vmeet

VMEET SG1000
V3.0

Media Server



Product Specification

Revision History

Release Version	Release Date	Revision Notes
V3.0	2026-10-10	Initial release

Product Overview

The SG1000 is a 1U rack-mount media server that supports 12th- through 14th-generation Intel processors. The motherboard provides two HDMI 2.0 and two DisplayPort 1.4 outputs and supports a single-slot, full-height graphics card. Depending on the configuration, the server delivers pixel-to-pixel video playback at resolutions up to 35.38 million pixels (4 × 4096 × 2160).

The SG1000 runs VMEET E1 Media Player Software (Standard Edition). It provides the signal-processing capabilities of a conventional video wall processor, with independent or stitched multi-display output. The SG1000-1S supports H.264, H.265 and HAP, and provides a graphical interface for media management and program scheduling. Virtual-screen splitting and recombination accommodate ultra-wide and ultra-tall display canvases. Multiple display servers can be cascaded and managed from a single control workstation for unified multi-display control.

Configuration Comparison

Model	SG1000-1S	SG1000-2S	SG1000-3S	SG1000-4S
Output Capacity Max. Pixel Load	4K × 1 8.84 million pixels	4K × 2 17.69 million pixels	4K × 4 35.38 million pixels	4K × 4 35.38 million pixels
Supported Output Resolutions	1 × 4096 × 2160 or 4 × 1920 × 1080	2 × 4096 × 2160 or 1 × 4096 × 2160 + 4 × 1920 × 1080	4 × 4096 × 2160 or 3 × 4096 × 2160 + 4 × 1920 × 1080	4 × 4096 × 2160 or 3 × 4096 × 2160 + 4 × 1920 × 1080
Render GPU	Intel UHD Graphics 730 (integrated)	NVIDIA RTX A400 4 GB	NVIDIA RTX A2000 EM 8 GB	NVIDIA RTX 4000 Ada 20 GB
Render Outputs	2 × HDMI 2.0 + 2 × DP 1.4 (onboard)	4 × Mini DP 1.4	4 × Mini DP 1.4	4 × DP 1.4
Memory	16 GB DDR4 (1 × 16 GB)	32 GB DDR4 (2 × 16 GB)	32 GB DDR4 (2 × 16 GB)	64 GB DDR4 (2 × 32 GB)
System Storage	256 GB NVMe M.2 SSD	256 GB NVMe M.2 SSD	256 GB NVMe M.2 SSD	256 GB NVMe M.2 SSD
Media Storage	—	500 GB PCIe 3.0 SSD	1 TB PCIe 4.0 SSD	2 TB PCIe 4.0 SSD

Ordering Information

VMEET SG1000-1S

Barebone system with a 300 W power supply, 125 W power consumption at full load and a CPU cooler rated for up to 120 W.

- 1U rack-mount server supporting a pixel load of 8.84 million pixels (1 × 4096 × 2160 or 4 × 1920 × 1080)
- Intel Core i3-12100T, 4 cores / 8 threads, up to 4.1 GHz turbo
- 16 GB DDR4 (2 × 8 GB) memory
- 256 GB SSD
- Intel UHD Graphics 730
- 2 × HDMI 2.0 and 2 × DP 1.4 onboard display outputs
- VMEET E1 media playback and control system
- Compatible with standard H.264, H.265 and HAP video
- Supports standard output slicing
- Supports TCP/UDP
- Windows 11 Pro

VMEET SG1000-2S

Customers may add the expanded configuration components themselves.

- 1U rack-mount server supporting a pixel load of 17.69 million pixels (2 × 4096 × 2160 or 1 × 4096 × 2160 + 4 × 1920 × 1080)
- Intel Core i3-12100T, 4 cores / 8 threads, up to 4.1 GHz turbo
- 16 GB DDR4 (2 × 8 GB) memory
- 256 GB SSD + 500 GB PCIe 3.0 SSD
- Intel UHD Graphics 730 + NVIDIA RTX A400 4 GB
- 2 × HDMI 2.0 and 2 × DP 1.4 onboard display outputs
- 4 × Mini DP 1.4 render outputs
- VMEET E1 media playback and control system
- Compatible with standard H.264, H.265 and HAP video
- Supports standard output slicing
- Supports TCP/UDP
- Windows 11 Pro

VMEET SG1000-3S

Customers may add the expanded configuration components themselves.

