

**R2 BaseStation
(ZC-3625-52-23) Product
Approval Sheet**



**V 1.0
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1. SUMMARY

1.1. Product

R2 BaseStation Outdoor Wireless Access Point

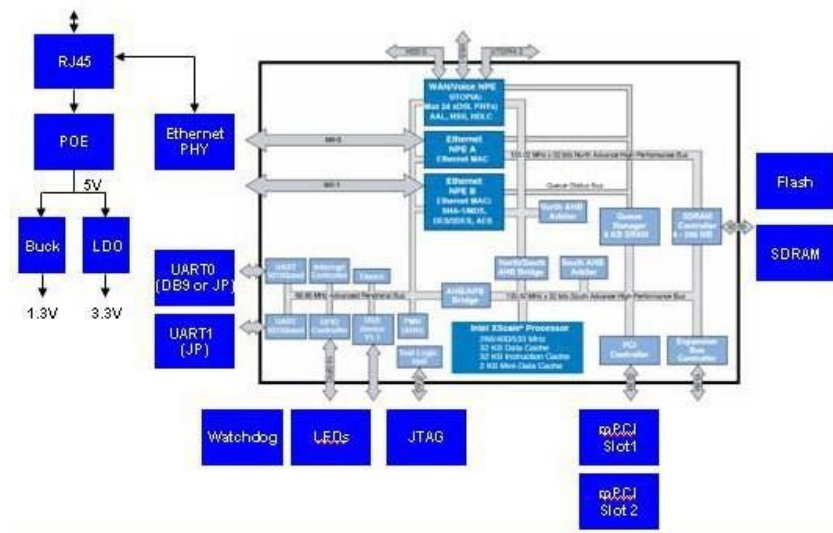
1.2. Product Picture



Picture 1 Product

1.3. System

The block diagram of the system can be shown as below:



Picture 2 Block Diagram



2. SPECIFICATION

2.1. System Specifications

System	
CPU	IXP425 ,533MHz
System Memory	16MB Flash 32MB SDRAM (64MB upgradable)
Power	Power over Ethernet (POE injector output 19.2Watts)
Radio	
RF Module	XA-623AH-A01x1 + XG-623GH-A01x1 (FCC*) , AG-623C-A01*2 (CE**)
Operating Frequency	FCC* : 5G: 5.725~5.850 GHz , 2.4G: 2.412~2.462 CE** : 5G:5.470~5.600 GHz , 5.660~5.725 GHz 2.4G: 2.412~2.472 (Programmable for different country regulations)
RF Modulation	OFDM/BPSK/QPSK/CCK/DQPSK/DBPSK
RF output power (Max. of Avg.)	WLAN0 (5G) : 24dBm at Radio for FCC (Band 4) 30dBm EIRP for ETSI 301 893 (Band3) WLAN1 (2.4G) : 23dBm at Radio for FCC (Band Edge excluded) 18dBm at Radio for ETSI (Band Edge excluded) (Controllable for different country regulations)
Sensitivity	≤-90dBm @6Mbps , ≤-73dBm @54Mbps
Regulation Compliance (Pre-Test only)	FCC Part 15B FCC Part 15C ETSI 301 893 EN301 489-1/17 EN300 328 EN60950
SW and Operational	
Operation Mode	Base Station, CPE, Relay Point to Point, Point to Multiple Point
Security	WEP 64/128, WPA-PSK/WPA2-PSK, WPA/WPA-2
Radio Bandwidth Control	5MHz/10MHz/20MHz/40MHz
Super A/G	Fast frames, Bursting compression
TDM Coordination	Traffic management
Link aggregation	Throughput enhancement
Intel TDMA	For long distance transmission
Distance in Meters	Auto ACK-Time adjustment
Wireless Isolation	YES
Management Statistics	Wireless and Ethernet
Link Test	Self-Wireless connection test
Configuration &	Web-based management(Secure SSL), Command line Interface

Management	(SSH or RS-232 (9600)), Windows-based Utility, SNMPv2
Firmware upgrade	Web/Windows management tool
Physical & Interface	
Ethernet	10/100 BaseT x1 Auto sense, negotiate
RS-232 (COM)	RS-232 (UART) in RJ45 form factor For debug purpose
Buzzer	Signal Indication
Reset Pin	2Pin design in COM port to support reset system to factory default Check below fetailed View of RS-232 port
Enclosure & Environment	
External Antenna connector	N-Type (Crimp Jack)
Enclosure	IP-67 (Die-Casting) Level "7" Waterproof Level "17" Beaufort Scale Vent design Antenna Flexibility
Mounting	Pole Mount (ADC-12 Aluminum alloy)
Operating Temperature	-30 ~ 70 Deg C
PCBA Dimension	160 *135 mm
Weight	2.4kg
Humidity	10~95% , (Operating)
Warranty	12 Months under normal use
Antenna Characteristics	
Gain	23dBi (Default Antenna)
Frequency Range	5400~5850 MHz
HPBW (horizontal)	10 Deg.
HPBW (Vertical)	10 Deg.
Dimension	320x320x27.5mm

2.2. System Safety/Country Approval (In-House Test only)

Item	Country	Description	
Safety	CE	EN60950	
EMI	CE	EN301 893(5G)	
	FCC	FCC part 15 Subpart B&C	
EMS	CE	EN301 489-1/17	
Approval items could be added based on customer requests.			

2.3. RS-232 PIN Define

RS-232 is used to for debug usage as well as for hard reset of the R2 Extender. Below you may find the pin definition of the RS-232.

Pin Assignment	Name	Description
P1	TXD0	UART0, debugging mode
P2	DSR0	UART0, debugging mode
P3	RXD0	UART0, debugging mode
P4	TXD1	UART1, debugging mode
P5	RXD1	UART1, debugging mode
P6	DTR1	UART0, debugging mode
P7	Hard Reset	Hard reset the unit
P8	GND	Grounding

To reset the device, short P7 (Hard Reset) to P8 (GND) less than 1 second and the system will be reset. If shorting P7 (Hard Reset) to P8 (GND) for over 5 seconds, it will be reset to factory default.



Detailed View of RS-232 Port

Below are the views of RS-232 cover and RJ-45 port respectively, please note the label covered on and DO strictly follow the instructions to avoid damaging your equipment!



Warning Label

2.4. Packaging Specification

R2 BaseStation with integrated 23dBi antenna	×1
Mounting Kit	×1
PoE Injector & Power cord	×1
Grounding Wire w/ screw	×1
Water Proof RJ-45 Connector Kit	×1
Quick Installation Guide	×1
Product CD.....	×1

 **Note**

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- Product CD contains Management Tool, Quick Installation Guide and User Manual!
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3. Outline Drawing

