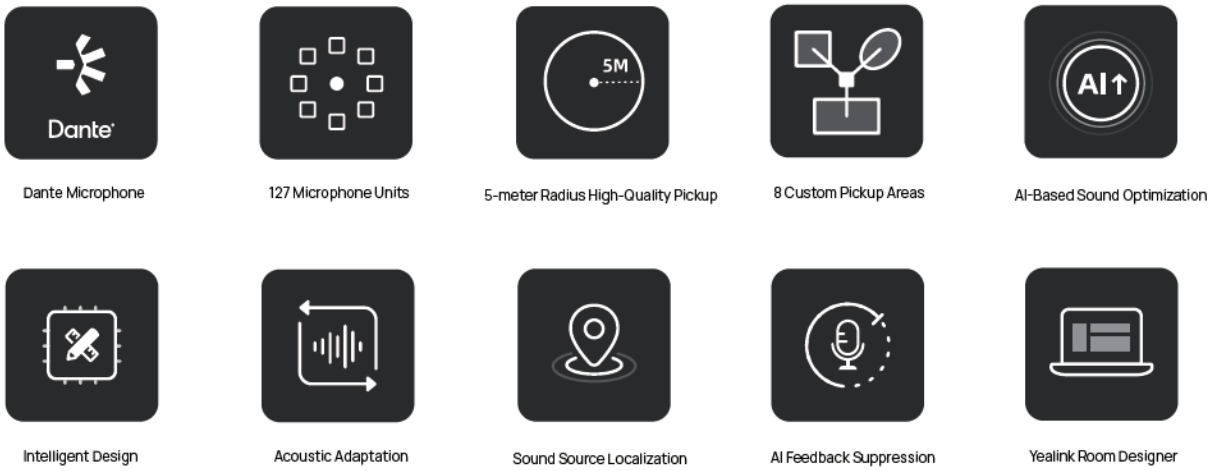
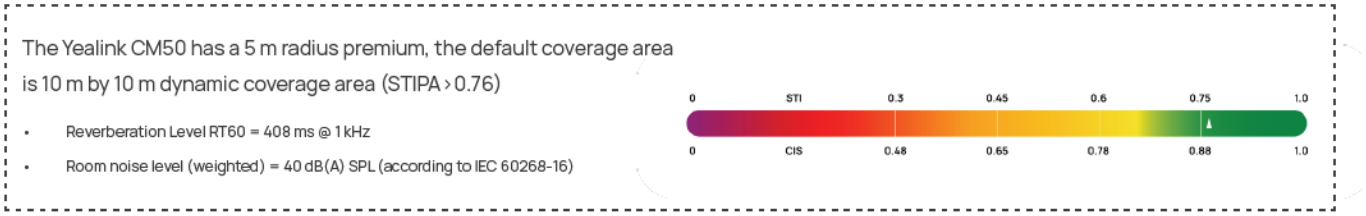
Yealink CM50 Datasheet

Yealink CM50 is an innovative Dante ceiling microphone system that utilizes beamforming voice pickup technology. With 127 microphone units, it effortlessly covers a 5-meter radius pickup range and supports 8 independent customizable pickup areas. CM50 features prioritized pickup and acoustic fence functions to accurately capture sound within customized areas, effectively reducing unwanted environmental noise interference.

Equipped with AI-based sound optimization technology, CM50 intelligently eliminates noise and reverberation, ensuring a true and immersive auditory experience. With AI-driven dynamic feedback suppression and highly directional pickup beams, CM50 optimizes and simplifies deployment. It also supports the Dante AES67 protocol, offering expandability for the CM50 system. With unparalleled audio fidelity and intelligent sound optimization, Yealink CM50 provides an unmatched experience for meetings and events.

Features





Ultra Coverage, High Fidelity

Yealink CM50 microphone features 127 omnidirectional pickup units and beamforming technology for fast and accurate sound capture. It supports up to 8 customizable pickup zones, reducing noise and delivering pure sound. Experience enhanced convenience and exceptional audio in complex meeting spaces with CM50!

