

5GHz 3x3 WI-FI ACCESS POINT

**VIDEO DISTRIBUTION OVER WI-FI WITH
CELENO OptimizAir™ TECHNOLOGY**

amino



Successful Wi-Fi distribution of HD video in the home is now possible by combining the Amino STB and 3x3 USB Wi-Fi dongle with a 5GHz Access Point.

5GHz for the best performance

2.4GHz has traditionally been used for Wi-Fi networks however this band is also occupied by many other sources of interference such as microwave ovens, intruder systems and other radio-based communication devices such as home automation. It is also used by others in the home accessing content on PCs, tablets and smart phones. The 5GHz band is more optimized for dedicated video distribution to ensure a robust distribution, as free as possible from either interference or from the load cause by other users accessing the Wi-Fi network.

Use with the Amino 3x3 Wi-Fi dongle

Customer acceptance of Wi-Fi video distribution means a wired-like quality experience. A telco's reputation for a quality TV service means being sure of delivering a high quality Wi-Fi solution. Typical home Wi-Fi routers do not contain any QoS techniques to ensure the robust delivery of HD video streams. Amino can supply a complete solution with the access point designed to partner with the Amino 3x3 dual band Wi-Fi dongle in order to benefit from specialist Wi-Fi distribution techniques from Celeno and ensure high quality streaming of higher bit-rate HD video around the home with extended reach over typical PC oriented routers and clients.

Multi-Client support

The access-point can support multiple STB client devices, allowing for full-home coverage of IPTV services. Typically 4 to 6 HD streams of 6 to 10Mbps should be distributable* (*Overall performance depends on many environmental factors and will vary with location)

Unicast and Multicast support

The access-point supports unicast video distribution for OTT, streaming and VoD services. It also supports multicast configuration with IGMP proxy enable, IGMP SSM and IGMP snooping to reduce the traffic to non-multicast destinations. Remote configuration over TR-069 is also possible.

Celeno OptimizAir™ technology

Celeno OptimizAIR™ technology equipped access points benefit from Celeno's advanced IP in the successful streaming of HD video over Wi-Fi by:

- Real Time Transmit Digital Beam Forming MIMO technology for increased range and coverage.
- One Celeno access point supports multiple clients with unique HD streams.
- Traffic shaping to maximise QoS for IPTV streams
- Advanced Interference detection and fast automatic channel scanning and hopping
- Dynamic Frequency Selection (DFS) support

Configuration

A typical domestic set-up is the 5GHz Access Point connected via Ethernet cable to the existing in-home router. The 2.4GHz router Wi-Fi network is used for existing PCs and non-5GHz compatible products. The set-top boxes equipped with the Amino 3x3 dual band USB Wi-Fi dongle will connect to the 5GHz access point.



SPECIFICATION

SIZE	123mm (D) x 64mm (W) x 175mm (H) 4.84" (D) x 2.52" (W) x 6.89" (H)
FREQUENCY BAND	USA: 5.150-5.250 GHz and 5.725GHz-5.850GHz (Note: DFS bands not available) EU: 5.150GHz-5.250GHz, 5.250-5.350GHz, 5.470-5.725GHz Internal use only
STANDARDS	802.11a, 802.11n (20MHz and 40MHz)
OUTPUT POWER	20dBm +/- 1dB
SECURITY	WEP, WPA Personal, WPA2 Personal
ANTENNA	3 internal antennae
ETHERNET	RJ-45 x 2, 10/100
FRONT PANEL INDICATIONS	Power, WLAN active, LAN 1 or 2 connected
OPERATIONAL TEMPERATURE	0degC to 40degC
SUPPLIED ACCESSORIES	12V 1A external plug-top PSU and 1.5m Ethernet cable
CERTIFICATION	CE and FCC

About Amino Communications

Amino Communications is a leading global IPTV and OTT digital TV innovator, enabling major network operators and service providers to connect their customers to the entertainment experiences they love. Amino combines iconic products, industry-leading software, deep specialist IP technology expertise and partnerships with the foremost ecosystem partners to deliver award-winning solutions to over 850 customers in 85 countries. Founded in 1997 and headquartered in Cambridge, Amino has offices in the US, China and Sweden, and is listed on the London Stock Exchange Alternative Investment Market (AIM symbol: AMO).

About Celeno

Celeno provides high performance Wi-Fi chips and software for HD multimedia and entertainment home networking applications. Celeno's extensive chip portfolio and OptimizAIR™ technology enable the wireless distribution of multiple and simultaneous HD video and data streams throughout the home with the highest levels of performance and reliability while ensuring a superlative quality of service and user experience. Celeno's field-proven chips have been integrated into numerous OEM Wi-Fi devices and have been deployed with over 75 service providers worldwide. Founded in 2005, the company has offices and representatives in EMEA, the US and Asia-Pacific and is backed by international blue chip investors.