




Test report No:  
NIE: 02297RCB.003

## Test report

### Citizen Broadband Radio Service Test report as per WINNForum Test Specification WINNF-TS-0122-V1.0.0

Identification of item tested	AirStrand 1300T
Trademark	Not Provided
Model and /or type reference	AirStrand 1300T, LTE-TDD Base Station, CBSD
Other identification of the product	Not Provided
Features	CBSD, Domain Proxy, LTE-TDD 48
Manufacturer	AIRSPAN NETWORK INC 777 YAMATO ROAD SUIT 310 BOCA RATON, FLORIDA – 33431 UNITE STATES OF AMERICA
CBSD Final HW version	1
CBSD Final SW version	SR16.0
Domain Proxy Final SW version	SR16.5
Domain Proxy Final HW version	NA
Test method requested, standard	WinnForum TEST SPECIFICATION WINNF-TS-0122-V1.0.0
Summary	IN COMPLIANCE
Approved by (name / position & signature)	Gonzalo Casado (Lab Manager) 
Date of issue	2020-Sep-02
Report template No	FDT08_21

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## Competences and guarantees

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## General conditions

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1. This report is only referred to the item that has undergone the test.
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## Uncertainty

Uncertainty (factor k=2) was calculated according to the DEKRA Testing and Certification internal document PODT000.

## Data provided by the client

DEKRA declines any responsibility with respect to the information provided by the client and that may affect the validity of results.

## Usage of samples

Samples undergoing test have been selected by: Airspan Network, Inc.

Sample M/01 is composed of the following elements:

Control N°	Description	Model	Serial N°	Date of reception
02297.003	CBSD	AirStrand 1300T	DC2F2BCDB898	2018-12-10
NA	Domain Proxy Software	Netspan	NA	2018-12-10

1. Sample M/01 has undergone the test(s) specified in subclause "Test method requested".

## Identification of the client

AIRSPAN NETWORK INC  
777 YAMATO ROAD SUIT 310, BOCA RATON, FLORIDA – 33431  
UNITE STATES OF AMERICA

## Testing period and place

Test Location	DEKRA Certification, Inc.
Date (start)	2018-12-10
Date (finish)	2018-12-12

## Document history

Report number	Date	Description
02297RCB.003	2020-09-02	First release

## Remarks and comments

- 1: The tests have been performed by the technical personnel: Indusha, Chitepu

## Testing verdicts

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Not applicable :	N/A
Pass :	P
Fail :	F
Not measured :	N/M

## Summary

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Standard :	WINNF-TS-0122
Band :	TDD 48
<b>Total</b>	<b>PASS VERDICT</b>
32	32

## Appendix A: Test Results

Test Spec	Ref	Name	Condition	Date	Test sample	Result	SAS version	SW Version	HW Version
WINNF-TS-0122-V1.0.0	WINNF.FT.D.REG.2	Domain Proxy Multi-Step registration	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.REG.6	Domain Proxy Single-Step registration for CBSD with CPI signed data	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.REG.9	Domain Proxy Missing Required parameters (responseCode 102)	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.REG.11	Domain Proxy Pending registration (responseCode 200)	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.REG.13	Domain Proxy Invalid parameters (responseCode 103)	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.REG.15	Domain Proxy Blacklisted CBSD (responseCode 101)	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.REG.17	Domain Proxy Unsupported SAS protocol version (responseCode 100)	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.REG.19	Domain Proxy Group Error (responseCode 201)	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.GRA.1	Unsuccessful Grant responseCode=400 (INTERFERENCE)	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	