AI-based Sound Optimization

Yealink's AI sound optimization model, trained in-house, combines intelligent noise reduction and echo cancellation algorithms for an exceptional audio experience. Yealink's AI sound optimization algorithm eliminates background noise and minimizes the impact of echo, ensuring your voice remains clear and sharp.

Intelligent Design and Deployment

Yealink's exclusive intelligent design and deployment feature, coupled with Room Designer software, offers a complete meeting room design experience with just basic room data. Yealink's acoustic environment adaptation solution provides algorithmic customization and tuning based on the room's acoustic environment, reducing deployment costs and improving efficiency. Achieve efficient and precise audio solution deployment with Yealink!

Deep Integration with Microsoft Teams

Deeply integrated with Microsoft Teams, Yealink offers convenient features like automatic EQ switching and mute synchronization. Precise CM50 sound source localization ensures accurate camera

tracking, making Yealink the best choice for your AV meetings. Combined with Yealink's native Teams room solution MVC, the CM50 solution provides an all-in-one, full Dante audio experience.

Easy deployment

Yealink CM50 requires only one PoE+ cable for power and data transmission. We offer the quickest deployment solution by directly replacing ceiling tiles, eliminating the need for drilling. It fits mainstream ceiling sizes of 60 × 60 cm or 2 × 2 ft. Optional accessories for suspension or adhesive ceiling mounting are included in the package.

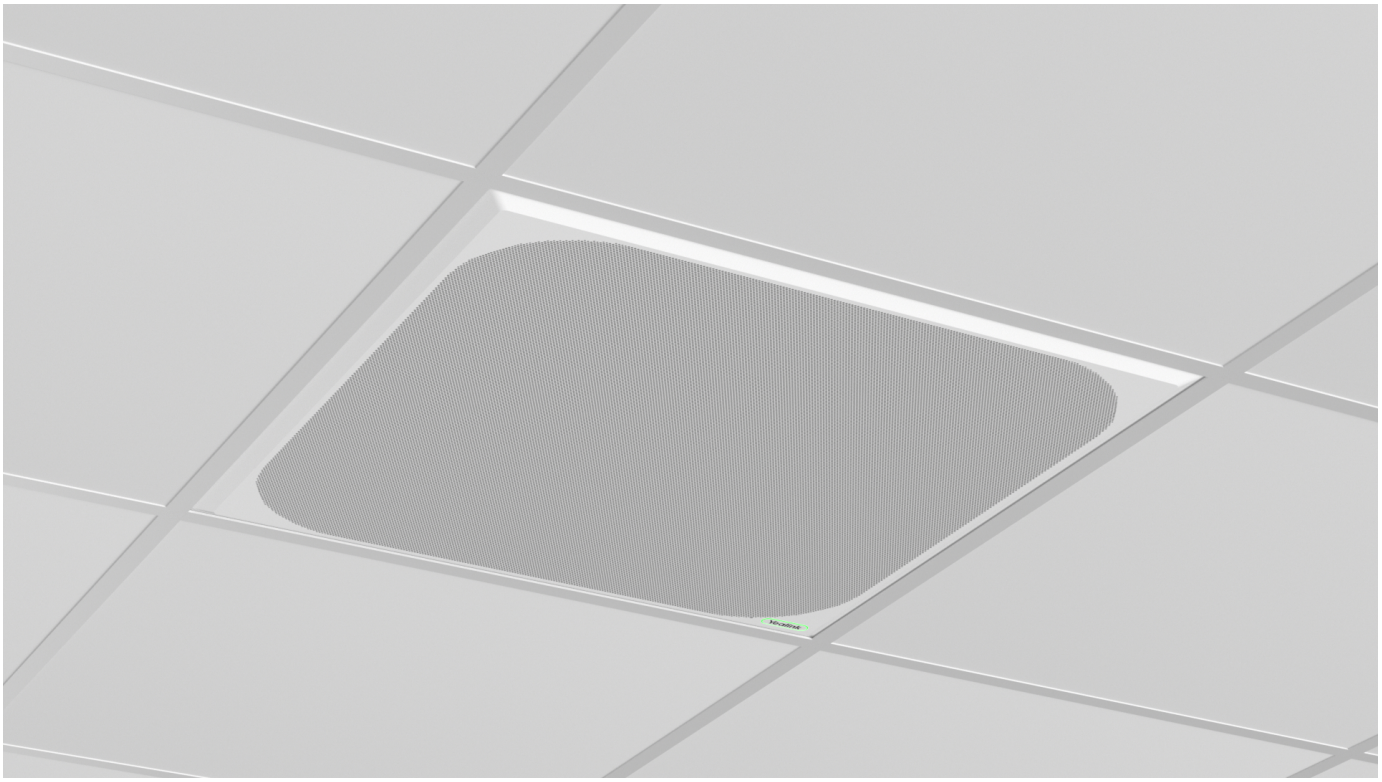
Widely Compatible Conference Audio Solution

