

Wireless 300N Gigabit Gaming Router

ESR9855G

2.4GHz Gigabit

Gigabit Ethernet / Stream Engine

11N 2x2 (300Mbps)

#### PRODUCT DESCRIPTION



ESR9855G is a Media Enhanced 11N Gaming Router. ESR9855G supports home network with superior throughput and performance and unparalleled wireless range (3dBi antenna included). With easy to use on the WPS function, it helps users to connect to wireless device with just one push button. Most importantly, the latest StreamEngine technology guarantees real-time multimedia services.

There's also a built-in 4-port 10/100/1000 Gigabit switch to connect your wired-Ethernet devices together. The Router function ties it all together and lets your whole network shares a high-speed cable or DSL Internet connection.



- Stream Engine Support: media-enhanced user experience
- WISH (WLAN Intelligent Stream Handling): smooth streaming wireless data transfer
- Multiple SSIDs: wireless network sharing management
- Gigabit Switch Ports: perfect for internal file sharing
- WDS AP: cross AP communication
- WPS button: easy one-touch-setup wireless security
- UPnP Support: game console compatible
- Upgradeable Antenna: flexible for extending radio coverage





# Hardware / RF Spec

CPU/MAC/BB	Ubicom IP7K		
RF	Atheros AR9223 (2x2)		
Environmental condition	Operation	Temperature 0~40°C ∕ Humidity 90% or less (Nn-condensing)	
	Storage	Temperature . 10~60°C ∕ Humidity 95% or less (Nn-condensing)	
PCB Dimension	154mm x 119mm		
Antenna Connector	SMA Reverse		
Antenna	3dBi External x 2		
LED	Blue LEDs		

Frequency Band	2.400~2.484 GHz							
Modulation Technology		<ul><li>OFDM: BPSK, QPSK, 16-QAM, 64-QAM</li><li>DBPSK, DQPSK, CCK</li></ul>						
Operating Channels	11 for North	America, 13 for E	urope					
Wireless Setting	<ul><li>Wireless M</li><li>Channel S</li><li>Channel E</li><li>Transmiss</li></ul>	<ul> <li>Operation Mode: AP Router</li> <li>Wireless Mode . 11b/ 11g /11n</li> <li>Channel Selection (Setting varies by Country)</li> <li>Channel Bandwidth (Auto, 20Mhz, 40Mhz)</li> <li>Transmission Rate         <ul> <li>-11g: Best. 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 in Mbps</li> </ul> </li> </ul>						
	MCS index	Guard Interval 800ns		Guard Interval 4	_			
	0	20MHz(Mbps) 6.5	40MHz(Mbps) 13.5	20MHz(Mbps) 7.2	40MHz(Mbps)			
	1	13	27	14.4	30			
	2	19.5	40.5	21.7	45			
	3	26	54	28.9	60			
	4	39	81	43.3	90			
	5	52	108	57.8	120			
	6	58.5	121.5	65	135			
	7	65	135	72.2	157.5			

<sup>\*\*</sup> All specifications are subject to change without notice.





	8	13	27	14.4	30	
	9	26	54	28.9	60	
	10	39	81	43.3	90	
	11	52	108	57.8	120	
	12	78	162	86.7	180	
	13	104	216	115.6	240	
	14	117	243	130	270	
	15	130	270	144.4	300	
Receive Sensitivity (Typical)	2.4G Radio (b/g/n)  IEEE802.11n  MCS0~15 @ optimal -90dBm  IEEE802.11g  6~54Mbps@ optimal -90dBm  IEEE802.11b  1~11Mbps@ optimal -93dBm					
Available transmit power	2.4G Radio (b/g/n) IEEE802.11N MCS 0~15@ up to 18dBm  ■ IEEE802.11g 6~54 Mbps@ up to 18dBm  ■ IEEE802.11b 1~11Mbps@ up to 20dBm					
Regulation Certifications	FCC Part 15, ETSI 300/328/CE					



