

VIS-CATC-C Camera Auto-tracking Processor Datasheet V1.0



1. Product Overview

The VIS-CATC-C is a powerful camera auto-tracking processor supporting HDMI, USB-C, 3G-SDI, and 12G-SDI inputs up to 4K@60Hz (4:4:4). USB-C supports bidirectional audio/video transmission and 65W fast charging. Attendees can share content via HDMI or USB from personal computers to displays or remote conferences. It supports seamless switching, multi-view, custom layouts, image freeze, test patterns, EDID management, speaker countdown/time/name display, camera tracking, and RS-232, IR, web, and button control for conference and remote conferencing applications.

2. Features

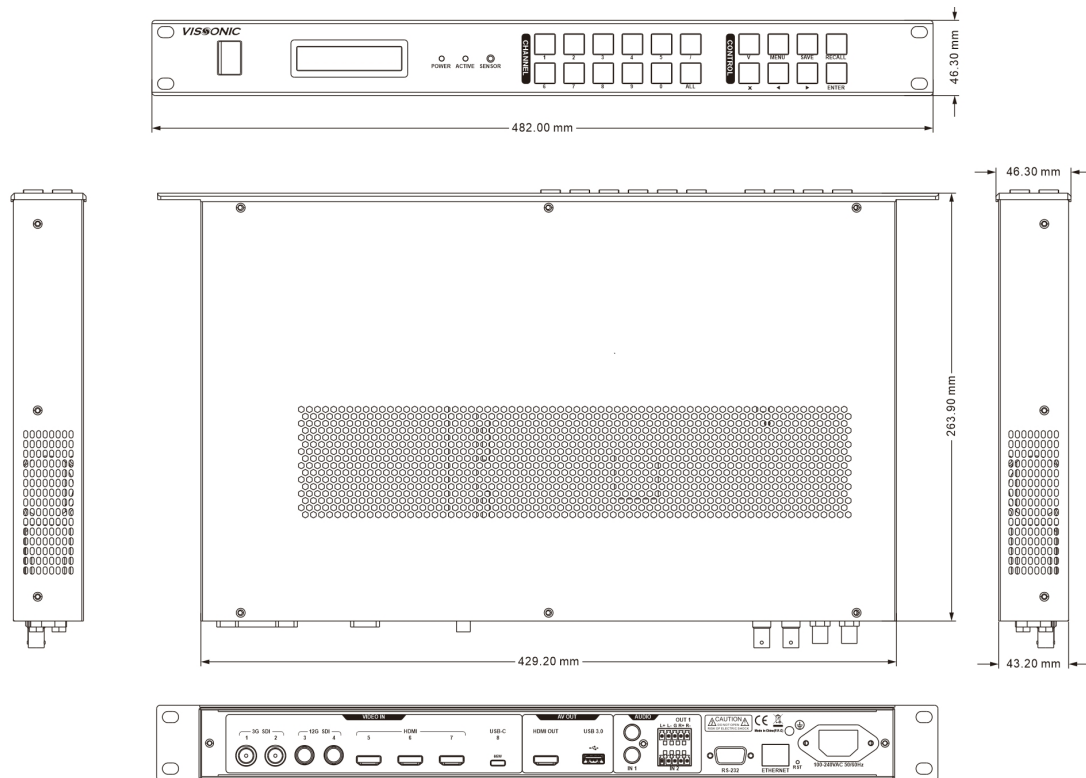
- 3× HDMI inputs and 1× HDMI output, supporting up to 4K@60Hz (4:4:4), compliant with HDMI 2.0 and HDCP 2.2.
- Full-function USB-C interface, supporting up to 4K@60Hz (4:4:4) input, DP 1.2, PD 3.0, and up to 65W fast charging, with bidirectional video capture and output.
- 2× 3G-SDI inputs, up to 1080p@60Hz; 2× 12G-SDI inputs, up to 4K@60Hz.
- 1× RCA audio input for conference controller connection; 1× balanced audio input and 1× balanced audio output.
- Seamless switching with no flicker, black screen, or visual artifacts for smooth presentation.
- Multi-view display, enabling simultaneous viewing of local content and remote video.
- Customizable output layouts, allowing flexible multi-window configuration via a web-based canvas.
- USB 3.0 video output, transmitting HDMI audio and video to PCs, smartphones, or tablets for preview or capture in Microsoft Teams®, Zoom™, and other conferencing platforms.
- Input labeling, allowing custom source names with support for any language and font.

