Prüfbericht-Nr.: *Test report no.*:	**CN24W6UQ 004**	**Auftrags-Nr.:** *Order no.*:	168492000	Seite 1 von 10 *Page 1 of 10*
Kunden-Referenz-Nr.: *Client reference no.*:	N/A	**Auftragsdatum:** *Order date:*	2024-07-01	
Auftraggeber: *Client*:	SZ DJI TECHNOLOGY CO., LTD Lobby of T2, DJI Sky City, No. 53 Xianyuan Road, Xili Community, Xili Street, Nanshan District, Shenzhen, China.			
Prüfgegenstand: *Test item*:	D-RTK 3 Multifunctional Station, D-RTK 3 AG			
Bezeichnung / Typ-Nr.: *Identification / Type no.*:	R600BS, R600_AG (Trademark: DJI)			
Auftrags-Inhalt: *Order content*:	Test Report			
Prüfgrundlage: *Test specification*:	47 CFR FCC Part 2.1091 KDB 447498 D01 v06			

Wareneingangsdatum: *Date of sample receipt*:	2024-07-01	Please refer to Photo Document
Prüfmuster-Nr.: *Test sample no:*	A003757365-001 A003757344-003, 005 A003834149-006~015	
Prüfzeitraum: *Testing period*:	2024-07-05 - 2024-12-17	
Ort der Prüfung: *Place of testing*:	TÜV Rheinland (Shenzhen) Co., Ltd.	
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.	
Prüfergebnis*: *Test result**:	Pass	

geprüft von: tested by:	x Bell Hu Signed by: Bell Hu	**genehmigt von:** *authorized by*:	X Hardy Suo Signed by: Hardy Suo
Datum: *Date:* 2024-12-31		**Ausstellungsdatum:** *Issue date:* 2024-12-31	
Stellung / Position:	Sachverständige(r)/Expert	**Stellung** / Position:	Sachverständige(r)/Expert

Sonstiges / *Other*: FCC ID: SS3-R600BS2024

Zustand des Prüfgegenstandes bei Anlieferung: *Condition of the test item at delivery*:	Prüfmuster vollständig und unbeschädigt *Test item complete and undamaged*

* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
* *Legend:*	*P(ass) = passed a.m. test specification(s)*	*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

Anmerkungen
Remarks

1	Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben. Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden. *The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.*
2	Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben. Informationen zur Verifizierung der Authentizität unserer Dokumente erhalten Sie auf folgender Webseite: go.tuv.com/digital-signature *As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged. For information on verifying the authenticity of our documents, please visit the following website: go.tuv.com/digital-signature*
3	Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt. *Test clauses with remark of * are subcontracted to qualified subcontractors and descripted under the respective test clause in the report.* *Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.*
4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnisen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezueglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. *The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.*

Test Summary

3.1.1 RF EXPOSURE COMPLIANCE

RESULT: Pass

Contents

1. Test Sites

1.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. China.

FCC Accreditation Designation No.: 694916

1.2 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, to equivalent nationally recognized standards organizations.

1.3 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

1.4 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendixes of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

1.5 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. facility located at No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. China. is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

2. General Product Information

2.1 General Description

The Product is D-RTK 3 Multifunctional Station which supports Bluetooth, 2.4GHz SDR, 5.2GHz SDR, 5.8GHz SDR and GNSS functions.
*remark: SDR means specific defined radio, and cannot changes radio specification via software/firmware by end-users.

For details refer to the User Manual, Technical Description and Circuit Diagram.