The CM50 works seamlessly with standard Dante/AES67 audio processors, such as Q-SYS Core series, enabling smooth integration with video conferencing hardware that connects via Dante, AES67, USB, or analog

interfaces—such as systems running Microsoft Teams, Cisco Webex, or Zoom. By being fully tested with a wide range of video conferencing systems, it delivers stable connectivity and high-quality conferencing experiences across enterprise-grade environments, making it ideal for modern hybrid workspaces.

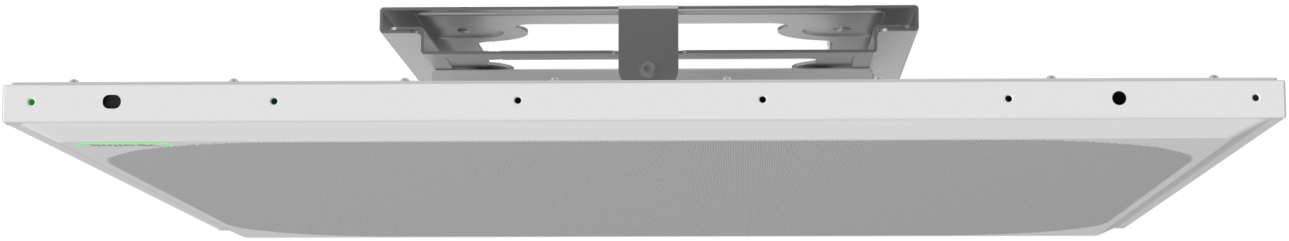
Hardware Deployment

In the Ceiling



Suspend from the Ceiling

On the Ceiling



Specifications

Parameters	Description
Acoustic Parameters	• Frequency response range: 120 Hz - 20 kHz

	• Sensitivity: 0 dBV/Pa 94dBSPL@1kHz • Signal-to-noise ratio: 86dB @1kHz, 94dBSPL A-Weighted • Maximum sound pressure level: 122dB at < 1% THD • Dynamic range: 86dB @<1% THD • Support Protocol: Dante, AES67

Dante Audio	• Output channels: 8+2 Dante output channels
	• Input channels: 2 Dante input channels
	  ○ 1 Dante input for AEC reference
	  ○ 1 Dante input for AFC reference
	• Sampling rate: 48K
	• Bit depth: 24-bit

