator in cm

If we know the maximum gain of the antenna and the total output power to the antenna, through calculation, we will know MPE value at distance 20cm.



2.3 TEST RESULT

Tune up

Mode	Detector	Tune up Power
802.11b	AV	12±1dBm
802.11g	AV	10±1dBm
802.11n(HT20)	AV	9±1dBm
802.11n(HT40)	AV	8±1dBm

Protocol	Fre. (GHz)	Separati on distance (cm)	Max Tune up power (dBm)	ANT Gain (dBi)	Max EIRP (dBm)	Max EIRP (mW)	Power Density (mW/cm ²)	Limit (mW/ cm ²)	Ratio	Result
802.11g	2.462	20	13	2	15	31.62	0.0063	1	0.0063	Pass

- Note: 1. The Maximum power is less than the limit, complies with the exemption requirements.
2. The Bluetooth and WLAN can't simultaneous transmission at the same time.
3. ERP = EIRP - 2.15

※※※※※END OF THE REPORT※※※※※