ZQAM Communications Corporation
3F., No6, Innovation Road II, Science Park, Hsinchu Taiwan 30076

Federal Communications Commission
Authorization and Evaluation Division
Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, MD 21046

Applicant's declaration concerning RF Radiation Exposure

We hereby indicate that the product
Product description: ZoneDAS
Model No: ZoneDAS

The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The integral antennas used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter within the host device.

A safety statement concerning minimum separation distances from enclosure of the Product : ZoneDAS
will be integrated in the user's manual to provide end-users with transmitter operating conditions for satisfying RF exposure compliance.

The appropriate information can be drawn from the test report no: W6M21812-18679-C-1 and the accompanying calculations.

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Date: March 25, 2019

Signature

10 Maximum Permissible Exposure

10.1 RF Exposure Compliance Requirements

FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.
The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a “worst case” or conservative prediction.

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

S – Power Density
P – Output power ERP
R – Distance
D – Cable Loss
AG – Antenna Gain

WCDMA

Band II			
Item	Unit	Value	Remarks
P	dBm/mW	22.66 / 184.50	Peak value
D	dB	- -	
AG	dBi	5.1	
G		3.24	Calculated Value
R	cm	20	Assumed value
S	mW/cm^2	0.1188	Calculated value

Band V			
Item	Unit	Value	Remarks
P	dBm/mW	22.03 / 159.59	Peak value
D	dB	- -	
AG	dBi	2	
G		1.58	Calculated Value
R	cm	20	Assumed value
S	mW/cm^2	0.3153	Calculated value

LTE

Band II			
Item	Unit	Value	Remarks
P	dBm/mW	23.42 / 219.79	Peak value
D	dB	- -	
AG	dBi	5.1	
G		3.24	Calculated Value
R	cm	20	Assumed value
S	mW/cm^2	0.1415	Calculated value

Band IV			
Item	Unit	Value	Remarks
P	dBm/mW	21.59 / 144.21	Peak value
D	dB	- -	
AG	dBi	4.4	
G		2.75	Calculated Value
R	cm	20	Assumed value
S	mW/cm^2	0.0790	Calculated value

Band V			
Item	Unit	Value	Remarks
P	dBm/mW	22.52 / 178.65	Peak value
D	dB	- -	
AG	dBi	2	
G		1.58	Calculated Value
R	cm	20	Assumed value
S	mW/cm^2	0.0563	Calculated value

Band XII			
Item	Unit	Value	Remarks
P	dBm/mW	23.24 / 210.86	Peak value
D	dB	- -	
AG	dBi	0.2	
G		1.05	Calculated Value
R	cm	20	Assumed value
S	mW/cm^2	0.044	Calculated value

Band XIII			
Item	Unit	Value	Remarks
P	dBm/mW	22.23 /167.11	Peak value
D	dB	- -	
AG	dBi	1.4	
G		1.38	Calculated Value
R	cm	20	Assumed value
S	mW/cm^2	0.0459	Calculated value

Limits:

Limit for General Population / Uncontrolled Exposure	
Frequency (MHz)	Power Density (mW/cm^2)
1500 – 100.000	1.0