

APo 2751

802.11A/B/G/N OUTDOOR WIRELESS SMART AP



OVERVIEW

APo 2751 is a Dual Band Concurrent Smart Outdoor Access Point that utilizes a highly innovative and extremely reliable set of smart antennas, allowing this device to be one of the most must have outdoor access points for immediate outdoor deployment in your current or future network compared to other access points available in the global market. This Smart Wireless Access Point is capable of providing the needs of extremely populated areas due to its industrially suited performance, capable of providing the wireless network needs of commonly known populated locations such as schools, hotels, public or private hospitals, parks, malls, and other crowded places in need of consistently fast and reliable wireless connectivity.

Designed perfectly for outdoor locations, Aztech APo 2751 can work at its perfect condition no matter what kind of environment it is currently at, and is capable of surviving various kinds of hot or cold temperature, known performance-disrupting moistures, dirt, and other kinds of precipitation that commonly disrupts your needed outdoor performance. This Smart AP is also equipped with surge protection, greatly ensuring the safety of this device even when placed or situated outdoors, allowing you to constantly maximize your network's flexibility even in terms of outdoor performance.

Features	Additional Information																																						
Chipset Solution	<ul style="list-style-type: none"> CPU : AR9342 RF : AR9382 PHY : AR8035 																																						
CPU	533MHz																																						
Memory (DDR II)	64Mbyte																																						
Flash	16Mbyte																																						
Ethernet PHY	10/100/1000Mbps																																						
LED definition	System LED Light Behavior Definition <ul style="list-style-type: none"> Front Panel LED definition <table border="1"> <thead> <tr> <th>Location</th> <th>Function</th> <th>Color</th> <th>Status</th> <th>Descriptions</th> </tr> </thead> <tbody> <tr> <td rowspan="3">DS4</td> <td rowspan="3">System</td> <td>Red</td> <td>Blinking</td> <td>System Bring up</td> </tr> <tr> <td>Green</td> <td>ON</td> <td>System work Unstable (System checking)</td> </tr> <tr> <td>Green</td> <td>ON</td> <td>System work stable</td> </tr> <tr> <td rowspan="3">DS19</td> <td rowspan="3">AC Mode</td> <td>Yellow</td> <td>Blinking</td> <td>AC Mode Connecting</td> </tr> <tr> <td></td> <td>ON</td> <td>AC Mode Connected</td> </tr> <tr> <td>Blue</td> <td>ON</td> <td>Stable in work in FAP mode</td> </tr> <tr> <td rowspan="3">DS20</td> <td rowspan="3">Smart Function</td> <td>Yellow</td> <td>ON</td> <td>Training</td> </tr> <tr> <td>Blue</td> <td>ON</td> <td>Training to Finished</td> </tr> <tr> <td>N/A</td> <td>OFF</td> <td>Disabled Smart Function</td> </tr> </tbody> </table>	Location	Function	Color	Status	Descriptions	DS4	System	Red	Blinking	System Bring up	Green	ON	System work Unstable (System checking)	Green	ON	System work stable	DS19	AC Mode	Yellow	Blinking	AC Mode Connecting		ON	AC Mode Connected	Blue	ON	Stable in work in FAP mode	DS20	Smart Function	Yellow	ON	Training	Blue	ON	Training to Finished	N/A	OFF	Disabled Smart Function
Location	Function	Color	Status	Descriptions																																			
DS4	System	Red	Blinking	System Bring up																																			
		Green	ON	System work Unstable (System checking)																																			
		Green	ON	System work stable																																			
DS19	AC Mode	Yellow	Blinking	AC Mode Connecting																																			
			ON	AC Mode Connected																																			
		Blue	ON	Stable in work in FAP mode																																			
DS20	Smart Function	Yellow	ON	Training																																			
		Blue	ON	Training to Finished																																			
		N/A	OFF	Disabled Smart Function																																			
Power supply	<ul style="list-style-type: none"> Support POE 802.3 at Support +48V PTE 																																						
Power requirement	<ul style="list-style-type: none"> Output: +48V DC@0.83A Input: 90~264V AC, 50/60Hz 																																						
Anti-static Grade	<ul style="list-style-type: none"> Contact discharge: 6KV - Air discharge: 8KV 																																						
Surge Capacity	Ethernet <ul style="list-style-type: none"> Line to Earth 2kv Line to Line 1kv 																																						
Data rate	<ul style="list-style-type: none"> 802.11a: 6/9/12/18/24/36/48/54 Mbps & Auto fallback 802.11b: 1/2/5.5/11 Mbps & Auto fallback 802.11g: 6/9/12/18/24/36/48/54 Mbps & Auto fallback 802.11n: 6/ 6.5/ 13/ 13.5/ 19.5/ 26/ 27/ 39/ 40.5/ 52/ 54/ 58.5/ 65/ 78/81/104/108/ 117/121.5/130/135/ 162/ 216/ 243/ 270/ 300Mbps 																																						
Data modulation type	IEEE 802.11 a/b/g <ul style="list-style-type: none"> DSSS (DBPSK, DQPSK, CCK) OFDM (BPSK, QPSK, 16-QAM, 64-QAM) IEEE 802.11n <ul style="list-style-type: none"> OFDM (BPSK, QPSK, 16-QAM, 64-QAM) 																																						