Test Spec	Ref	Name	Condition	Date	Test sample	Result	SAS version	SW Version	HW Version
WINNF-TS-0122-V1.0.0	WINNF.FT.C.GRA.2	Unsuccessful Grant responseCode=401 (GRANT CONFLICT)	Normal	12/11/2018	02297.00 3	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.HBT.2	Domain Proxy Heartbeat Success Case (first Heartbeat Response)	Normal	12/11/2018	02297.00 3	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.C.HBT.3	Heartbeat responseCode=105 (DEREGISTER)	Normal	12/11/2018	02297.00 3	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.C.HBT.5	Heartbeat responseCode=501 (SUSPENDED_GRANT ) in First Heartbeat Response	Normal	12/11/2018	02297.00 3	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.C.HBT.6	Heartbeat responseCode=501 (SUSPENDED_GRANT ) in Subsequent Heartbeat Response	Normal	12/11/2018	02297.00 3	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.C.HBT.7	Heartbeat responseCode=502 (UNSYNC OP PARAM)	Normal	12/11/2018	02297.00 3	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.HBT.8	Domain Proxy Heartbeat responseCode=500 (TERMINATED_GRANT )	Normal	12/11/2018	02297.00 3	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.C.HBT.9	Heartbeat Response Absent (First Heartbeat)	Normal	12/11/2018	02297.00 3	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.C.HBT.10	Heartbeat Response Absent (Subsequent Heartbeat)	Normal	12/11/2018	02297.00 3	PASS	1.0.0.2	SR16.0	



Test Spec	Ref	Name	Condition	Date	Test sample	Result	SAS version	SW Version	HW Version
WINNF-TS-0122-V1.0.0	WINNF.FT.C.HBT.11	Successful Grant Renewal in Heartbeat Test Case	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.MES.2	Domain Proxy Registration Response contains measReportConfig	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.RLQ.2	Domain Proxy Successful Relinquishment	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.RLQ.4	Domain Proxy Unsuccessful Relinquishment, responseCode=102	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.RLQ.6	Domain Proxy Unsuccessful Relinquishment, responseCode=103	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.DRG.2	Domain Proxy Successful Deregistration	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.D.DRG.4	Domain Proxy Deregistration responseCode=102	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.C.DRG.5	Deregistration responseCode=103	Normal	12/11/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.C.SCS.1	Successful TLS connection between UUT and SAS Test Harness	Normal	12/12/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.C.SCS.2	TLS failure due to revoked certificate	Normal	12/12/2018	02297.003	PASS	1.0.0.2	SR16.0	

Test Spec	Ref	Name	Condition	Date	Test sample	Result	SAS version	SW Version	HW Version
WINNF-TS-0122-V1.0.0	WINNF.FT.C.SCS.3	TLS failure due to expired server certificate	Normal	12/12/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.C.SCS.4	TLS failure when SAS Test Harness certificate is issue by unknown CA	Normal	12/12/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.FT.C.SCS.5	TLS failure when certificate at the SAS Test Harness is corrupted	Normal	12/12/2018	02297.003	PASS	1.0.0.2	SR16.0	
WINNF-TS-0122-V1.0.0	WINNF.PT.C.HBT	UUT RF Transmit Power Measurement	Normal	12/12/2018	02297.003	PASS	1.0.0.2	SR16.0	

## Appendix B: Test Systems

## Test System Used

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Model	Description	Control Number	Uncertainties
Dell Latitude, Windows 7, 64-bit	Laptop with SAS harness	CTC-5233-K	NA
EXA N9010A	Signal Analyzer	0018	NA
MXA N9020A	Signal Analyzer	0382	NA
HWg-STE Plain	Ethernet SNMP Thermometer	1107	NA
DR-4X7S201-LH	Shielded Chamber	0131	NA

## Appendix C: CBSD/ DP Supported Features

## Supported Features

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Condition	Feature Description	Supported
C1	Mandatory for UUT which supports multi-step registration message.	Y
C2	Mandatory for UUT which supports single-step registration with no CPI-signed data in the registration message. By definition, this is a subset of Category A devices which determine all registration information, including location, without CPI intervention.	N
C3	Mandatory for UUT which supports single-step registration containing CPI-signed data in the registration message.	Y
C4	Mandatory for UUT which supports RECEIVED_POWER_WITHOUT_GRANT measurement report type.	Y
C5	Mandatory for UUT which supports RECEIVED_POWER_WITH_GRANT measurement report type.	N
C6	Mandatory for UUT which supports parameter change being made at the UUT and prior to sending a deregistration.	N

## Appendix D: Reference Standards and Procedures

## Reference Standards

Test and Certification for Citizens Broadband Radio Service (CBRS); Conformance and Performance Test Technical Specification; CBSD/DP as Unit Under Test (UUT) Working Document WINNF-TS-0122	V1.0.0
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## Test Procedures

PECB001_00: CBRS Alliance Certification Testing Based On WINN Forum CBRS CBSD Test Specification “WINNF-TS-0122”
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