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## **SOFTWARE FEATURES**

System Status	System Information	Y	System Up Time, Device Name, Wireless MAC, LAN MAC, Country, Current Time, Firmware Version	
	Current IP Setting	Y	IP Address, Subnet Mack, Default Gateway, DHCP	
	Current Wireless Setting	Y	Operation mode, Wireless Mode, Channel/ Frequency, L2 Isolation, MSSID Setting	
Client List	List current associated clients. Show only authorized and associated clients			
System Log	Displays a list of events triggered			

## **Wireless Functional List**

Wireless Radio On/Off button	Υ	Software button / Disable or Enable WiFi radio
	Y	AP
Operation mode		
	Υ	Router
	Υ	WDS
Switch of 802.11 modes	Υ	b/g/n
Channel setting	Υ	Manual
	Υ	Auto / Best Channel Selection
Transfer rate setting	Υ	Auto and Manual
Output Power Control	Υ	High / Medium / Low
WMM	Υ	
Multiple BSSID (Multi AP)	Υ	4 BSSID for 2.4Ghz
	Υ	Each BSSID should has its own WiFi & security settings
WPS	Υ	WPS : Enable / Disable
		Wi-Fi Protected Setup Information
		- WPS Current Status: unConfigured
		- Self Pin Code:
		- SSID:
		- Authentication Mode: Disable
		- Passphrase Key:
		- WPS Via Push Button:
		- WPS via PIN:
Security WEP	Υ	WEP(64/128bit)

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WPA/ WPA2	Υ	WPA-PSK(Personal),WPA2-PSK
		(Personal),WPA/WPA2-PSK(Personal), WPA-EAP
		(Enterprise),
		WPA2-EAP(Enterprise),WPAWPA2-EAP(Enterprise)-
TKIP/ AES	Υ	TKIP / AES
Hidden ESSID	Υ	
MAC address filtering	Υ	MAC address filtering (Both in WLAN and LAN), up to 50 field
L2 Isolation	Υ	
802.1x Authenticator	Υ	MD5/ TLS/ TTLS, PEAP (Nice to Have)

## **Functional List**

LAN Settings		Y	IP (check validity and DHCP server IP range)  MAC	
DHCP server		Υ	DHCP Range, Lease Time, Client list	
Router	NAT/ NA	.PT	Υ	
	Port For	warding	Υ	
	Virtual S Mapping	erver / Port	Y	Virtual Server: every single IP should support more than one service port (UI forbids that)
	Port Trig	ger	Υ	
	WISH		Υ	Wireless Intelligent Stream Handling
	QoS		Υ	StreamEngine
	Filtering	URL	Υ	URL-Keyword blocking, 20 site can be registered
		IP	Υ	IP Filtering with scheduling function
		Port	Υ	TCP / UDP
	Block Pir	ng From WAN	Υ	Enable / Disable option box
	DMZ		Υ	Multiple DMZ records
Dynamic DNS		Υ		
UPNP			Υ	Universal Plug and Play
MAC Clone		Y	Clone WAN port MAC supported / Change in WAN side MAC address	
WAN side PPPoE		Υ	PAP/CHAP/MS-CHAP / MS-CHAPV2	
form			Υ	Always (keep trying if fail)
			Υ	On demand / Manual
			Υ	Idle Time Out(disconnect if idled for a certain time)
	DH	CP Client	Υ	

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PPTP	Υ	PAP/CHAP/MS-CHAP / MS-CHAPV2
	Υ	Always (keep trying if fail)
	Υ	On demand / Manual
	Υ	Idle Time Out(disconnect if idled for a certain time)
Fixed IP	Υ	
	N	User Name
	Υ	Password
	Υ	Confirmed Password
Backup/ Restore Setting		Save Current Setting
		Restore Saved Setting
		Reset to Factory Default
ade	Υ	Firmware Upgrade
Diagnosis		Address to Ping :
		Ping Frequency: 1/3/5/10/15/20
Support	Υ	9216bytes
	Fixed IP  e Setting  ade	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y A A A A



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