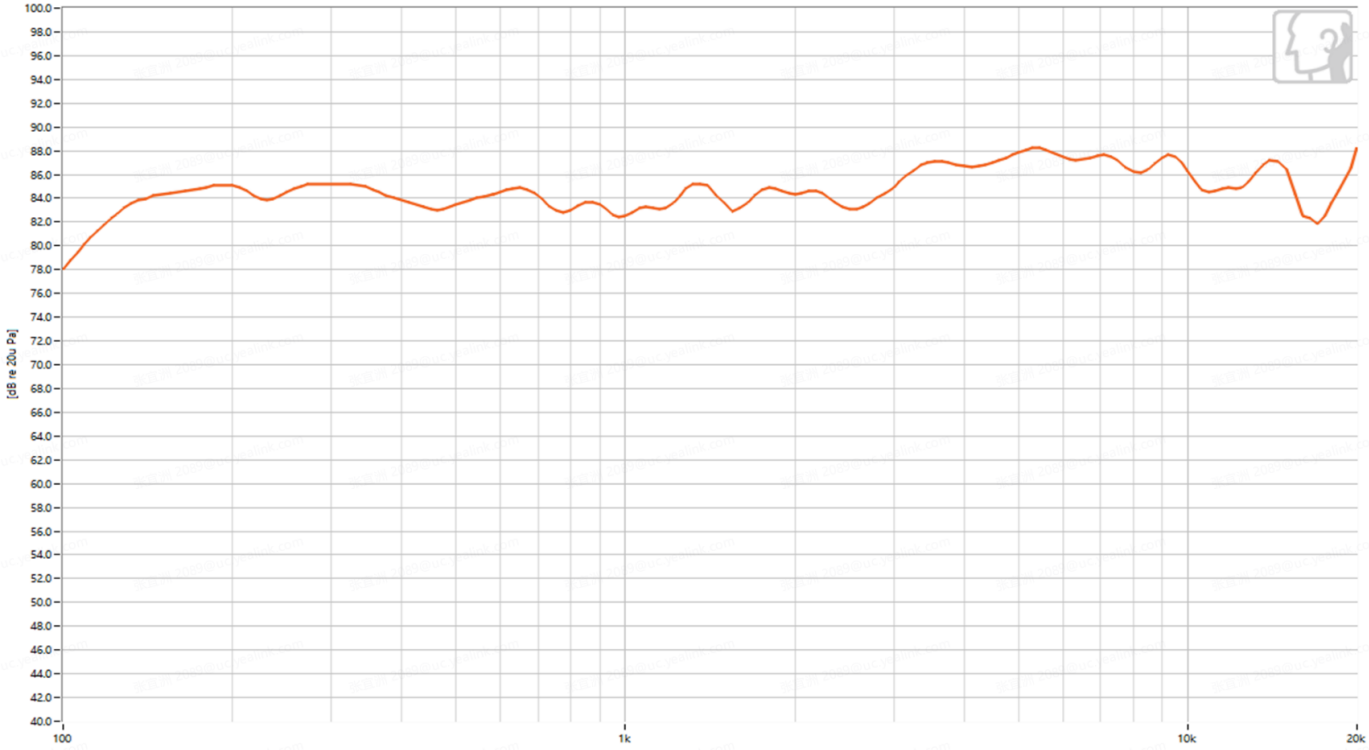
Encryption Solutions	• Dante Media Encryption with AES-256 encryption (Works with Dante Brooklyn 3, Dante IP Core, and Dante Pro S1) • Yealink Audio Encryption with AES-256 encryption (Works with Yealink AVBridge)
Product Design	• Microphone array: 127 MEMS array • Acoustic technology: Beamforming • Product dimensions: L592 × W592 × T56 mm

	• Product weight: 5.15 kg (net weight, excluding accessories)
	• Product color: Apple White
	• Product Material: SGCC/SPCC/AL5052
	• Certification: Plenum Rated UL 2043 (suitable for air handling spaces)
	• Physical interface:
	  ○ 1 × RJ-45 interface
	  ○ 1 × 3-pin Phoenix connectors for analog output

Operating Information	• Power requirements: IEEE PoE+ (IEEE 802.3at class 4)
	• Power consumption:
	  ○ Rated power: 19.3 W
	  ○ Typical power: 17 W
	• Operating temperature: 0-40 °C
	• Operating humidity: 0-93% RH

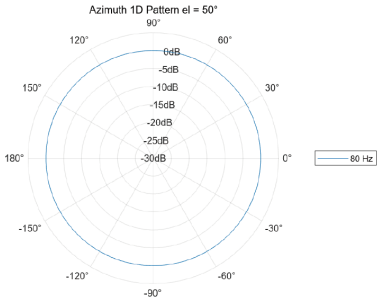
Logistics Information	• Giftbox dimensions (L×W×H): 722 × 687 × 110 mm
	• Weight:
	  ○ N.W/CTN: 7.750 kg
	  ○ G.W/CTN: 9.790 kg
	• Storage temperature: -30~70 °C