- 1U rack-mount server supporting a pixel load of 35.38 million pixels (4 × 4096 × 2160 or 3 × 4096 × 2160 + 4 × 1920 × 1080)
- Intel Core i3-12100T, 4 cores / 8 threads, up to 4.1 GHz turbo
- 32 GB DDR4 (2 × 16 GB) memory
- 256 GB SSD + 1 TB PCIe 4.0 SSD
- Intel UHD Graphics 730 + NVIDIA RTX A2000 EM 8 GB
- 2 × HDMI 2.0 and 2 × DP 1.4 onboard display outputs
- 4 × Mini DP 1.4 render outputs
- VMEET E1 media playback and control system
- Compatible with standard H.264, H.265 and HAP video
- Supports standard output slicing
- Supports TCP/UDP
- Windows 11 Pro

VMEET SG1000-4S

Customers may add the expanded configuration components themselves.

- 1U rack-mount server supporting a pixel load of 35.38 million pixels (4 × 4096 × 2160 or 3 × 4096 × 2160 + 4 × 1920 × 1080)
- Intel Core i3-12100T, 4 cores / 8 threads, up to 4.1 GHz turbo
- 64 GB DDR4 (2 × 32 GB) memory
- 256 GB SSD + 2 TB PCIe 4.0 SSD
- Intel UHD Graphics 730 + NVIDIA RTX 4000 Ada 20 GB
- 2 × HDMI 2.0 and 2 × DP 1.4 onboard display outputs
- 4 × DP 1.4 render outputs
- VMEET E1 media playback and control system
- Compatible with standard H.264, H.265 and HAP video
- Supports standard output slicing
- Supports TCP/UDP
- Windows 11 Pro

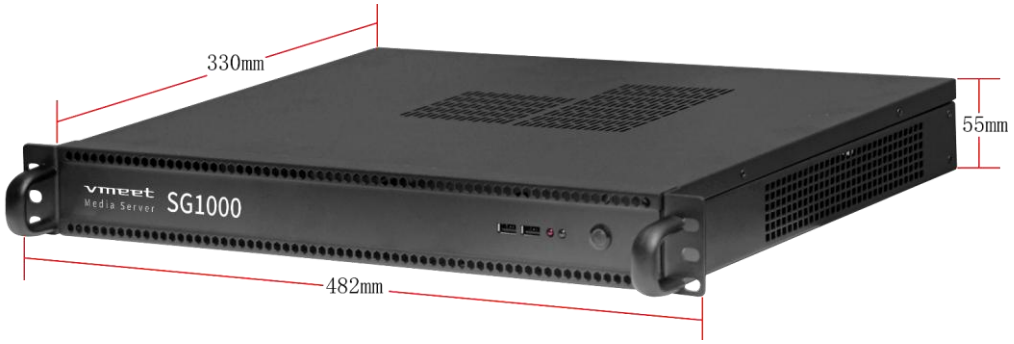
Product Features

★ denotes a highlighted feature.

