Products Comparison

	X14	X35	X45	X45Pro	X50D	X50Pro	N15D	HA500H
Production Status	In production	In production	In production	In production	In production	In production	In production	In production
Basic Concept	All-in-One with compact size Music Server and Streamer CD Ripper(Optional)	All-in-One with full size CD Ripper, Music Server and Streamer	World-Class Hi-Res Music Server, D/A Converter, CD Ripper and Streamer	Flagship Music Server with most advanced DAC chip(ES9038PRO) for Audiophiles	Pure Digital Music Server, CD Ripper and Streamer	Premium Pure Digital Music Server, CD Ripper and Streamer for Audiophiles	USB D/A Converter, Music Storage, Streamer, HiFi Network node for existing Amplifier or DAC	Premium Hybrid Headphone Amplifier, Dual DAC, Pre-Amplifier, USB DAC powered by Vaccum Tubes and Solid State
CPU & Memory	Dual Core ARM Cortex A9, 1.0Ghz Main Memory(1GByte, DDR2 1066Mhz) NAND Flash 8GByte	Dual Core ARM Cortex A9, 1.0Ghz Main Memory(1GByte, DDR2 1066Mhz) NAND Flash 8GByte	Dual Core ARM Cortex A9, 1.0Ghz Main Memory(1GByte, DDR2 1066Mhz) NAND Flash 8GByte	Quad Core ARM Cortex A9, 1.0Ghz Main Memory(1GByte, DDR2 1066Mhz) NAND Flash 8GByte	Dual Core ARM Cortex A9, 1.0Ghz Main Memory(1GByte, DDR2 1066Mhz) NAND Flash 8GByte	Quad Core ARM Cortex A9, 1.0Ghz Main Memory(1GByte, DDR2 1066Mhz) NAND Flash 8GByte	Dual Core ARM Cortex A9, 1.0Ghz Main Memory(1GByte, DDR2 1066Mhz) NAND Flash 8GByte	ARM926EJ-S core DDR2 16MB for internal SPI Flash 16MB
Ripping Function	Yes, but you need to prepare an USB Optical Disk Drive separately	Yes	Yes	Yes	Yes	Yes	No	No
CD Drive Supported Media	Yes CD, CD-DA, CD-R, CD-RW, DVD-R/RW	Yes CD, CD-DA, CD-R, CD-RW, DVD-R/RW	Yes CD, CD-DA, CD-R, CD-RW, DVD-R/RW	Yes CD, CD-DA, CD-R, CD-RW, DVD-R/RW	Yes CD, CD-DA, CD-R, CD-RW, DVD-R/RW	Yes CD, CD-DA, CD-R, CD-RW, DVD-R/RW	No	No
CD Metadata	Gracenote(two years free/ SEURO for additional one year) Freedb with free	Gracenote(two years free/ SEURO for additional one year) Freedb with free	Gracenote(two years free/ SEURO for additional one year) Freedb with free	Gracenote(two years free/ SEURO for additional one year) Freedb with free	Gracenote(two years free/ SEURO for additional one year) Freedb with free	Gracenote(two years free/ SEURO for additional one year) Freedb with free	No	No
Album Cover art	Gracenote, Bing, Google, Amazon, 7Digital, allcdcovers	Gracenote, Bing, Google, Amazon, 7Digital, allcdcovers	Gracenote, Bing, Google, Amazon, 7Digital, allcdcovers	Gracenote, Bing, Google, Amazon, 7Digital, allcdcovers	Gracenote, Bing, Google, Amazon, 7Digital, allcdcovers	Gracenote, Bing, Google, Amazon, 7Digital, allcdcovers	No	No
Display on the front	5 inch Full Color TFT LCD (800 x 480 pixels)	7 inch Full Color TFT LCD (1024 X 600 pixels)	7 inch Full Color TFT LCD (1024 X 600 pixels)	7 inch Full Color TFT LCD (1024 X 600 pixels)	7 inch Full Color TFT LCD (1024 X 600 pixels)	7 inch Full Color TFT LCD (1024 X 600 pixels)	No	5 inch Full Color TFT LCD (800 x 480 pixels)