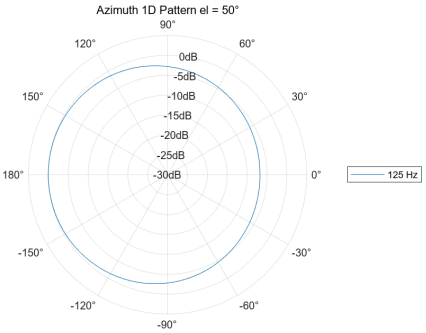
Frequency Response Curve

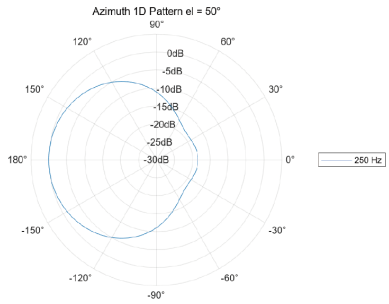


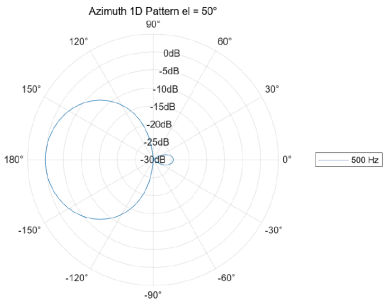
Polarity Diagram

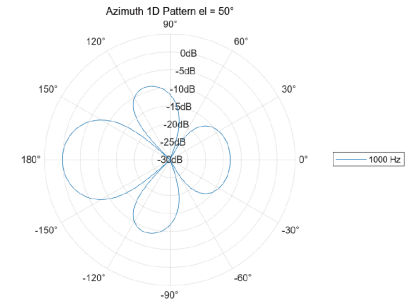
The shape of the lobe is: medium

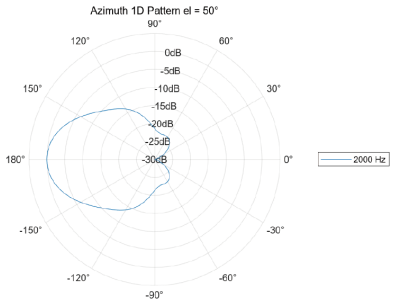


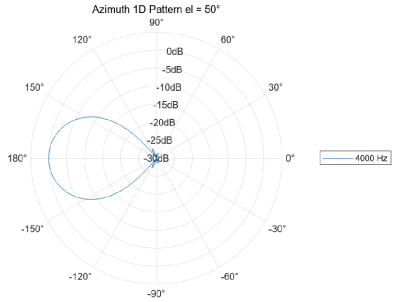