- ★ 1U rack-mount server with an enclosure protection rating that meets the IP20 requirement of GB/T 4280-2017. A built-in 220 V / 10 A mains filter suppresses high-frequency conducted interference from the mains and reduces emissions fed back onto the mains by internal components such as the switching power supply, supporting compliance with EMC standards including EN55022 and FCC requirements.
- Supports up to 35.38 million pixels and four 4K × 2K outputs at 60 Hz. Actual pixel capacity depends on the configuration.
- ★ Supports hardware decoding at 4K @ 60 fps and 8K @ 60 fps, and HAP decoding at 16K @ 60 fps.
  - SG1000-1S: 1 stream at 4K @ 60 fps.
  - SG1000-2S: 1 stream at 8K × 2K @ 60 fps or 2 streams at 4K × 2K @ 60 fps.
  - SG1000-3S: 1 stream at 8K × 4K @ 60 fps or 4 streams at 4K × 2K @ 60 fps.
  - SG1000-4S: 2 streams at 16K × 4K @ 60 fps, 7 streams at 8K × 4K @ 60 fps or 16 streams at 4K × 2K @ 60 fps.
- Supports four 4K or four 2K outputs, either independent or stitched.
- Supports a professional graphics card with EDID locking to maintain output order. Up to four 4K outputs can be stitched. Each output supports a custom resolution up to 8192 px in width and height. The maximum blended canvas width and height is 16,384 px, with a recommended limit of 8192 px in each dimension.
- ★ Supports unlimited layer windows and onboard 7.1-channel audio. An external USB 7.1-channel sound card enables eight-channel audio output.
- Provides two HDMI 2.0 and two DisplayPort 1.4 outputs for external control monitors without using the render GPU outputs.
- Two DDR4 SO-DIMM slots support dual-channel memory, with up to 64 GB per channel.
- One full-bandwidth PCIe 5.0 x16 slot supports a full-height, single-slot graphics card or an expansion card such as a network, capture or serial card.
- Two 1 GbE ports support link aggregation for increased bandwidth and fault tolerance.
- Provides two USB 2.0 and four USB 3.0 ports.
- Provides one PCIe Gen 4.0 x4 M.2 SSD slot.
- Import media assets as needed or import entire folders in batches. Categorize, sort and filter the asset list for quick retrieval.
- Runs professional Media Player Software with centralized control of cascaded servers and a graphical interface for program scheduling and playback.
- Schedule fast-forward, rewind, pause, stop, loop, jump, end, fade-in and fade-out actions. The program runs automatically once scheduled.
- Supports unattended playback, including automatic playback on boot, a minimized interface after startup and automatic execution of scheduled playback tasks.
- Supports customizable hotkeys for playback control, with one-touch screen lock, blackout and jump.

- Supports column-based program switching and jumps, and synchronization across multiple playback windows. Other windows can be set to follow a designated master playback window automatically.
- Supports decoding of H.264/AVC, HEVC/H.265, AV1 and HAP video.
- Supports playback of PowerPoint, Word, Excel, image sets and dynamic web pages.
- Supports external signal ingest via network streams, NDI and optional capture cards.
- Supports recombining multiple virtual screens. Quickly split an output into a user-defined number of regions and map them to ultra-wide, high-pixel-count displays.
- Supports layer compositing and nondestructive editing, including chroma key, masking, cropping, mirroring, rotation, mosaic, blur and opacity adjustment for creative applications.
- Supports playback from USB flash drives, with configurable removable-drive priority and hardware ID binding. Automatic playback is limited to bound drives.
- Folder playback mode plays all media in a folder in sequence or according to a playback schedule text file.
- Supports TCP/UDP network commands and an open control protocol for unified control by third-party AV control systems.
- Supports direct playback control from a tablet without a dedicated AV control processor. A PowerPoint presentation remote can also control playback.
- Supports playback control from a web browser. Program scheduling and playback control can operate independently, so preview does not affect the rendered image on the main display.

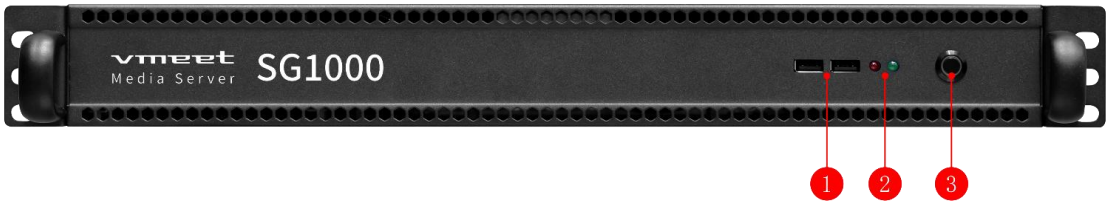
Product Dimensions



482 mm (W) × 330 mm (D) × 55 mm (H)