2.2 Rating and System details

Table 1: Rating of EUT

General Information of EUT	Value
Kind of Equipment	D-RTK 3 Multifunctional Station, D-RTK 3 AG
Type Designation	R600BS, R600_AG (Two models are identical except for model name and product name.)
Trademark	DJI
FCC ID	SS3-R600BS2024
Operating Voltage	Powered by battery(7.2Vdc) or DC 9V-15V by USB-C port for charging
Testing Voltage	Fully charged battery
Extreme Temperature Range	-30ºC to +55ºC
Radiofrequency operating mode	1) Bluetooth: operating within 2400-2483.5MHz, Bluetooth BLE (1Mbps&2Mbps) 2) 2.4GHz SDR: operating within 2400-2483.5MHz, supports 1.4MHz/3MHz/5MHz/10MHz/20MHz/40MHz/60MHz Bandwidth 3) 5.2GHz SDR: operating within 5150-5250MHz, supports 1.4MHz/3MHz/5MHz/10MHz/20MHz/40MHz60MHz/80MHz Bandwidth 4) 5.8GHz SDR: operating within 5725-5850MHz, supports 1.4MHz/3MHz/5MHz/10MHz/20MHz/40MHz/60MHz/80MHz Bandwidth 5) GPS & BDS & Galileo & Glonass (receiver): operating within 1559-1610MHz

Table 2: Technical Specification of EUT

Technical Specification of Bluetooth LE	
Operating Frequency	2402-2480MHz
Type of Modulation	GFSK
Data Rate	1Mbps, 2Mbps
Channel Number	40 channels
Channel Separation	2MHz
Antenna Type	Integral Antenna

Antenna Number	1
Antenna Gain	1 dBi (Provided by the Client)
The type of wideband data transmission equipment	DTS
Technical Specification of 2.4GHz SDR	
Operating Frequency	2403.5-2469.12MHz for 1.4MHz Bandwidth 2405.5-2468.2MHz for 3MHz Bandwidth 2404.5-2469.5MHz for 5MHz Bandwidth 2407.5-2467.5MHz for 10MHz Bandwidth 2412.5-2462.5MHz for 20MHz Bandwidth 2422.5-2452.5MHz for 40MHz Bandwidth 2432.5-2442.5MHz for 60MHz Bandwidth
Type of Modulation	OFDM (QPSK, 16QAM, 64QAM)
Channel Number	108 channels for 1.4MHz Bandwidth 64 channels for 3MHz Bandwidth 130 channels for 5MHz Bandwidth 155 channels for 10MHz Bandwidth 97 channels for 20MHz Bandwidth 31 channels for 40MHz Bandwidth 11 channels for 60MHz Bandwidth
Antenna Type	Integral Antenna
Antenna Number	1Tx4Rx for SISO mode (ANT0 or ANT1 or ANT2 or ANT3) 2Tx4Rx for MIMO mode (ANT0+ANT1, or ANT0+ANT2, or ANT0+ANT3, or ANT2+ANT1, or ANT1+ANT3, or ANT2+ANT3)
Antenna Gain	3 dBi for ANT0/ANT1/ANT2/ANT3 (Provided by the Client)
The type of wideband data transmission equipment	DTS
Technical Specification of 5.2GHz SDR	
Operating Frequency	5154-5248MHz for 1.4MHz Bandwidth 5154-5247MHz for 3MHz Bandwidth 5155-5246.24MHz for 5MHz Bandwidth 5157-5245MHz for 10MHz Bandwidth 5161-5240MHz for 20MHz Bandwidth 5170-5230MHz for 40MHz Bandwidth 5180-5220MHz for 60MHz Bandwidth 5190-5210MHz for 80MHz Bandwidth
Type of Modulation	OFDM (QPSK, 16QAM, 64QAM)
Channel Number	110 channels for 1.4MHz Bandwidth 68 channels for 3MHz Bandwidth 189 channels for 5MHz Bandwidth 247 channels for 10MHz Bandwidth 202 channels for 20MHz Bandwidth 103 channels for 40MHz Bandwidth 41 channels for 60MHz Bandwidth 21 channels for 80MHz Bandwidth
Antenna Type	Integral Antenna
Antenna Number	1Tx4Rx for SISO mode (ANT0 or ANT1 or ANT2 or ANT3) 2Tx4Rx for MIMO mode (ANT0+ANT1, or ANT0+ANT2, or ANT0+ANT3, or ANT2+ANT1, or ANT1+ANT3, or ANT2+ANT3)
Antenna Gain	5 dBi for ANT0, 4.5 dBi for ANT1/ANT2/ANT3 (Provided by the Client)
The type of wideband data	DTS