Interface	Remote Control, Key & Jog GUI with 4.3 inch LCD WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices	Remote Control, Key & Jog GUI with 7 inch LCD WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices	Remote Control, Key & Jog GUI with 7 inch LCD WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices	Remote Control, Key & Jog GUI with 7 inch LCD WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices	Remote Control, Key & Jog GUI with 7 inch LCD WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices	Remote Control, Key & Jog GUI with 7 inch LCD WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices	WebInterface for Internet Explorer, FireFox, Chrome, Safari Customized App, MusicX for Android and iOS devices	Remote Control GUI with 5 inch LCD Key & Jog
Supported Sample Rate	PCM 32bit/384Khz DXD 24bit/352.8Khz DSD64(2.8224Mhz) DSD128(5.6448Mhz) MQA	PCM 32bit/384Khz DXD 24bit/352.8Khz DSD64(2.8224Mhz) DSD128(5.6448Mhz) DSD256(11.2896Mhz) MQA	PCM 32bit/384Khz DXD 24bit/352.8Khz DSD64(2.8224Mhz) DSD128(5.6448Mhz) DSD256(11.2896Mhz) MQA	up to PCM 32bit/768Khz DXD 24bit/352.8Khz DSD64(2.8224Mhz) DSD128(5.6448Mhz) DSD256(11.2896Mhz) DSD512(22.5792Mhz), MQA	PCM 32bit/384Khz DXD 24bit/352.8Khz DSD64(2.8224Mhz) DSD128(5.6448Mhz) DSD256(11.2896Mhz) MQA	PCM 32bit/384Khz DXD 24bit/352.8Khz DSD64(2.8224Mhz) DSD128(5.6448Mhz) DSD256(11.2896Mhz) MQA	PCM 32bit/384Khz DXD 24bit/352.8Khz DSD64(2.8224Mhz) DSD128(5.6448Mhz) DSD256(11.2896Mhz) MQA	PCM 32bit/384Khz DXD 24bit/352.8Khz DSD64(2.8224Mhz) DSD128(5.6448Mhz) DSD256(11.2896Mhz) MQA
DA Converter	Cirrus Logic CS4351 up to 24bit/192Khz	ESS ES9018K2M, Sabre^{32} DAC up to 32bit/384Khz	Dual ESS ES9018K2M, Sabre^{32} DAC for left and right / up to 32bit/384Khz	SABRE PRO Flagship ES9038PRO DAC chip supporting up to PCM 768Khz/32bit	No	No	ESS ES9018K2M, Sabre^{32} DAC up to 32bit/384Khz	Dual ESS ES9018K2M, Sabre^{32} DAC for left and right / up to 32bit/384Khz
Oscillator	Clock Oscillator	TCXO	TCXO	TCXO	TCXO	Ultra-low phase noise Oscillator CCHD-575 from Crystek Corporation	Clock Oscillator	TCXO
Encoder for Knob	Incremental(mechanical) type	Incremental(mechanical) type	Incremental(mechanical) type	High Quality Optical Encoder from Grayhill	Incremental(mechanical) type	High Quality Optical Encoder from Grayhill	Incremental(mechanical) type	Incremental(mechanical) type
Speaker Out (Amplifier)	TI TAS5715 30W + 30W @ 1Khz, 8ohm, 1% THD	Dual Digital Amplifiers built-in 100W + 100W @ 1Khz, 8ohm, 0.1% THD	No	No	No	No	No	No
Headphone Out	3.5mm Jack on the front 150mW+150mW@1Khz, 16ohm, 0.1% THD	6.35mm Jack on the front 100mW+100mW@1Khz, 600ohm, 0.1% THD	6.35mm Jack on the front 100mW+100mW@1Khz, 600ohm, 0.1% THD	6.35mm Jack on the front 100mW+100mW@1Khz, 600ohm, 0.006% THD	No	No	6.35mm Jack on the front 80mW+80mW@1Khz, 32ohm, 0.1% THD	Balanced(XLR) and Unbalanced Headphone Out available (** Refer to HA500H spec sheet for detailed information)