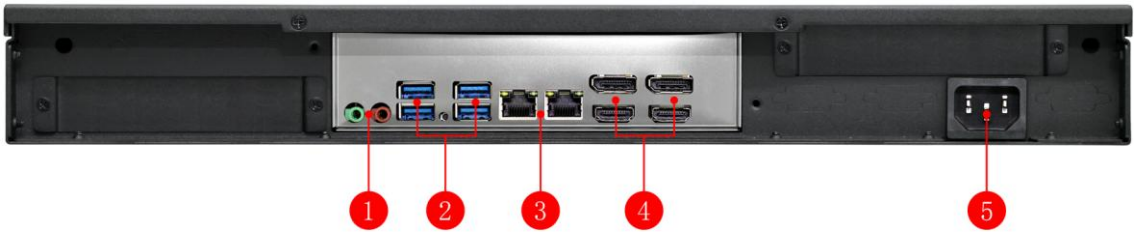
Product Appearance

SG1000 Front Panel



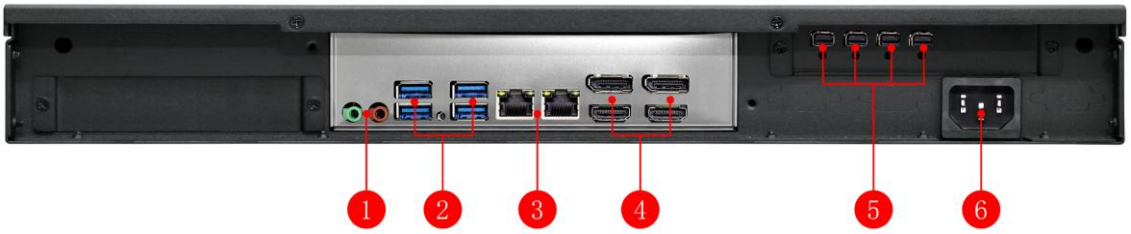
No.	Interface	Qty	Description
1	USB	2	USB 2.0 ports
2	Indicators	2	1 × drive activity indicator and 1 × power indicator
3	Power Button	1	Power on/off button

SG1000-1S Rear Panel



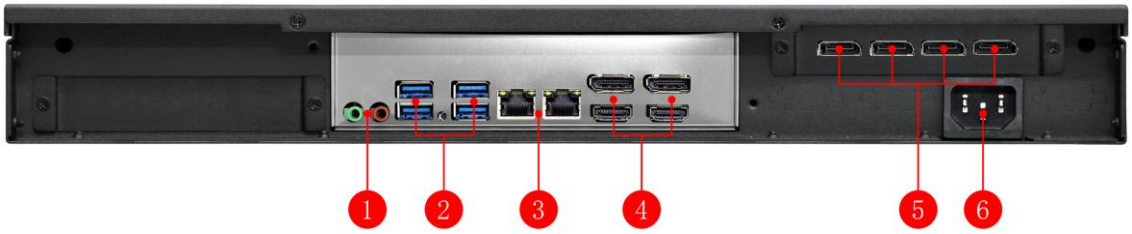
No.	Interface	Qty	Description
1	Audio	2	1 × MIC jack and 1 × LINE jack
2	USB	4	4 × USB 3.0 ports
3	Network	2	1 GbE RJ45 ports for Internet or LAN connectivity
4	Display Outputs	4	2 × HDMI (4K @ 60 Hz) and 2 × DP (4K @ 60 Hz) for control monitors Supports mirrored or independent display modes across four ports, with up to three outputs active simultaneously
5	Power Input	1	100–240 V AC, 50/60 Hz

SG1000-2/3S Rear Panel



No.	Interface	Qty	Description
1	Audio	2	1 × MIC jack and 1 × LINE jack
2	USB	4	4 × USB 3.0 ports
3	Network	2	1 GbE RJ45 ports for Internet or LAN connectivity
4	Display Outputs	4	2 × HDMI (4K @ 60 Hz) and 2 × DP (4K @ 60 Hz) for control monitors Supports mirrored or independent display modes across four ports, with up to three outputs active simultaneously
5	Render Outputs	4	4 × Mini DP outputs (two at 4K @ 60 Hz or four at 2K @ 60 Hz) Connects to display devices such as LED sending cards or LCD displays Mini DP-to-HDMI conversion requires an active adapter cable
6	Power Input	1	100–240 V AC, 50/60 Hz

SG1000-4S Rear Panel



No.	Interface	Qty	Description
1	Audio	2	1 × MIC jack and 1 × LINE jack
2	USB	4	4 × USB 3.0 ports
3	Network	2	1 GbE RJ45 ports for Internet or LAN connectivity
4	Display Outputs	4	2 × HDMI (4K @ 60 Hz) and 2 × DP (4K @ 60 Hz) for control monitors Supports mirrored or independent display modes across four ports, with up to three outputs active simultaneously
5	Render Outputs	4	4 × DP 1.4 outputs (four at 4K @ 60 Hz or four at 2K @ 60 Hz) Connects to display devices such as LED sending cards or LCD displays Mini DP-to-HDMI conversion requires an active adapter cable
6	Power Input	1	100–240 V AC, 50/60 Hz