SPECIFICATIONS MAY CHANGE WITHOUT PRIOR NOTICE

Current Consumption (Input 48V)

- $\leq 25.5W$

RF1 2.4GHz 100mW (U.FL compliance connectors)

Output Power (802.11 b/g/n) 20dBm (per chain)

Tolerance

- @-10°C~40°C(per chain $\pm 2dBm$)
- @ 40°C~50°C(per chain $\pm 2dBm$)

Sensitivity (per chain)

11b

- -91dBm@1Mbps
- -89dBm@2Mbps
- -88dBm@5.5Mbps
- -85dBm@11Mbps

11g

- -87dBm@6Mbps
- -86dBm@9Mbps
- -83dBm@12Mbps
- -81dBm@18Mbps
- -78dBm@24Mbps
- -74dBm@36Mbps
- -69dBm@48Mbps
- -68dBm@54Mbps

11gn

HT20

- -82dBm@MCS0/8
- -79dBm@MCS1/9
- -77dBm@MCS2/10
- -74dBm@MCS3/11
- -70dBm@MCS4/12
- -66dBm@MCS5/13
- -65dBm@MCS6/14
- -64dBm@MCS7/15

HT40

- -79dBm@MCS0/8
- -76dBm@MCS1/9
- -74dBm@MCS2/10
- -71dBm@MCS3/11
- -67dBm@MCS4/12
- -63dBm@MCS5/13
- -62dBm@MCS6/14
- -61dBm@MCS7/15

RF2 5.8GHz 100mW (SMA Compliance Connectors)

Output Power • 20dBm (per chain)

Tolerance

- @-10°C~40°C(per chain $\pm 2dBm$)
- @ 40°C~50°C(per chain $\pm 2dBm$)

11a

- -89dBm@6Mbps
- -88dBm@9Mbps
- -85dBm@12Mbps
- -83dBm@18Mbps
- -80dBm@24Mbps
- -76dBm@36Mbps
- -71dBm@48Mbps
- -68dBm@54Mbps

11an

HT20

- -83dBm@MCS0/8
- -80dBm@MCS1/9
- -78dBm@MCS2/10
- -75dBm@MCS3/11
- -71dBm@MCS4/12
- -67dBm@MCS5/13
- -66dBm@MCS6/14
- -65dBm@MCS7/15

HT40

- -80dBm@MCS0/8
- -77dBm@MCS1/9
- -75dBm@MCS2/10
- -72dBm@MCS3/11
- -68dBm@MCS4/12
- -64dBm@MCS5/13
- -63dBm@MCS6/14
- -62dBm@MCS7/15

