CloudPower CP354

4 x 350W amplifier
with DSP and remote control

DATASHEET

Apex CloudPower CP354 professional amplifiers feature built-in DSP and and secure, remote control over the cloud.

Connect the amplifier easily to the WebUI on any HTML5 capable browser (MAC, PC, IOS, Android) with the built-in WiFi hotspot, or to a local area network via cat5 cable.

Multiple amplifiers can be controlled through the same WebUI using the trusted and comprehensive workflow of our IntelliWare software package.

Log in to Apex Cloud and remotely manage your amplifiers from your office. Save time and money by monitoring performance and adjusting functions without the need for a site visit.

Featuring high-end studio-grade analogue circuit designs, the Apex CloudPower series sets a new benchmark in powered system management and speaker processing design. The proprietary Class-D amplifier control loop features GlidePath direct drive technology and exceptionally low intermodulation figures resulting in wide stereo imaging.

Whether the application is a standalone system amplifier, or a comprehensive networked system with multiple amplifiers, the Apex CloudPower series is designed to provide the solution that our clients demand. With comprehensive loudspeaker preset capability, implementing CloudPower into your system couldn't be easier.

FEATURES

- Remote management over Apex Cloud
- All models can directly-drive low impedance or 70/100v loudspeakers
- High-efficiency, low idle power
- WebUI with built-in Wi-Fi Hotspot.
- Daylight viewable colour OLED display
- 4-channel platform
- 350 Watts per channel
- Optional 4-input digital network card
- Unique internal streaming source supporting Spotify and Airplay

SPECIFICATIONS

Operating conditions	
Temperature	0° to 50° C, 10 to 60 % non-condensing
Storage temperature	-20° to 70° C
Safety / Compliance	CB Cerificate

Amplification and power supply	
Amplification class	Class D Glide Path technology
Power supply model	Universal switch mode power supplies with active PFC
Power Factor	> 0,9 above 1/2 P
Mains Rating	100-240V @ 50-60 Hz
Operating Voltage	90-260V
AC Mains connector	IEC C20 Inlet (20 A max) , CP1504 -3004 Powercon 32A

Audio Specifications	
Frequency response	1Hz-22kHz
Distortion THD+N	0,05% @ P/2 , 20Hz- 20 kHz, 22 kHz BW
Noise level (20 Hz - 20 kHz 8 ohm, A-weighted)	
Latency	
Phase response	±10 deg 20hz - 20kHz

DSP	
Digital Signal Processor	64 bit fix point
I/O Routing	Flexible Routing matrix

User processing functions per channel	
Gain:	-80 to +15dB, 0,1dB steps
Polarity:	normal / inverted
Delay:	0 to 250 ms (Shared between User and Group settings)
PEQ:	12 x PEQ. Each PEQ can be set to a choice of 16 filter types (1)
HP/LP filters:	Bessel , Butterworth and Linkwitz Riley with slopes from 6 to 48 dB/oct
Limiter:	Peak voltage, RMS voltage

Group processing functions	
Six global processing groups overlays which can link any amplifier channel in the network	
Gain:	-80 to +15dB, 0,1dB steps
Polarity:	normal / inverted
Delay:	0 to 250 ms (Shared between User and Group settings)
PEQ:	12 x PEQ. Each PEQ can be set to a choice of 16 filter types (1)

Speaker processing functions	
Gain:	-80 to +15dB, 0,1dB steps
Polarity:	normal / inverted
Delay:	0 to 250 ms (Shared between User and Group settings)
PEQ:	12 x PEQ. Each PEQ can be set to a choice of 16 filter types (1)
HP/LP filters:	Bessel , Butterworth and Linkwitz Riley with slopes from 6 to 48 dB/oct
Limiter:	Peak voltage, RMS voltage
FIR filters:	1024 taps per channel
(1) Filter types:	
	Bell-Sym,Bell-Asym, Notch, Low-Shelf 6dB or12dB, High-Shelf 6dB or 12dB
	All-Pass 90° or 180°, High-Pass 6dB, or 12dB, High-Pass VariQ 12dB,
	Low-Pass 6dB or 12dB, Low-Pass Vari-Q 12dB, Band-Pass

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Circuits protection

Mains and power supply	Under, over voltage, over current protection
Power outputs	DC, Overtemp, Overcurrent limiter, VHF
Load monitoring	Realtime load monitoring and internal pilot tone
Cooling	Cooling fans with temperature control speed

Inputs

Analog	4 balanced analog line inputs 4x 3-pin Phoenix
A/D conversion	32 bit
Input impedance	10 kOhm
Max. input level	21 dBu
Digital	Optional digital network card (DANTE or AVB Milan)
Internal Streaming source	Two channels internal streaming source supporting Spotify en Airplay

Remote control and monitoring

Network connection	Single port Ethernet Gigabit interface
Apex remote control software	CloudWare

Front panel indicators

Daylight viewable colour OLED display	Real time level , limit and fault indicators

CP354

Total burst power (all channels driven)	1400
2 ohms	350
4 ohms	350
8 ohms	350
16 ohms	250
Hi-Z 70V	280
Hi-Z 100V	140

Max Output Power bridged mode

4 ohms	700
8 ohms	700
16 ohms	700

Power and Thermal 115 V

Idle Power	30W
Idle Current Draw	0.3A
Idle Thermal loss	102 BTU/h
1/8 Power @ 4 Ohm Power	185W
1/8 Power @ 4 Ohm Current Draw	1.6A
1/8 Power @ 4 Ohm Thermal loss	341 BTU/h

Power and Thermal 230V

Idle Power	30W
Idle Current Draw	0.15A
Idle Thermal loss	102 BTU/h
1/8 Power @ 4 Ohm Power	185W
1/8 Power @ 4 Ohm Current Draw	0.8A
1/8 Power @ 4 Ohm Thermal loss	320 BTU/h

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CP354	
Unit Dimensions	483 x 44.5 x 358 mm
Shipping Dimensions	560 x 120 x 560 mm
Unit Weight	5 kg - 11 Lbs
Shipping weight	6,5 Kg - 14,5 Lbs