Hardware & Software

Hardware Specifications	
CPU	SG1000-1S/2S/3S/4S　Intel Core i3-12100T, 4 cores / 8 threads, up to 4.1 GHz turbo
Memory	SG1000-1S　16 GB DDR4 (1 × 16 GB) SG1000-2S/3S　32 GB DDR4 (2 × 16 GB) SG1000-4S　64 GB DDR4 (2 × 32 GB)
Storage	SG1000-1S　256 GB SATA SSD SG1000-2S　256 GB SATA SSD + 500 GB PCIe 3.0 SSD SG1000-3S　256 GB SATA SSD + 1 TB PCIe 4.0 SSD SG1000-4S　256 GB SATA SSD + 2 TB PCIe 4.0 SSD
Render GPU	SG1000-1S　— SG1000-2S　NVIDIA RTX A400 4 GB SG1000-3S　NVIDIA RTX A2000 EM 8 GB SG1000-4S　NVIDIA RTX 4000 Ada 20 GB
Integrated GPU	Intel UHD Graphics 730
Power Supply	300 W
Chassis	1U custom server chassis
Cooling	Built-in air cooler
Software	
Operating System	Windows 11 Pro
Playback Control System	VMEET E1 Media Player Software (Basic Edition)
Power	
Input Power	100–240 V AC, 50/60 Hz
Maximum Power Consumption	255 W

Device Specifications

Electrical	100–240 V AC, 50/60 Hz
Installation	1U rack-mount installation, subject to on-site conditions
Dimensions	482 mm (W) × 330 mm (D) × 55 mm (H)
Operating Environment	Temperature 5–35 °C (40–95 °F) Relative humidity 5–95%, non-condensing
Storage Environment	Temperature −10 to +60 °C Relative humidity 0–95%, non-condensing
Packaging Dimensions	560 mm (L) × 395 mm (W) × 140 mm (H)
Accessories	1 × filtered power cord, 1 × compact keyboard and mouse set

Supported Media Types

Media Type	Supported Formats
Video	MP4, AVI, MKV, FLV, MOV, WMV, MPEG, MPG, M4V, WebM, HAP
Audio	MP3, AAC, FLAC, AMR, APE, WAV, WMA
Image	JPG, JPEG, BMP, PNG, GIF, ICO
Text	TXT
Streaming Media	NDI, HTTP, RTSP, RTP, RTCP, RTMP, MMS, HLS
Web Pages	Any accessible web page
Office Files	PowerPoint (1080p)

Notes — Recommended Encoding & Bitrate

Recommended Video Codecs

- H.265 (HEVC) or VP9 is recommended for video above 4K and up to 8K, with a width of up to 8192 px and a height of up to 4320 px.
- H.264 (AVC) is recommended for video at 4K or below.
- HAP is recommended for video above 8K, with a width of up to 15,360 px and a height of up to 7680 px.

For best performance and image quality, use the recommended source bitrates below.

