T-CAM Package CM70



Description

The T-CAM Package CM70 is a complete and out-of-the-box solution for conference camera tracking.

It allows straight-forward installation, fast configuration and integration of a camera tracking system with any Televic Conference system. The T-CAM solution controls up to 4 IP-CAM CM70¹, using the 3G-SDI connectivity.

By combining hardware and software, the T-CAM solution makes it easy to use and control cameras. Installers can quickly set up cameras, create talking heads, automatically switch the camera between participants, and even add a participant's name as an overlay² on top of the image. The end result is a package that makes camera integration plug and play.

The T-CAM Package CM70 solution comes in 3 different packages.

Packages

Basic T-CAM Package CM70 [71.98.1305]

The basic package contains everything you need for a basic camera tracking set-up:

- » 2 IP-CAM CM70 cameras
- » Preview capture card: Blackmagic DeckLink Mini Recorder
- » Video switcher: Blackmagic ATEM 1M/E Constellation HD
- » T-CAM Software: PC software with a license for control of 2 cameras
- » BlackMagic Micro Converter SDI to HDMI

IP-CAM CM70 Camera & License [71.98.1306]

Adds another camera and a camera license. Up to 2 packages may be ordered for a maximum of 4 cameras.

- » 1 IP-CAM CM70 Camera
- » Camera interconnection cables
- » 1 license for one additional camera

T-CAM Name Overlay [71.98.1302]

This add-on allows an overlay to be added onto the video output by using an additional capture card.

- » 1 license for name overlay
- » Capture card: Blackmagic DeckLink Mini Recorder



^{1.} The basic package includes 2 cameras by default. One additional license required for each additional camera. (for a maximum of 4 cameras)

^{2.} Available as an add-on in the T-CAM Name Overlay package.

Global Features

T-CAM is built for seamless integration with Televic Conference systems and allows a number of features out of the box.

- » Integrates perfectly with D-Cerno, Plixus engine, CoCon, Confidea G3 and Confidea G4.
- » Creation of a synoptic for easy configuration of camera positions
- » 2 shots per seat
- » 2 shots for the wide shot
- » Multiple seat configurations immediately available for flexible seating arrangements
- Configuration of camera positions can be done with the software or with a USB-joystick (not included in any of the packages)
- » Camera control over serial connection and IP connection
- » 20× Optical zoom on cameras
- » Software may be upgraded to webcasting software

Product Features

Full HD PTZ Camera

» Camera

The T-CAM solution is a dynamic PTZ camera tracking solution ideally suited for conference room settings. With Full HD 1080p output at 60 fps, the camera provides excellent images. Additionally, the 20× zoom, outstanding white balance and exposure mode, bring even the smallest details into focus, especially in darker conference rooms where lighting conditions may be poor.

With a wide viewing angle (horizontal -170° to $+170^{\circ}$, tilting up to 90° and down to -30°), fast response and smooth operation, the camera captures every move securely.

Finally, the 3G-SDI interface allows for crystal-clear and uncompressed video without delays. Combined with Televic Conference's Plixus network, working with high-quality, lipsynced video becomes a joy.

Blackmagic DeckLink Mini

» Capture Card

Blackmagic ATEM 1/M Constellation HD

» Video Switcher

The Blackmagic ATEM video switcher puts a host of video switching options easily at your fingertips. It includes 10 3G-SDI video inputs to convert any 1080p input source, making it ideal to use with the T-Cam cameras. It includes a large LCD front panel to see program output and change the switcher settings via the on-screen menu.

T-CAM Camera Control

» Software

Configure camera positions, assign name overlays (separate license required), set up 2 shots per seat, wide shots, etc. Manual override is available.



BlackMagic Micro Converter SDI to HDMI

» HDMI converter

System Requirements

Recommended PC requirements:

- » Desktop PC with at least 1 PCI slot. 2 PCI slots, if both preview and overlay are required.
- » Windows 7, 8 and 10 supported
- Serial COM port (USB to Serial converter can be used as well) when not used with IP connection
- » PoE switch when used with IP connection

Standard USB joystick can be connected for camera control. Recommended joystick: Axis T8310.

Specifications

T-CAM Package CM70

Mechanical	
Weight	1.5 kg
Size packed	26 x 24 x 24 cm
Weight packed	2.4 kg

IP-CAM CM70

Technical & Electrical	
Sensor	1/3" CMOS, 2.12 mp, 16:9
Video output	1080p 60 / 59.94 / 50 fps, 1080p 30 / 29.97 / 25 fps, 720p 60 / 59.94 / 50 fps
Optical zoom	20×
Panning angle	-170° ~ +170°
Tilting angle	-30° ~ +90°
Video output (HD) interface	3G-SDI
PoE	PoE 12 W (802.3af)
Camera control interface	RS-232 / RS-422 / Ethernet
Camera control protocol	VISCA / PELCO-P / PELCO-D
Video S/N ratio	> 55 dB
Focal length	4.4-88.8 mm
Digital noise reduction	2D & 3D DNR
Horizontal viewing angle	55.2° ~
Vertical viewing angle	3.2° 42.1° ~

Aperture	F1.8-F11
Minimum illumination	0.05 LUX
Gain control	Auto, manual
White balance	Auto, manual, OnePush, 2,400 K - 7,100K in steps of 100K
H&V image flip	Supported 255
Audio input	Balanced Line In via 5-way Phoenix connector
Audio output	Ethernet, SDI and HDMI
Environmental	
Operating Temperature	-5° C to 40° C (23° - 104°F)
Storage Temperature	-20° to 60° C (-4° to 140° F)
Relative Humidity	20% to 95% non-condensing
	9

Blackmagic ATEM 1/M Constellation HD

Technical & Electrical	
Power Supply	1 x Internal 100 - 240 AC
Power Usage	36 W
Dimensions	28 x 4.4 x 17.6 cm
Connections	
Total Video Inputs	10
Total Video Outputs	6
SDI Rates	1.5G, 3G
Total Audio Inputs	2 x balanced 1/4 inch Jack 1 x 5 pin XLR Talkback
Total Audio Outputs	1 x 5 pin XLR Talkback
SDI Audio Inputs	4 x 10-bit SD/HD switchable. 2 channel embedded audio.
SDI Audio Inputs	2 Ch embedded audio on all SDI inputs
SDI Audio Outputs	2 Ch embedded audio on all SDI outputs
Reference Input	Tri-Sync or Black Burst
Video Input Re-Sync	On all 10 inputs
Frame Rate and Format Converters	On all 10 inputs
SDI Aux Outputs	Any of the 6 SDI outputs
SDI Preview Outputs	Any of the 6 SDI outputs.
SDI Program Output	Any of the 6 SDI outputs

1 x USB-C supporting 720p or 1080p at PGM frame rate
1 x 3G-SDI
Ethernet. Direct connection between panel and chassis, or via network.
Yes
RJ45 for 3rd party talkback systems
10/100/1000 BASE-T
1 x USB-C supports USB 3.1 Gen 1 (5Gb/s)
None
720p50, 720p59.94, 720p60, 1080i50, 1080i59.94, 1080i60 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60
SMPTE 292M, SMPTE 296M, SMPTE 424M, SMPTE 425M level A and B
4:2:2
10-bit
REC 709
Automatically detects between 1.5G-SDI and level A or level B 3G-SDI
Built in 2.2"LCD monitor for video, 10 LED buttons for setup and emergency switching, 4 source but- tons, 6 talkback selection and mix buttons, menu control knob and set button, front panel lock
button.
button.
0° to 40°C (32° to 104°F)