## PROFESSIONAL INSTALLATION ATTESTATION

Date: 2017-12-14

FCC ID: 2AHBN-AP61

We, **Mist Systems**, **Inc.** hereby declare that requirements of KDB 353028 D01 Antennas Part 15 Transmitters v01 have been met and shown on the following questions. Further we declare that the info listed below are correct and represent the product in consideration under this filing.

1. Professional installation must be justified.

Description: Device is outdoor Access Point and must need special trained professional in configuring and installing the product, more details please refer to user manual exhibit.

2. Professional installation does not permit use of any antenna with the transmitter; the permitted types of antenna specified as below.

Description: Below listed of Antennas has been compliance FCC Rule Part 15 requirement, more details please refer to test reports.

For Model No.: AP61	1				_			
	Radio 1-	WLAN	- 2.4GHz -	+ 5GHz (In	ternal a	intenna)		
Antenna Set	Transmitter Circuit	Antenna Net Gain (dBi)		Frequency Range (GHz)		Antenna Typ	Connecter Type	
		3.87		2.4~2.4	835			
	Chain (0)	4.94		5.15~5.25				
		4.66		5.25~5.35		PIFA	i-pex(MHF)	
		4.25		5.47~5.725				
		4.42		5.725~	5.85			
Ī		3.91		2.4~2.4835				
	Chain (1)	4.23		5.15~5.25		PIFA		
		4.54		5.25~5.35			i-pex(MHF)	
		4.66		5.47~5.725				
1		4.70		5.725~5.85				
i ' [		3.93		2.4~2.4	835			
	Chain (2)	4.53		5.15~5.25				
		4.86		5.25~5.35		PIFA	i-pex(MHF)	
		4.95		5.47~5.725				
l L		4.94		5.725~5.85				
	Chain (3)	3.81		2.4~2.4835				
		4.50		5.15~5.25		PIFA		
		4.92		5.25~5.35			i-pex(MHF)	
		4.71		5.47~5.725				
		4.90		5.725~5.85				
				4GHz + 5GHz (Scanning		g radio antenr	•	
Antenna No.		Antenna Net Gain (dBi)		Frequency Range (GHz)		enna Type	Connecter Type	
1	3.85		2.4~2.4835		PIFA		i-pex(MHF)	
	4.61		5.15~5.25					
	4.71		5.25~5.35					
	4.72		5.47~5.725					
	4.73		5.725~5.85					
			Radio 3 -					
Antenna No.	Antenna Net Gain (dBi)		Frequency Range (GHz)		Antenna Type		Connecter Type	
1	3.56		2.4~2.4835		Omni		i-pex(MHF)	
2	5.01		2.4~2	.4835		Patch	i-pex(MHF)	

For Model N	No.: AP61E						
		Radio 1	- WLAN - 2.4GHz +	5GHz (Exte	rnal antenna	a)	
A - 4	T			Antenna	Frequency		C
Antenna Set	Transmitter Circuit	Brand	Model	Net Gain	Range	Antenna Type	Connecter
Set	Circuit			(dBi)	(GHz)		Type
				6	2.4~2.4835		
	Chain (0)	PCTEL	FPMI2458-DP4NM	5	5.15~5.25	1	N-Type
				5	5.25~5.35	Sector	
				5	5.47~5.725		
				5	5.725~5.85		
				6	2.4~2.4835		N-Type
			FPMI2458-DP4NM	5	5.15~5.25		
	Chain (1)	PCTEL		5	5.25~5.35	Sector	
				5	5.47~5.725		
1				5	5.725~5.85		
' '				6	2.4~2.4835		N-Type
		PCTEL	FPMI2458-DP4NM	5	5.15~5.25		
	Chain (2)			5	5.25~5.35	Sector	
				5	5.47~5.725		
				5	5.725~5.85		
				6	2.4~2.4835		
Chain (3)			5	5.15~5.25			
	Chain (3)	(3) PCTEL	FPMI2458-DP4NM	5	5.25~5.35	Sector	N-Type
				5	5.47~5.725		
				5	5.725~5.85		
Antenna	Transmitter	Brand	Model	Antenna	Frequency		Connecter Type
Set				Net Gain	Range	Antenna Type	
	002			(dBi)	(GHz)		
			MPMI2458-4-NM	4	2.4~2.4835		N-Type
				4	5.15~5.25		
	Chain (0)	PCTEL		4		Omnidirectional	
				4	5.47~5.725	Antenna Type  35 25 Omnidirectional 25 85 35	
				4	5.725~5.85		
				4	2.4~2.4835	Sector  Sector  Sector  Antenna Type  Omnidirectional  Omnidirectional	N-Type
		PCTEL	MPMI2458-4-NM	4	5.15~5.25		
Chain (1)	Chain (1)			4		Omnidirectional	
				4	5.47~5.725		
2	2		MPMI2458-4-NM	4	5.725~5.85		N-Type
		n (2) PCTEL		4	2.4~2.4835		
	Ob -i- (O)			4	5.15~5.25		
	Chain (2)			4		Omnidirectional	
				4	5.47~5.725 5.725~5.05		
		PCTEL	MPMI2458-4-NM		5.725~5.85		N-Type
	Chain (3)			4	2.4~2.4835		
				4	5.15~5.25	O:-	
				4		Omnidirectional	
					5.47~5.725		
				4	5.725~5.85		

Antenna No.	Transmitter Circuit		Frequency Range (GHz)		Connecter Type			
		3.85	2.4~2.4835		i-pex(MHF)			
1	Chain (0)	4.61	5.15~5.25					
		4.71	5.25~5.35	PIFA				
		4.72	5.47~5.725					
		4.73	5.725~5.85					
Radio 3 - Bluetooth								
Antenna No.	Transmitter Circuit	Antenna Net Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connecter Type			
1	Chain (0)	3.56	2.4~2.4835	Omni	i-pex(MHF)			
2	Chain (1)	5.01	2.4~2.4835	Patch	i-pex(MHF)			
Note: 1. Max. gain was	selected for Antenr	na Port Conducted	Measurement test					

For antennas of radio 2 & 3, Model No.: AP61 is as same as AP61E.

- 3. The applicant should address the following items when justifying professional installation.
- (1) To qualify for professional installation, please explain why the hardware is not readily available to average consumer. Description: Due to this product and will not be sold directly to the general public through retail store, therefore the hardware is not readily available to average consumer.
- (2) Marketing Applicant must ensure device cannot be sold via retail to the general public or by mail order.

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Description: This product and will not be sold directly to the general public through retail store. It will be sold to authorized dealers or installers only.

(3) Applicant must show that device intended use is not for consumers and general public.

Description: Device is for industrial/commercial use.

(4) Explain what is unique, sophisticated, complex, or specialized about the equipment that REQUIRES it to be installed by a professional installer?

Description: The device cannot be purchased by general end-users, only professional installers can help to install it.

- 4. Other professional installation requirements
- (1) Installation must be controlled.

Description: The product will be distributed through controlled distribution channel which has special trained professional to install this product

(2) Installed by licensed professionals.

Description: Device sold to dealer who hires installers and need special trained professional in configuring and installing the product.

(3) Installation requires special training.

Description: The product need special programming, access to keypad, field strength measurements made, so must need special trained professional in configuring and installing the product.

If you should have any question(s) regarding this declaration, please don't hesitate to contact us. Thank you!

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