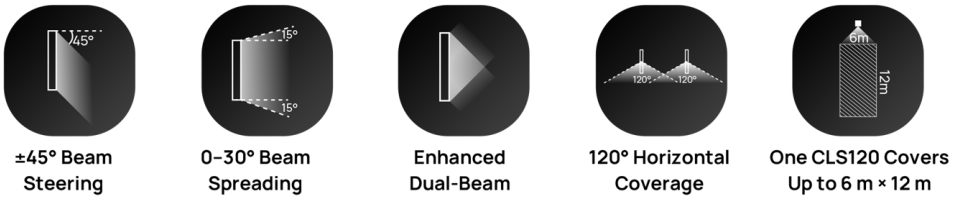
Yealink CLS120 Datasheet

Yealink CLS120 is a professional sound column speaker designed to deliver clear, uniform, and high-fidelity audio for boardrooms, extra-large meeting rooms, and training rooms. It features a 12 × 2.5-inch full-range driver array, built-in DSP, and a 420 W amplifier, delivering up to 112 dB maximum SPL with excellent vertical directivity and a wide frequency response. With ±45° beam steering, 0–30° beam spreading, and dual-beam technology, CLS120 provides precise and flexible sound coverage for different room layouts and seating arrangements. It supports Dante and analog audio input, as well as AC, PoE+, and PoE++ power options for flexible system integration and deployment. Combined with Yealink Room Designer, CLS120 enables intelligent acoustic tuning and automated configuration, while its support for AVONE solutions and third-party AV systems through Dante provides an open and flexible audio ecosystem. Microsoft Teams certified with a Teams MOS score of 4.15, rated Excellent, CLS120 delivers clear speech and consistent voice quality for professional meeting experiences.





Certified for Microsoft Teams Dante

Note: Microsoft Teams certification is coming soon.

Key Features

- 12 × 2.5-inch full-range neodymium magnet driver array, driver frequency response range up to 90 Hz–20 kHz.
- Adjustable beam steering for precise sound coverage.
- Built-in DSP and 420 W amplifier deliver powerful audio performance.

- Strong vertical directivity for a more even front-to-rear sound field, while dual-beam provides independent sound coverage for two listening zones.
- Premium metal housing with an integrated mounting bracket and built-in gravity sensor.
- Supports multiple power supply modes with auto-adaptation: AC, PoE+, PoE++.
- Works with Yealink Room Designer Wizard, it enables automated simulation, configuration and deployment.
- Supports cascading two CLS120 units for extended sound coverage.
- Dante and analog audio signal inputs.

Powerful Hardware, Exceptional Audio Performance

CLS120 features a 12 × 2.5-inch full-range driver array with 88 dB driver sensitivity, a built-in DSP, and a 420 W amplifier, delivering up to 112 dB maximum SPL. CLS120 is also Microsoft Teams certified and achieved a Teams MOS score of 4.15, rated Excellent, demonstrating strong performance in speech clarity and overall voice quality.

Hear the Precision

With ±45° beam steering, 0–30° beam spreading, and dual-beam technology, CLS120 optimizes sound coverage for different room layouts and seating arrangements. A single CLS120 can provide coverage for areas up to 6 meters wide by 12 meters long. It maintains SPL variation within 3 dB across the room, delivering clear and consistent sound from front to back.

Premium Design, Flexible Deployment

With a slim 93 mm profile and premium aluminum enclosure, CLS120 is designed to blend naturally into modern meeting spaces. Its flush wall installation and built-in mounting bracket provide a streamlined appearance while enabling faster and easier installation. Gravity-sensing technology automatically optimizes settings for upright or inverted mounting, simplifying deployment in different orientations. With support for AC, PoE+, and PoE++, CLS120 also offers flexible power options for different deployment scenarios.

Design Before Deployment

Yealink Room Designer 2 simplifies complex audio planning with an intuitive visual workflow, helping users design, simulate, and configure sound coverage before deployment. Wizard-Guided

Design simplifies room layout creation with intuitive guidance. Heatmap Acoustic Simulation allows users to preview and optimize sound coverage in real time. Device Configuration applies optimized settings directly to devices, streamlining the deployment process.