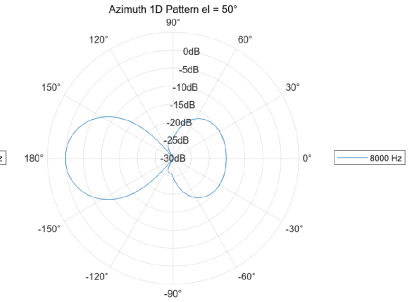


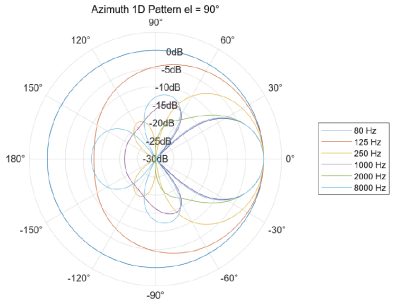






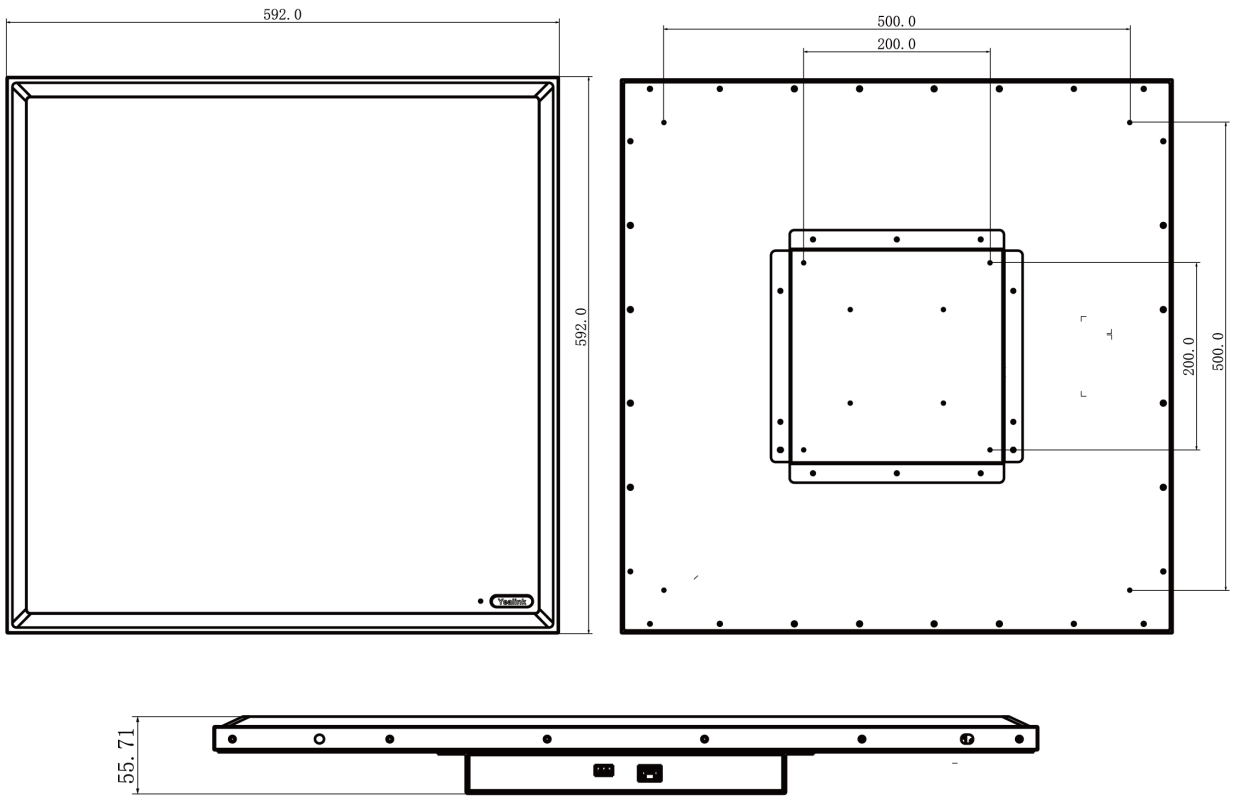






Dimensions

Unit: mm



Interface

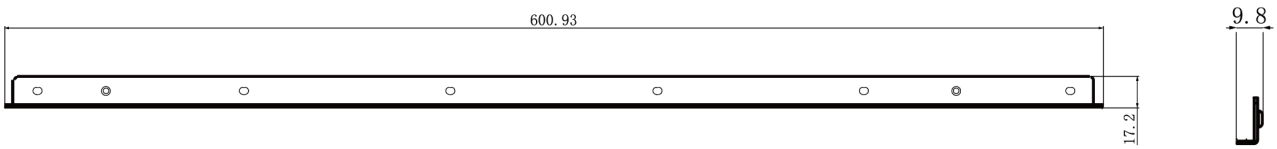
Ethernet	RJ-45 PoE+ Dante interface used for audio transmission and network control