- One-touch output freeze and unfreeze.
- One-touch output on/off control.
- Flexible switching logic, with configurable input priority for automatic source switching and true plug-and-play operation.
- Multiple control options, including RS-232, IR remote control, web interface, and front-panel buttons.
- Input test pattern generation for system commissioning and troubleshooting.
- Output test pattern generation to verify display and output connectivity.
- Intelligent HDMI output analysis, automatically selecting the optimal resolution based on display EDID.
- Output scaling modes supporting auto full-screen and aspect ratio preservation.
- Real-time device status monitoring via the web interface.
- Provides +5V DC / 250mA power for external HDMI peripherals.
- HDMI input equalization, actively compensating for signal loss caused by long or low-quality cables.
- Advanced EDID management, with multiple built-in EDID options and EDID file upload support.
- Supports speaker countdown or speaking time display; displays the current speaker's name with conference software.
- Supports control via Android and iOS mobile applications.
- Web-based one-click firmware upgrade for simplified maintenance.

3. Parameters

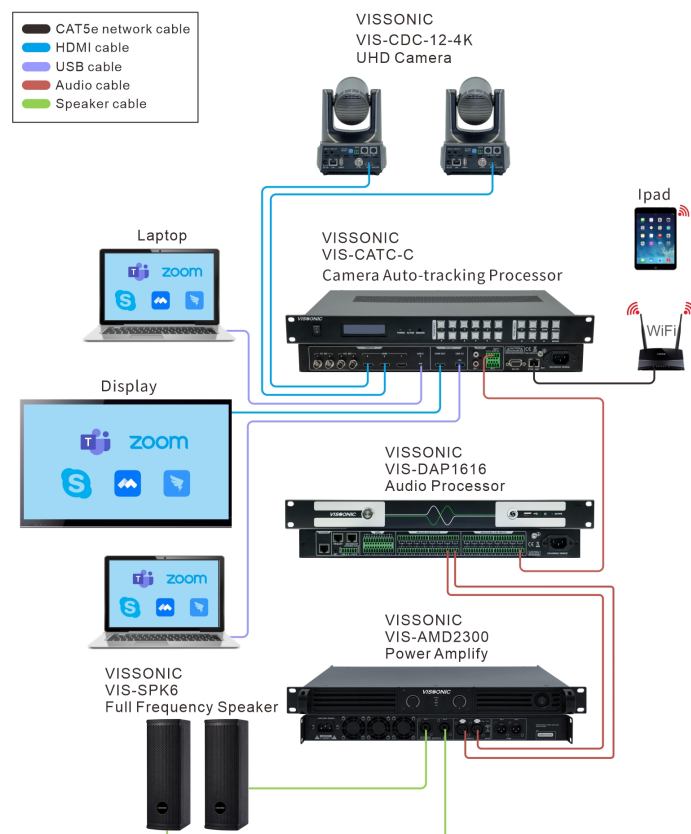
Model	VIS-CATC-C
3G-SDI Input	HD-SDI, 3G-SDI
12G-SDI Input	HD-SDI, 3G-SDI, 6G-SDI, 12G-SDI
HDMI Input	HDMI 2.0, HDCP 2.2
USB-C Input / Output	DP 1.2, PD 3.0, up to 65W fast charging
HDMI Output	HDMI 2.0, HDCP 2.2
USB Output	USB 3.0 (Video Streaming) Mode: YUV422: 4096×2160@25Hz MJPEG: 4096×2160@60Hz RGB: 1920×1080@60Hz NV12: 3840×2160@30Hz
Maximum Power Consumption	100W
Operating Environment	Temperature: -20°C~70°C; Humidity: 10%~90%
Power Supply	AC 100~240V, 50/60Hz
Size (W×D×H)	482×264×46 mm
Weight	3.42kg
Color	Black
Warranty	3 Years