Open Ecosystem Integration

CLS120 is designed to work with existing AVONE solutions, enabling seamless integration with microphones and DSP solutions already available in the AV ONE ecosystem. It also supports the Dante protocol, allowing CLS120 to integrate with third-party AV systems for greater flexibility in system design

and deployment.

Scalable for Larger Spaces

CLS120 is suitable for boardrooms, extra-large rooms, and training rooms, with flexible configurations to accommodate different room layouts and coverage requirements. For boardrooms and extra-large rooms, two CLS120 units provide a more balanced sound field across the meeting area, maintaining clear and consistent speech throughout the room. In training rooms, four CLS120 units can be configured in different layouts: two pairs of vertically cascaded speakers provide balanced coverage for long and narrow rooms, while four speakers deployed side by side extend coverage across wider layouts.

Specifications

Module	Parameters	Description
Acoustic Performance	Frequency Response (-3 dB)	120 Hz ~ 18 kHz
	Frequency Range (-10 dB)	90 Hz ~ 20 kHz
	Horizontal Coverage Angle	120° @ 1 kHz ~ 4 kHz (-6 dB)
	Vertical Beam Steering Range	±45°
	Maximum Vertical Opening Angle	30°
	Max SPL @ 1m	• AC power: 112 dB (continuous) • PoE++ power: 106 dB (continuous) • PoE+ power: 103 dB (continuous)
	Amplifier Channels × Rated Power	12 × 35W
	Sensitivity (1 W, 1 m on single driver)	88 dB
Electrical Performance	Power Supply Modes	AC / PoE
	AC Mains Voltage	220 V / 50~60 Hz
	AC Mains Connector	IEC60320-C14
	Standby Power	5.4 W
	Rated Power	• 120 W (AC power input) • 30 W (PoE+) • 60 W (PoE++)
	Maximum Power	255 W
Audio Input	Analog Audio Input Connector	3-pin Euroblock

	Max Analog Audio Input Level	2.45 Vrms (+10 dBu)
	Analog Input Impedance	20 kΩ
	Digital Audio Input	• 2 channels of Dante® digital audio (RJ-45) • AES67 audio input (RJ-45) • YeaAudio input (RJ-45)
Audio Output	Digital Audio Output	1 channel of Dante® (RJ-45)
Integrated DSP	A/D and D/A Converters	24-bit, 48 kHz
	Storable PEQ Presets	20+
	Audio Latency	< 5 ms
Protocol	Protocol Support	Supports Dante (encrypted with a security chip), AES67, and Yealink Audio protocol
Physical Parameters	Color	Black
	Material	• Cabinet: aluminum alloy – extruded, sandblasted, anodized • End caps: PC, painted • Grille: Cold Rolled Steel, with electrophoresis finish
	Unit Dimensions (L×W×T)	1000 mm × 93 mm × 128 mm
	Packing Dimensions (L×W×T)	1138 mm × 303 mm × 202 mm
	Net Weight	10.15 kg
	Gross Weight	13 kg
	Mounting	Suspension / integrated wall-mount brackets allow horizontal yaw up to 90° in either direction
Environmental	Operating Temperature	0 °C to 40 °C
	Operating Humidity	0% ~ 95%
	Storage Temperature	-20 °C to 60 °C
	Altitude	< 2000 m
	Operating Environment	Indoor use only

Other Information	Package Contents	• 1 × CLS120 • 1 × Quick Start Guide • 1 × Power Cable • 1 × Cascade Network Cable • 1 × Power Cascade Cable • 1 × 3-pin Male Phoenix Connector • 1 × Mounting Bracket • 1 × Cascade Plate • 1 × Mounting Bracket Silicone Pad • 1 × Cascade Cable Tape • 2 × Angle Mount Bracket • 2 × M6 Flange Nuts, M5 × 30 mm • 4 × M6 Flange Nuts, M5 ×18 mm • 6 × M5 Hex Head Bolts • 1 × Pre-fixed Screw, M3 × 8 mm • 14 ×Expansion Bolts, ϕ6 × 30 mm • 14 ×Self-tapping Screws, T4 × 30 mm • 1 × Safety Rope