Analog Out	PRE-OUT(L/R RCA) Dynamic Range: 109dB(Max 2Vrms, Stereo) THD+N: 0.001% Volume Variable/Fixed optional	Pre-Out(L/R RCA) Dynamic Range: -120dB THD+N(Max 2Vrms, Stereo), 127dB DNR Volume Variable/Fixed optional	Balanced(Pre-Out) XLR, Dynamic Range: -120dB THD+N(Max 4.5Vrms, Stereo), 127dB DNR Unbalanced(Pre-Out) RCA/LR, Dynamic Range: -120dB THD+N(Max 2Vrms, Stereo), 127dB DNR Volume Variable/Fixed optional	Balanced(Pre-Out) XLR, Dynamic Range: 137dB(Max 6.5Vrms, Stereo) THD+N: 0.0003% Unbalanced(Pre-Out) RCA/LR, Dynamic Range: 137dB(Max 2Vrms, Stereo) THD+N: 0.0003% Volume Variable/Fixed optional	No	No	Unbalanced(Pre-Out) RCA/LR, Dynamic Range: -120dB THD+N(Max 2Vrms, Stereo), 127dB DNR Volume Variable/Fixed optional	Balanced(Pre-Out) XLR, Dynamic Range: 130dB(Max 4Vrms/8Vrms, Stereo) THD+N:0.0004% Unbalanced(Pre-Out) RCA/LR, Dynamic Range: 130dB (Max 2Vrms/4Vrms, Stereo), THD+N:0.0004%
Digital Out	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz Volume Variable/Fixed optional	Coaxial x 1(75ohm RCA): 24bit/192Khz Toslink x 1: 24bit/192Khz AES/EBU XLR 110ohm x 1: 24bit/192Khz USB Audio x 1: USB Audio Class2.0 HDMI Out x 1: HDMI Audio Out(* Shared with HDMI Out for external screen)	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz AES/EBU XLR 110ohm x 1: 24bit/192Khz (Volume Variable/Fixed optional) USB Audio Out x 1: USB Audio Class 2.0	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz AES/EBU XLR 110ohm x 1: 24bit/192Khz (Volume Variable/Fixed optional) USB Audio Out x 1: USB Audio Class 2.0	Toslink x 1: 24bit/192Khz Coaxial x 2(75ohm RCA): 24bit/192Khz AES/EBU XLR 110ohm x 1: 24bit/192Khz USB Audio Class 2.0 Out x 1: up to DSD256(DSD Native) I²S(RJ45) x 1: up to DSD256(DSD Native) I²S(HDMI) x 1: up to DSD256(DSD Native) Word Clock x 1: up to 192Khz	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz AES/EBU XLR 110ohm x 1: 24bit/192Khz USB Audio Class 2.0 Out x 1: up to DSD256(DSD Native) I²S(RJ45) x 1: up to DSD256(DSD Native) I²S(HDMI) x 2: up to DSD256(DSD Native) Word Clock x 1: up to 192Khz	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz	No
Bluetooth	Yes(Bluetooth Receiver) aptX support	No	No	No	No	No	No	
12V Trigger	No	No	Yes(Max 200mA, 12V Trigger Out)	Yes(Max 200mA, 12V Trigger Out)	Yes(In - Max 12V)/(Out - Max 200mA, 12V	Yes(In - Max 12V)/(Out - Max 200mA, 12V	No	No
Analog In	L, R RCA, default 2Vrms (controllable 1~4Vrms) 24bit/96Khz	Line In x 1: L, R RCA, default 2Vrms (controllable 1~4Vrms) AUX In x 1: 3.5mm Jack, default 1Vrms (controllable 0.5~2Vrms)	Line In x 1: L, R RCA 2Vrms 24bit/192Khz AUX In x 1: 3.5mm Jack, 800mVrms	Line In x 1: L, R RCA 2Vrms 24bit/192Khz AUX In x 1: 3.5mm Jack, 800mVrms	No	No	No	No
Phono In	No	Phono In x 1: MM Input default 7.5mVrms (controllable 3.75~15mVrms)	Yes(Phono Input, MM, default 7.5mVrms, L/R RCA) (Controllable 3.75 ~ 15mVrms)	Yes(Phono Input, MM, default 7.5mVrms, L/R RCA) (Controllable 3.75 ~ 15mVrms)	No	No	No	No
Digital In	No	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz AES/EBU/XLR x 1: 24bit/192Khz	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz AES/EBU XLR x 1: 24bit/192Khz	Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz AES/EBU XLR x 1: 24bit/192Khz	* X50 : No * X50D : Yes (Toslink / Coaxial)	Yes(Toslink / Coaxial)		Toslink x 1: 24bit/192Khz Coaxial x 1(75ohm RCA): 24bit/192Khz AES/EBU XLR x 1: 24bit/192Khz I²S HDMI x 1: Native DSD256, MQA, 32Bit/384Khz
