

# DH-VCS-TS51A0

## Integrated Full-HD Video Conferencing Endpoint



- Built-in MCU, supports max 4 sites 30fps @ 1080P, or 6 sites 30fps @ 720P
- Integrated design, 60fps @ 1080P and 12x optical PTZ camera
- Latest H.265 video encoding protocols provide ultimate full HD image under ultra-low bandwidth
- Unique anti-packet loss technology ensures normal operation of audio and video in the event of a 30% packet loss
- Standard H.323 and SIP protocols. Record meetings onto USB drive
- Provides a variety of conference call modes and installation modes, making it simple to operate and easy to maintain



### System Overview

The TS51A0 integrated full-HD video conferencing endpoint is a flagship video conferencing system and an ideal choice for small to mid-size meeting rooms. It adopts an integrated, compact, and exquisite design featuring a camera and codec. The endpoint supports dual 1080P full-HD image and OPUS audio coding technology, bringing you a life-like face-to-face experience.

### Functions

#### Powerful built-in MCU

Embedded with a powerful MCU, the TS51A0 lets you create meetings without requiring the purchase of external expensive MCUs (Multi-point Control Units). The endpoint supports 4 sites 30fps @ 1080P or 6 sites 30fps @ 720P, which perfectly satisfies the needs of video conferences and enables efficient communication.

#### All-in-one Design, easy to deploy

The TS51A0 is a compact system combining a full-HD camera and codec. Its elegant design enables support for hanging mounts, wall mounts, and pendants, making it easy to deploy.

#### Outstanding full-HD PTZ camera

Benefiting from a 1/2.8" 2.1MP CMOS sensor, the TS51A0 delivers a 60fps @ 1080P full-HD image. The TS51A0 features a fast, accurate, and stable auto vari-focal lens with up to 12x optical zoom, allowing for viewing wide angle images at a distance.

#### Strong network adaptability provides seamless experience for low-bandwidth connections

Thanks to our unique anti-packet loss technology, TS51A0 ensures normal operation of audio and video in the event of a 30% packet loss or 800ms delay. By supporting a new generation of H.265 encoding technology, the device adapts to different networking requirements and provides a 1080P full-HD image over low bandwidth connections.

#### Open standard, compatible interoperability

Conforming to ITU-T H.323 and IETF SIP communication standards, the TS51A0 supports industry standard A/V encoding technologies and achieves seamless interconnection with products that meet international standards. Meanwhile, it achieves integration with security products which conforms to industry standard.

#### Rich functionality delivers easy use

TS51A0 can connect to networks via Wi-Fi, making it easy to adapt to various meeting scenarios. An LED screen displays meeting site information (IP address) in real-time, providing easy maintenance.

#### Record meetings onto USB drives

Powerful meeting recording enables you to archive real-time meetings, which is crucial for meeting reviews. With the TS51A0, all you need is a USB drive to record meeting video.

#### Accurate real-time information sharing

TS51A0 supports 1080P full-HD dual stream to simultaneously transmit and receive video and documents. The device allows users to share and edit documents, PPTs, and other information in real-time, providing effective visual communication.

## Technical Specifications

Built-in MCU

Multi-point Capability 4 sites 30fps @ 1080P, or 6 sites 30fps @ 720P

### Video Features

Video Codec H.265, H.264 SVC, H.264HP and H.264BP

Video Resolution Main stream: 1080P, 720P, D1

Demo stream: 1080P, 720P, D1

Frame Rate 5~60fps

Video Bitrate 128kbit/s to 8Mbit/s

Dual Stream Dual 1080p

### Audio Features

Audio Codec OPUS, MP3, AAC-LC, G.719, G.711a and G.711u

Audio Processing AEC (Acoustic Echo Cancellation), AGC (Automatic Gain Control), ANS (Automatic Noise Suppression), Self-Adaptive Post-filtering, Audio Error Correction and Lip Sync

### Camera Features

Image Sensor 1/2.8" 2.1MP CMOS

Lens Horizontal Angle: 73°, Zoom: 12x Optical Zoom

Frame Rate 30/60fps @ 1080P, 30/60fps @ 720P

Pan/Tilt Pan: -120° ~ +120°  
Tilt: -30° ~ +30°

### Communication & Security

Communication Protocols ITU-T H.323, IETF SIP

Transmission Protocols IPv4, TCP/IP, RTP, SRTP, RTCP, HTTP, DNS, NTP and DHCP

Other Protocols H.225, H.235, H.245 and H.460

### Network Feature

Network Packet Loss Tolerance In the event of a 30% packet loss, the conference audio and video is unaffected

Network Delay Tolerance Normal conference processing for up to 800ms delay

### Interfaces

Video Inputs 1 x VGA, 1 x built-in camera input

Video Outputs 2x HDMI

Audio Inputs 2 x 3.5mm audio jack, 1 x USB

Audio Outputs 2 x HDMI, 1 x 3.5mm audio jack

USB Interfaces 2 x USB 2.0 host

Network Interfaces 1 x RJ45 10/100/1000M self-adaptive network port

## Certifications

Certifications CE (EN55032, EN50130-4, EN301489-1, EN301489-17, EN300328, EN62311)  
FCC (CFR 47 FCC Part 15 subpartB, 2016)  
UL (60950-1 & CAN/CSA C22.2 No. 60950-1-07)

## Electrical

Power Supply DC 12V, 3A

Power Consumption <=36W

## Environmental

Operating Conditions 0°C ~ +45°C (+32°F ~ +113°F) / 10%~80% RH  
\* Start up should be done at above 0°C (+32°F)

Storage Conditions -40°C ~ +70°C (-40°F ~ +158°F) / Less than 95% RH

## Construction

Dimensions 245.0mm x 165.2mm x 156.0mm  
(9.65" x 6.50" x 6.14")

Net Weight 2.5kg (5.51lb)

Gross Weight 6.0kg (13.22lb)

### Ordering Information

Type	Part Number	Description
Endpoint	DH-VCS-TS51A0	Integrated Full-HD Video Conferencing Endpoint

### Rear Panel

