

SD2140

Network Power Amplifier

Product Datasheet



The ZYCOO SD2140 Network Power Amplifier is designed for commercial audio applications, utilizing advanced Class-D technology to deliver crystal-clear sound and exceptional reliability.

The SD2140 provides 2 x 140W or 1 x 280W (bridged) outputs, supporting constant voltage and constant impedance configurations. It features balanced/unbalanced line, Bluetooth, and network inputs, with seamless compatibility with SIP, Dante, and ONVIF—all without the need for additional modules, providing a feature-rich solution.

The SD2140 is also equipped with a real-time adjustable mixer, an equalizer, and supports scheduled playback using USB storage devices.

Features

- Audio outputs include
 - SE Mode:
 - @100V -----2x140W
 - @25V -----2x140W
 - @4Ω(Min) -----2x140W
 - BTL Mode:
 - @100V Bridge -----1x280W
 - @70V Bridge ----- 1x280W
 - @25V Bridge ----- 1x280W
 - @8Ω(Min) Bridge -----1x280W
- Audio inputs include
 - 2ch analogue audio input (balanced & unbalanced)
 - Bluetooth audio input
 - Network audio input
- 0.05% THD+N(@ 1 kHz)
- Robust power protection
- Easily pair with your smartphone via BT to play audio directly from your device seamlessly
- Store custom audio files directly on a USB device
- Schedule audio file and playlist playback with the Event Scheduler feature
- Customizable equalizer settings for individual channels
- Adjust input and output volumes in real time using the Mixer
- Configure and control via web GUI
- Standard SIP protocol supported, integrable with ZYCOO IP Audio Center or third-party SIP servers, such as IP-PBX systems

- Three SIP account lines supported
- Play background music, emergency alarms, and more to the connected analog speakers when integrated with the ZYCOO IP Audio Center
- Multicast and P2P supported
- ONVIF compatible
- Dante compatible without additional modules
- Provides flexible API functionality

Applications

- Schools
- Health Care
- Shopping Centers
- Train/Bus Stations
- Government Offices
- Indoor Car Parks
- Residential Buildings
- Retail Shops
- Airports
- Office Buildings
- Warehouses
- Hotels

Specifications

General	
Amplifier Topology	Class-D
Frequency Response	20Hz ~ 20KHz $\pm$ 0.25dB
THD+N(@1kHz)	0.05%
SNR	85dB
Audio	
Audio Output Connectors	1 x 4-Pin Phoenix Connector
Audio Output Power	SE(Single Ended): @ 100V 2 x 140W @ 25V 2 x 140W @ 4 Ω (Min) 2 x 140W
	BTL(Bridge Tied Load): @ 100V Bridge 1 x 280W @ 70V Bridge 1 x 280W @ 25V Bridge 1 x 280W @ 8 Ω (Min) Bridge 1 x 280W
Rated Load Impedance (Min/Ch)	4 Ω (SE) / 8 Ω (BTL)
Audio Input Connectors	Balanced: 2 x 3-Pin Phoenix Connectors
	Unbalanced: 2 x RCA Jacks
	Bluetooth: 1 x IPX1 External 2.4G Antenna(BT 5.3 Compatible)
	Network: 1 x RJ45 Connector
Audio Input Amplitude Range	0.1Vrms ~ 2Vrms
SIP Audio Codecs	G.722, G.711 A-law, G.711 U-law, Opus
SIP Audio Stream	MP3 Sampling Rate 8–48KHz, Bit Rate 64–320kbps, Mono or Stereo
AC Power	
Power Input Voltage	100 ~ 240VAC 50/60Hz
Power Input Current	3A

Network	
Network	10/100Mbps Adaptive
Network Protocols	SIP(RFC3261), HTTP, TCP/IP, SSL, DNS, SNTP, NTP, RTSP,PTP, RTP, RTCP, TCP, UDP, MQTT, ICMP, DHCP, ARP, SSH
Dante	Supported
ONVIF	Supported
Interface	
USB	USB 2.0
Dry Contact Output Connectors (Reserved)	1 x 3-Pin Phoenix Connector
Switch Input Connectors (Reserved)	1 x 2-Pin Phoenix Connector
Physical	
Chassis	Metal, Black, 1U Standard Chassis
Weight	2.75kg
Dimensions	17.32" x 6.69" x 1.73" (440mm x 170mm x 44mm)
Environmental	
Operating Temperature	-20°C ~ 70°C (-4°F ~ 158°F)
Storage Temperature	-40°C ~ 70°C (-40°F ~ 158°F)
Approvals	
General	FCC SDOC (Part 15B), CE (EN 55032: 2015+A11: 2020, EN 55035: 2017+A11: 2020, EN IEC 61000-3-2: 2019+A1: 2021, EN IEC 61000-3-3: 2013+A1: 2019+A2: 2021, ETSI EN 301 489-1 V2.2.3 (2019-11), ETSI EN 301 489-17 V3.3.1 (2024-09), ETSI EN 300 328 V2.2.2 (2019-07), EN IEC 62368-1: 2020+A11: 2020)