Analog Out	3-pin Phoenix connectors for analog audio output

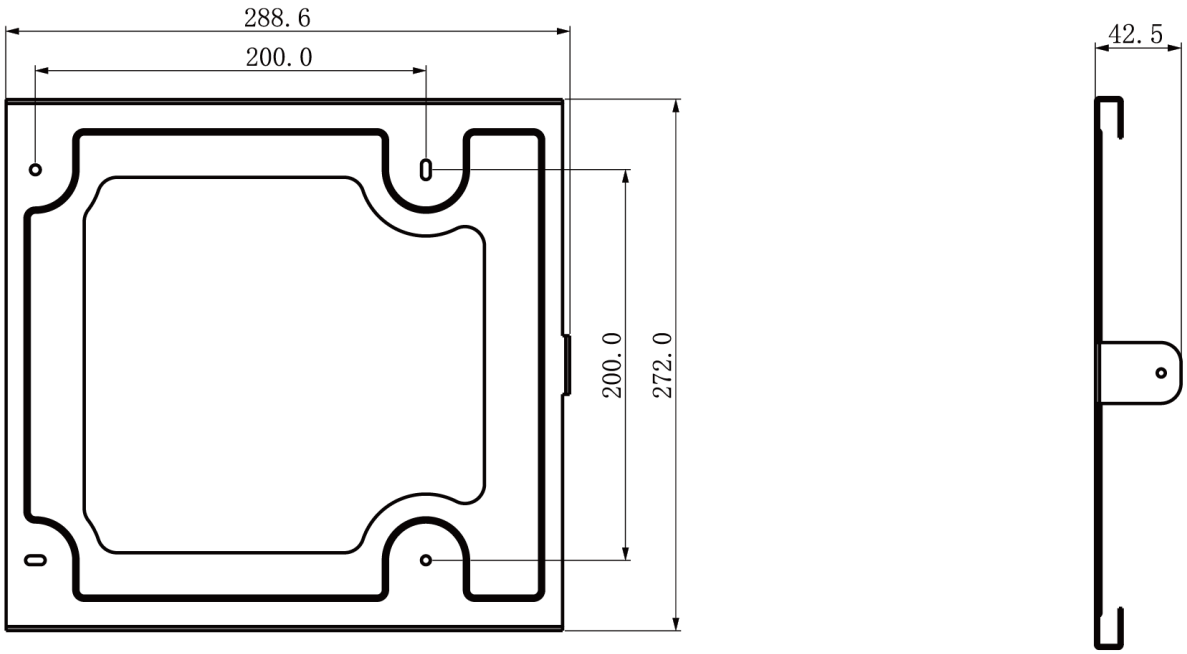
Accessory Dimensions

Unit: mm

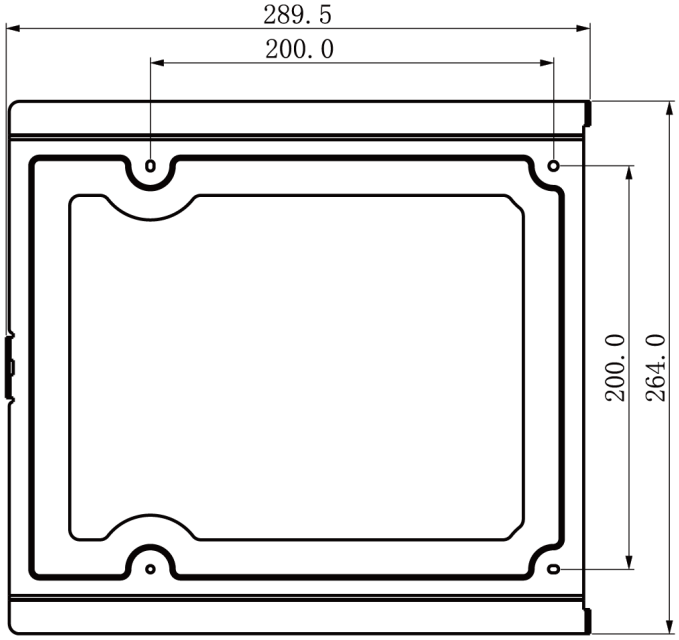
Angle Bracket



Mounting Bracket A



Mounting Bracket B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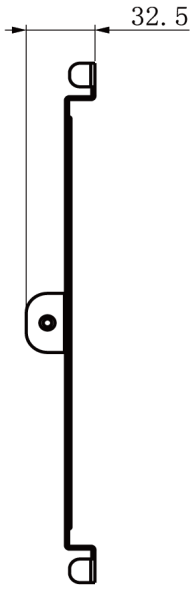
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