USB Audio Input (USB DAC)	No	No	USB B type connector, USB Audio Class 2.0 input (support up to PCM 384Khz/32Bit, DSD Native 256, MQA)	USB B type connector, USB Audio Class 2.0 input (support up to PCM 768Khz/32Bit, DSD Native 512, MQA)	No	No	USB Audio Class 2.0 Input(type B)	USB B type connector, USB Audio Class 2.0 input (support up to PCM 384Khz/32Bit, DSD Native 256, MQA)
DAB+ Tuner	No	DAB/DAB+, Full Band III frequency range (174~240Mhz), MP2 audio 32 to 384Kbps, AAC+(HE AAC v2 according to ETSI TS 102 653)	DAB/DAB+, Full Band III frequency range (174~240Mhz), MP2 audio 32 to 384Kbps, AAC+(HE AAC v2 according to ETSI TS 102 653)	DAB/DAB+, Full Band III frequency range (174~240Mhz), MP2 audio 32 to 384Kbps, AAC+(HE AAC v2 according to ETSI TS 102 653)	DAB/DAB+, Full Band III frequency range (174~240Mhz), MP2 audio 32 to 384Kbps, AAC+(HE AAC v2 according to ETSI TS 102 653)	DAB/DAB+, Full Band III frequency range (174~240Mhz), MP2 audio 32 to 384Kbps, AAC+(HE AAC v2 according to ETSI TS 102 653)	No	No
FM Radio Tuner	No	FM Radio RDS Tuning Range(FM 87.5~ 108Mhz) FM Antenna input Impedance: 75ohm unbalance	FM Radio RDS Tuning Range(FM 87.5~ 108Mhz) FM Antenna input Impedance: 75ohm unbalance	FM Radio RDS Tuning Range(FM 87.5~ 108Mhz) FM Antenna input Impedance: 75ohm unbalance	FM Radio RDS Tuning Range(FM 87.5~ 108Mhz) FM Antenna input Impedance: 75ohm unbalance	FM Radio RDS Tuning Range(FM 87.5~ 108Mhz) FM Antenna input Impedance: 75ohm unbalance	No	No
Connectivity	3.0 USB Host Port(5V1A) x 2 2.0 USB Host Port(5V/1A) x 1 Giga Fast Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle	3.0 USB Host Port(5V1A) x 2 2.0 USB Host Port(5V/1A) x 1 Giga Fast Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle HDMI Out for external screen	3.0 USB Host Port(5V1A) x 2 2.0 USB Host Port(5V/1A) x 1 Giga Fast Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle HDMI Out for external screen	3.0 USB Host Port(5V1A) x 2 2.0 USB Host Port(5V/1A) x 1 Giga Fast Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle HDMI Out for external screen	3.0 USB Host Port(5V1A) x 2 2.0 USB Host Port(5V/1A) x 1 Giga Fast Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle HDMI Out for external screen	3.0 USB Host Port(5V1A) x 2 2.0 USB Host Port(5V/1A) x 1 Giga Fast Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle HDMI Out for external screen	3.0 USB Host Port(5V1A) x 2 at rear 2.0 USB Host Port(5V/1A) x 1 at front Giga Fast Ethernet LAN(10/100/1000Mbps) Optional: 801.11b/g/n WiFi USB Dongle	N/A
Supported Storage	SSD(2.5" SATA) 2.5" SATA Hard Disk 3.5" SATA Hard Disk Maximum capacity: up to 8TB Supported file system: NTFS or Linux	SSD(2.5" SATA) 2.5" SATA Hard Disk 3.5" SATA Hard Disk Maximum capacity: up to 8TB Supported file system: NTFS or Linux	SSD(2.5" SATA) 2.5" SATA Hard Disk 3.5" SATA Hard Disk Maximum capacity: up to 8TB Supported file system: NTFS or Linux	SSD(2.5" SATA) 2.5" SATA Hard Disk 3.5" SATA Hard Disk Maximum capacity: up to 8TB Supported file system: NTFS or Linux	SSD(2.5" SATA) 2.5" SATA Hard Disk 3.5" SATA Hard Disk Maximum capacity: up to 8TB x 2 (16TB) Supported file system: NTFS or Linux	SSD(2.5" SATA) 2.5" SATA Hard Disk 3.5" SATA Hard Disk Maximum capacity: up to 8TB x 2 (16TB) Supported file system: NTFS or Linux	SSD(2.5" SATA) 2.5" SATA Hard Disk Maximum capacity: up to 2TB Supported file system: NTFS or Linux	N/A
