CloudPower Series Datasheet

APEX CloudPower installation amplifiers feature built-in DSP and secure, remote control over the cloud. CloudPower can be remotely controlled and monitored from any device running the IntelliCloud WebUI*, via the amplifier's built-in WiFi hotspot. Local area network control via cat5 cable is also available. IntelliCloud is comprehensive yet straightforward, allowing multiple CloudPower units to be comfortably monitored and adjusted without the cost and inconvenience of a site visit.

CloudPower features an internal streaming source, enabling playback from Spotify and AirPlay direct from a mobile device, reducing the need for additional hardware. Comprehensive loudspeaker preset capability makes it quick and easy to integrate CloudPower into a system.

CloudPower is founded on proprietary GlidePath architecture, with DSP and amplifier circuits fully integrated for outstanding performance. GlidePath employs DC coupling throughout the signal path, dramatically reducing the time offsets and distortion associated with AC coupling. The result: crisper, punchier bass, and brighter, more natural high frequencies, delivering superb intelligibility and higher perceived volume.

Whether deployed standalone or with multiple units in a comprehensive networked system, CloudPower offers a powerful, elegant solution for venues scaling from bars and hotels to auditoriums and stadiums.

* Requires an HTML5 compatible browser - Mac, iOS, Windows, Android.

FEATURES

- Remote management over the cloud
- Directly-drive low impedance or 70/100v loudspeakers
- High-efficiency, low idle power
- IntelliCloud WebUI with built-in Wi-Fi hotspot
- Daylight viewable colour OLED display
- 4-channel platform
- 350, 750, 1500, 3000 WPC options
- Optional 4-input digital network card
- Unique internal streaming source supporting Spotify and AirPlay
- Source mixer

SPECIFICATIONS

Operating conditions	
Temperature	0° to 50° C, 10 to 60 % non-condensing
Storage temperature	-20° to 70° C
Safety / Compliance	CB Certificate
Amplification and power supply	
Amplification class	Class D GlidePath 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)	< 100 mV
Latency	1 mS
Phase response	±10 deg 3 Hz - 20 kHz
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 group 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:	768 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

Circuits protection	
Mains and power supply	Under, over voltage, over current protection
Power outputs	DC, Overtemp, Overcurrent limiter, VHF
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
Internal Streaming source	Two channel internal streaming source supporting Spotify and AirPlay
Remote control and monitoring	
Network connection	Single port Ethernet Gigabit interface
Apex remote control software	IntelliCloud
Front panel indicators	
Daylight viewable colour OLED display	Real time level , limit and fault indicators

Amplifier model	CP354	CP704	CP1504	CP3004
Total burst power (all channels driven)	1400	2800	6000	12000
2 ohms	350	700	1500	3000
4 ohms	350	700	1500	3000
8 ohms	350	500	1500	2000
16 ohms	250	250	1000	1000
Hi-Z 70V	280	280	1500	1500
Hi-Z 100V	140	140	1500	2500
Max Output Power bridged mode				
4 ohms	700	1400	NA	NA
8 ohms	700	1400	NA	NA
16 ohms	700	1000	NA	NA
Power and Thermal 115V				
Idle Power	30W	30W	60W	120W
Idle Current Draw	0.3A	0.3A	0.6A	1.2A
Idle Thermal loss	102 BTU/h	102 BTU/h	204 BTU/h	408 BTU/h
1/8 Power @ 4 Ohm Power	185W	375W	800W	1600W
1/8 Power @ 4 Ohm Current Draw	1.6A	3.3A	7A	14A
1/8 Power @ 4 Ohm Thermal loss	341 BTU/h	682 BTU/h	1364 BTU/h	2729 BTU/h
Power and Thermal 230V				
Idle Power	30W	30W	60W	120W
Idle Current Draw	0.15A	0.15A	0.3A	0.6A
Idle Thermal loss	102 BTU/h	102 BTU/h	204 BTU/h	408 BTU/h
1/8 Power @ 4 Ohm Power	185W	375W	800W	1600W
1/8 Power @ 4 Ohm Current Draw	0.8A	1.65A	3.5A	7A
1/8 Power @ 4 Ohm Thermal loss	320 BTU/h	640 BTU/h	1280 BTU/h	2560 BTU/h

Physical	CP354	CP704	CP1504	CP3004
Unit Dimensions	483 x 44.5 x 358 mm	483 x 44.5 x 358 mm	483 x 44.5 x 363 mm	483 x 44.5 x 363 mm
Shipping Dimensions	560 x 120 x 560 mm	560 x 120 x 560 mm	560 x 120 x 565mm	560 x 120 x 565mm
Unit Weight	5 kg - 11 Lbs	6 Kg - 13 Lbs	8 kg - 17 Lbs	10 kg - 22 Lbs
Shipping weight	6.5 Kg - 14.5 Lbs	7.5 Kg - 16.5 Lbs	9.5 Kg - 21 Lbs	11.5 Kg - 25 Lbs