4. Mechanical Drawing

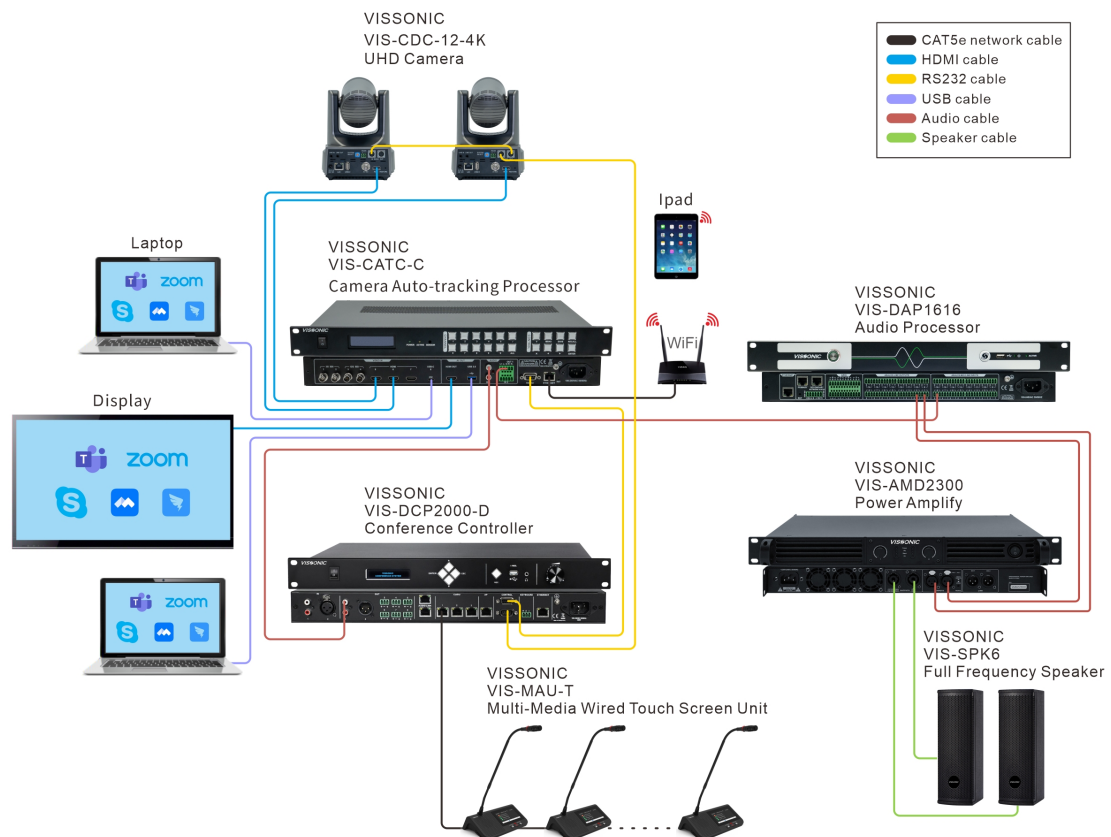


5. System Diagram

Standalone Diagram



Conference Unit Integration Diagram



About VISSONIC Electronics Limited

Our mission is to develop and manufacture the most comprehensive and innovative audio visual products for our clients. We provide the best performance/price ratio products because it could give you satisfaction just from the time you use them, we believe the good design with cutting edge technology on products will provide value to all our partners and end users. Listen to your demands, we fulfill it.



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