Raid System	No	No	No	No	Yes(HDD deck X 2)	Yes(HDD deck X 2)	No	N/A
MQA Playback	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Codec & Format supported	DSD(64/128) DFF/DSF, MQA up to PCM 24bit/192Khz APE/CUE HD FLAC(24I/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, CAF AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	DSD(64/128/256) DFF/DSF, MQA up to PCM 32bit/384Khz APE/CUE HD FLAC(24I/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	DSD(64/128/256) DFF/DSF, MQA up to PCM 32bit/384Khz APE/CUE HD FLAC(24I/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	DSD(64/128/256) DFF/DSF, MQA up to PCM 32bit/768Khz APE/CUE HD FLAC(24I/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	DSD(64/128/256) DFF/DSF, MQA up to PCM 32bit/384Khz APE/CUE HD FLAC(24I/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	DSD(64/128/256) DFF/DSF, MQA up to PCM 32bit/384Khz APE/CUE HD FLAC(24I/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	DSD(64/128/256) DFF/DSF up to PCM 32bit/384Khz APE/CUE HD FLAC(24I/192Khz) HD WAV(24bit/192Khz) DXD, FLAC, WAV, ALAC, AIFF, AIF, AAC, M4A, MP3, WMA, Ogg, PCM, Playlist(M3U, PLS)	DSD(64/128/256) DFF/DSF up to DSD Native 256 up to PCM 32bit/384Khz
Network Protocols supported	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server	DLNA(UPnP) Server/Client/Media Renderer, Samba Server/Client. FTP Server, Web Server	N/A
Internet Radio & Podcast	Internet Radio from Airable Podcast from Airable	Internet Radio from Airable Podcast from Airable	Internet Radio from Airable Podcast from Airable	Internet Radio from Airable Podcast from Airable	Internet Radio from Airable Podcast from Airable	Internet Radio from Airable Podcast from Airable	Internet Radio from Airable Podcast from Airable	N/A
Recording function	Yes(for Analog In, Internet Radio) 48/96/192Khz, 24bit	Yes(for Analog In, Digital In, FM/Radio) 48/96/192Khz, 24bit	Yes(for iRadio, FM Radio, DAB+) 48/96/192Khz, 24bit	Yes(for iRadio, FM Radio, DAB+) 48/96/192Khz, 24bit	Yes(for iRadio, FM Radio, DAB+) 48/96/192Khz, 24bit	Yes(for iRadio, FM Radio, DAB+) 48/96/192Khz, 24bit	Yes(for iRadio) 48/96/192Khz, 24bit	N/A
CD Burning function	Yes(Optional, you need to prepare an external USB Disk Drive)	Yes(Audio CD Burning)	Yes(Audio CD Burning)	Yes(Audio CD Burning)	Yes(Audio CD Burning)	Yes(Audio CD Burning)	No	N/A
Streaming playback from NAS	Yes DSD64/128 and up to PCM 24bit/192Khz DXD(24bit/352.8Khz)	Yes up to 32bit/384Khz and DSD256(11.2896Mhz)	Yes up to 32bit/384Khz and DSD256(11.2896Mhz)	Yes up to 32bit/384Khz and DSD256(11.2896Mhz)	Yes up to 32bit/384Khz and DSD256(11.2896Mhz)	Yes up to 32bit/384Khz and DSD256(11.2896Mhz)	Yes up to 32bit/384Khz and DSD256(11.2896Mhz)	N/A