General Specification of AHIC ANT Control Board

Chipset Solution	CPLD: 5M240ZT100I5N	
RF Path Design	1 to 4 RF Switch design *2	
Standard compliance	IEEE 802.3u MDI / MDIX 10/100 Base-T Ethernet & IEEE 802.ab 1000 Base-T Ethernet	
Interfaces	<ul style="list-style-type: none"> • 2 RJ45 support 10/100/1000Mbps (For 1*POE In + 1*POE Out) • 1 MINI DIN JACK MDG-06-NS DIP 6PIN Black (For Console) • 1 BOX Header Dual Straight 2x5 2.54mm 180° DIP (For Digital Control) • 1 Header Male 1x4 P=2.0mm 180° White TIN DIP • 2 Header Male 1x2 P=2.54mm 180° Black DIP (Console*1For connect with Main board + 1* External Power Supplier Light) 	
RJ45 port	Support 10/100/1000Mbps	
Restore button	Reset to factory default	
RF Frequency Range	<ul style="list-style-type: none"> • FCC : 2412-2472MHz • CE: 2412-2472MHz • SRRC: 2412-2472MHz 	
RFcharacteristic	RF SW	<ul style="list-style-type: none"> • Isolation>50dB • Insertion Loss<1.5dB
	Disable Diode	<ul style="list-style-type: none"> • Isolation<30dB
	Enable Chain 1 Diode	<ul style="list-style-type: none"> • Insertion Loss<3dB • EVM<0.6%
	Enable Chain 2 Diode	<ul style="list-style-type: none"> • Insertion Loss<6dB • EVM<0.6%
	Enable Chain 3 Diode	<ul style="list-style-type: none"> • Insertion Loss<8dB • EVM<0.6%
	Enable Chain 4 Diode	<ul style="list-style-type: none"> • Insertion Loss<10dB • EVM<0.6%

Physical Specifications

Dimension	242.05mm x247.88mmx145.45mm
Weight	1.7kg (including Ceilling mount/PoE/Powre cord)
Enclosure	IP67

Environmental Specifications

Items Device

Operating Temperature(Max)	-20°C ~ +55°C
Operating Humidity (non-condensing)	10°C to 95% RH
Storage Temperature	-40°C ~ +70°C
Storage Humidity (non-condensing)	10 to 95% RH

Safety/Country Approval

FCC / CE

Type	Certification Number	Spec
FCC	FCC Part 15 Subpart B_2008-07	Class B
CE	EN 301 489-1 : V1.9.2 / EN 301 489-17 : V2 1.1	Class B

CE-ESD

CE	EN 301 489-1 : V1.9.2 / EN 301 489-17 : V2 1.1 EN 61000-4-2	Air : ±2kV, ±4kV, ±8kV, Contact : ±2kV, ±4kV, Criteria : B
-----------	--	--

CE-Surge

CE	EN 301 489-1 : V1.9.2 / EN 301 489-17 : V2 1.1 EN 61000-4-5	Differential Mode: ±2kV Common Mode: ±6kV POE A/B Mode: ±6kV
	ITU-T K.21	Common Mode : ±6KA Single Line : ±1KA

SPECIFICATIONS MAY CHANGE WITHOUT PRIOR NOTICE

Antenna Vertical Polarization

Antenna component Material	PCB
Frequency Band	2.4GHz~2.5GHz
Power Handling	1w (cw)
Impedance	50Ω
VSWR	< 2.0:1
Polarization	Linear
Antenna Peak Gain	7.5dBi
RF Cable	Od 1.37mm * L 200 mm
RF Cable Connector	IPEX (MHF)

Antenna Horizontal Polarization

Antenna Component Material	PCB
Frequency Band	2.4GHz~2.5GHz
Power Handling	1w (cw)
Impedance	50Ω
VSWR	< 2.0:1
Polarization	Linear
Antenna Peak Gain	7.5dBi
RF Cable	Od 1.37mm * L 200 mm
RF Cable Connector	IPEX (MHF)

RX Assistance ANT

Antenna component Material	metal
Frequency Band	2.4GHz~2.5GHz
Power Handling	1w (cw)
Impedance	50Ω
VSWR	< 2.0:1
Polarization	Linear
Antenna Peak Gain	3dBi
RF Cable	Od 1.13mm * L 200 mm
RF Cable Connector	IPEX (MHF)