transmission equipment	
Technical Specification of 5.8GHz SDR	
Operating Frequency	5728.5-5846.12MHz for 1.4MHz Bandwidth 5727.5-5847.2MHz for 3MHz Bandwidth 5732.5-5842.5MHz for 5MHz Bandwidth 5730.5-5844.5MHz for 10MHz Bandwidth 5735.5-5839.5MHz for 20MHz Bandwidth 5745.5-5829.5MHz for 40MHz Bandwidth 5755.5-5819.5MHz for 60MHz Bandwidth 5765.5-5809.5MHz for 80MHz Bandwidth
Type of Modulation	OFDM (QPSK, 16QAM, 64QAM)
Channel Number	194 channels for 1.4MHz Bandwidth 126 channels for 3MHz Bandwidth 229 channels for 5MHz Bandwidth 317 channels for 10MHz Bandwidth 259 channels for 20MHz Bandwidth 147 channels for 40MHz Bandwidth 65 channels for 60MHz Bandwidth 45 channels for 80MHz Bandwidth
Antenna Type	Integral Antenna
Antenna Number	1Tx4Rx for SISO mode (ANT0 or ANT1 or ANT2 or ANT3) 2Tx4Rx for MIMO mode (ANT0+ANT1, or ANT0+ANT2, or ANT0+ANT3, or ANT2+ANT1, or ANT1+ANT3, or ANT2+ANT3)
Antenna Gain	5 dBi for ANT0/ANT1/ANT2/ANT3 (Provided by the Client)
The type of wideband data transmission equipment	DTS

3. Test Results

3.1 Transmitter Requirements & Test Suites

3.1.1 RF Exposure Compliance

RESULT: **Pass**

Test standard	:	47 CFR FCC Part 2.1091 KDB 447498 D01 v06
Limit	:	Table 1 of 47 CFR FCC Part 1.1310
Kind of test site	:	Shielded room

This device is mobile device, and the applicant declares that the minimum separation distance is greater than 20cm. Therefore MPE measurement or computational modelling should be used to determine compliance.

3.1.1.1 RF Exposure Compliance Requirement for FCC

- **Radio Frequency Exposure Calculation Formula**

MPE Calculation is based on the conducted power, and considering maximum power and Antenna gain. The following formula is used to MPE evaluation.

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density (in appropriate units, e.g. mW/cm^2)
P = power input to the antenna (in appropriate units, e.g., mW)
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

or:

$$S = \frac{EIRP}{4\pi R^2}$$

where: EIRP = equivalent (or effective) isotropically radiated power

➢ **Radio Frequency Exposure Limit**

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f2)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f2)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

Table 3: Test Results of RF Exposure Calculations for FCC, stand-alone mode

Operating Mode	Max. EIRP (dBm)	Distance (cm)	MPE (mW/cm^2)	Limit (mW/cm^2)	Verdict
Bluetooth	6.16	20	0.0008	1.0	Pass
2.4GHz SDR	30.14	20	0.2056	1.0	Pass
5.2GHz SDR	19.78	20	0.0189	1.0	Pass
5.8GHz SDR	30.50	20	0.2233	1.0	Pass

Table 4: Test Results of RF Exposure Calculations for FCC, Simultaneous mode

Co-location Mode	Sum of the MPE Ratios	Limit	Verdict
Bluetooth + 5GHz SDR	0.0008/1+0.2233/1=0.2241	1.0	Pass
Bluetooth + 2.4GHz SDR	0.0008/1+0.2056/1=0.2064	1.0	Pass

➢ **Conclusion**

Therefore the maximum calculations result of above are meet the requirement of Radio Frequency Exposure (MPE) limit.

4. List of Tables

========== END OF REPORT ==========