Airplay	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Online Music Services	Spotify Connect, TIDAL, Deezer, Qobuz, Napster, Highresaudio, Amazon Music	Spotify Connect, TIDAL, Deezer, Qobuz, Napster, Highresaudio, Amazon Music	Spotify Connect, TIDAL, Deezer, Qobuz, Napster, Highresaudio, Amazon Music	Spotify Connect, TIDAL, Deezer, Qobuz, Napster, Highresaudio, Amazon Music	Spotify Connect, TIDAL, Deezer, Qobuz, Napster, Highresaudio, Amazon Music	Spotify Connect, TIDAL, Deezer, Qobuz, Napster, Highresaudio, Amazon Music	Spotify Connect, TIDAL, Deezer, Qobuz, Napster, Highresaudio, Amazon Music	N/A
Roon support	Yes(Roon Ready)	Yes(Roon Ready)	Yes(Roon Ready)	Yes(Roon Ready)	Yes(Roon Ready)	Yes(Roon Ready)	Yes(Roon Ready)	N/A
Cooling Method	Fanless Passive Cooling System	Fanless Passive Cooling System	Fanless Passive Cooling System	Fanless Passive Cooling System	Fanless Passive Cooling System	Fanless Passive Cooling System	Fanless Passive Cooling System	Fanless Passive Cooling System
Power Source	AC/DC Power Adapter Input: 100 - 240Vac, 50/60Hz(free voltage) Output: 24V/3.5A	Isolated Power Source ciruit design Toroidal Transformer for Analoq Switch Mode Power Supply for Digital AC220V-240V, 50/60Hz for Europe AC110V-120V, 50/60Hz for North America, Japan and Taiwan	Isolated Power Source ciruit design Toroidal Transformer for Analoq Switch Mode Power Supply for Digital AC220V-240V, 50/60Hz or AC110V-120V, 50/60H Toroidal & SMPS are shielded to minimize electrical noise	Isolated Power Source ciruit design Toroidal Transformer for Analoq Switch Mode Power Supply for Digital AC220V-240V, 50/60Hz or AC110V-120V, 50/60H Toroidal & SMPS are shielded to minimize electrical noise	Switch Mode Power Supply for Digital 100 - 240Vac, 50/60Hz Free Voltage	Switch Mode Power Supply for Digital 100 - 240Vac, 50/60Hz Free Voltage with extensively shielded aluminum	Isolated Power Source ciruit design Linear Power Supply for Analoq Switch Mode Power Supply for Digital AC220V-240V, 50/60Hz for 220V AC110V-120V, 50/60Hz for 110V	Isolated Power Source ciruit design Toroidal Transformer for Analoq Switch Mode Power Supply for Digital AC110V - 120V~ / 220-240V~, 50/60Hz Auto-sensinq
Housinq	Plastic injection Rear: Pressinq with steel	Front: Aluminum(12mm thickness) Top/side/rear: Pressinq with steel	Front: Aluminum(12mm thickness) Top/side/rear: Pressing with steel	Whole aluminum with beautiful qlass-sandinq finish, fabricated by precision CNC machine	Whole aluminum casinq Front: 12mm thickness Top/side: full aluminum by CNC cutting	Whole aluminum with beautiful qlass-sandinq finish, fabricated by precision CNC machine	Whole aluminum casinq Front: 8mm thickness full aluminum by CNC cutting	High quality and beautiful qlass-sandinq aluminum crafted by CNC * Rear & Bottom made of high quality steel
Dimension	180(W) x 100(H) x 150mm(D) without foot	441(W) x 330(D) x 100mm(H) without foot	435(W) x 325(D) x 88mm(H) without foot	440(W) x 329(D) x 118mm(H) without foot	442(W) x 330(D) x 110mm(H) with foot	440(W) x 329(D) x 130mm(H) with foot	180(W) x 180(D) x 45mm(H) without foot	270(W) x 333(D) x 85mm(H) without foot
Others								
	X14	X35	X45	X45Pro	X50/X50D	X50Pro	N15D	HA500H