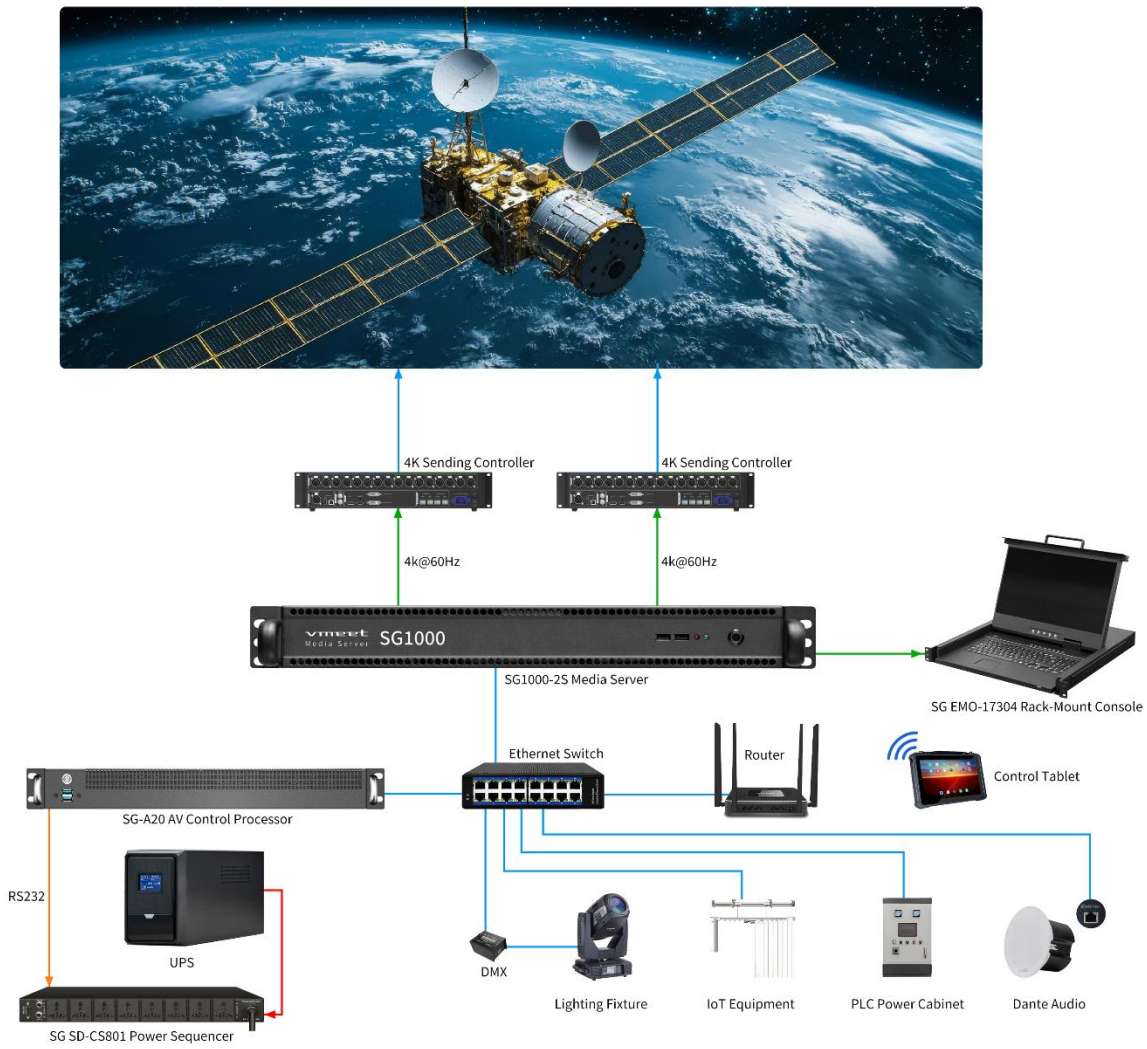
Video Resolution	24–30 fps (standard)	48–60 fps (high frame rate)
4320p (8K)	70–100 Mbps	100–140 Mbps
2160p (4K)	35–45 Mbps	55–70 Mbps
1080p (2K)	10 Mbps	16 Mbps

The values above are recommended bitrates for SDR sources.

Packing List

Item	Qty	Specification	Unit
Media Server	1	SG1000	unit
Power Cord	1	1.8 m	pc
Keyboard & Mouse	1	Compact keyboard and mouse set	set
Certificate of Conformity	1		copy
Test Report	1		copy
Function Checklist	1		copy
Packing List	1		copy

Application Scenario



Typical SG1000-2S System Topology

Installation Notes

1. When in use, place the device horizontally; do not flip it or stand it vertically.
2. This product can be installed in a 19-inch standard rack. The rack must be able to bear at least four times the total weight of all devices inside it. Four M5 panel screws are required for installation.

Statements and Warnings

This is a Class A product. In a residential environment, this product may cause radio interference, in which case the user may be required to take practical measures to mitigate the interference.

Copyright © 2026 Shenzhen Ruizhong Technology Co., Ltd. All rights reserved.
Without the prior permission of the Company, no entity or individual may transcribe or reproduce any part or the whole of the contents of this document, nor disseminate it in any form.

Trademark Statement

vmeet is a registered trademark of the Company.

Disclaimer

Every effort has been made to ensure the accuracy and reliability of this document. Its contents are subject to modification or change at any time without prior notice.

Should you encounter any issues during use, please contact us using the contact details provided in this document, and we will do our best to provide support.

Website: www.vmeetshow.com

Address: Room 301, Building 1, No. 2 Shouhe Road, Jinsha Community, Kengzi Subdistrict, Pingshan District, Shenzhen

Tel: +86-755-27644552