# Angekïs®

# Angekis®

COMPANY BROCHURE

# Contents

# WHY
# Angekis
# ?

## Leaders in USB Video Conferencing

Way back in 2011, our team helped pioneer the USB PTZ camera with one of the first of such video conference cameras ever released on the market. Since then our team has continued to pave the way advancing technology in the video conferencing camera industry in the realms of AF, AE, AWB, UVC, camera controllers, and much more. In 2015, we decided to spin off and start our own brand.

## Class Leading Warranty

Angekis is built to last. We have the utmost confidence in our design and manufacturing, and back up every product with a class leading 3 year manufacturer's warranty. Your A/V equipment is a long term investment, and when you choose Angekis you can rest assured - we've got you covered.

## Award Winning Range

The original Saber camera won Best in Show from the 2016 ISE Expo in Amsterdam – the world's largest A/V industry conference. That meant taking on every world famous brand in the industry and coming out on top. Our technology won another award in 2018 with the introduction of the revolutionary Saber Auto Pilot, recognizing its next generation auto tracking as Best in Class.

## Easy Integration

Angekis products are tested for compatibility with a wide range of hardware and software. Whether you prefer Skype, Zoom, MS Teams, Tencent Meeting, Google Hangouts, or any other videoconferencing solution, chances are that Angekis A/V equipment offers plug and play compatibility. And if you're not sure? Just contact us and we'll help you test it.

## Complete Solution

Angekis offers a range of products with versatile integration capabilities. Whether you want something simple like video, control, and power through a single USB 3.0 cable (Saber Light), or to daisy chain a string of super high performance cameras into an advanced control console over RS232 (Saber Plus), or just need a reliable speakerphone that sounds great (Cleartalk Wireless ASP-04) - we have a solution for you.

# TORPEDO

**Accelafocus:**

Angekis Accelafocus represents a generational leap in autofocus technology. Using optical phase detection, the camera moves with a mission, locking on and bringing you into perfect clarity in less than 0.1 second.
Feel free to compare Accelafocus to any other autofocus technology on the market and see how it stacks up. We'll be the first to say: "target acquired".

**Form Factor:**

The Torpedo is armed and ready. Just like its namesake, the Torpedo has a sleek and sturdy metal casing intelligently designed to protect the advanced electronics contained within.
The anodized, fingerprint proof metal surface looks great in any setting, and the shape of the device, plus the built-in bracket stand, makes it easy to transport, deploy, find just the right angle, and do it all over again.

**Mounting Options:**

A built-in collapsible mounting bracket makes the device easy to transport and simple to deploy. A 6mm mounting receiver also allows for the use of tripods and other optional mounting solutions so you can find the perfect angle.

| Model | Torpedo ATO-01 | | |
|---|---|---|---|
| Sensor | 1/2.8 inch high quality 8.42 megapixel UHD CMOS sensor | | |
| Video Format | YUY2: 1280*720 @ 12/5, 1024*576 @ 20/15, 640*480 @ 30/20 | | |
| | MJPG: Portrait Video<br>1080*1920 @ 30/15, 720*1280 @ 30/15,<br>576*1024 @ 30/15, 360*480 @ 30/15 | | |
| | MJPG：Landscape Video<br>4000*3000 @ 15/10, 3840*2160 @ 30/10, 2560*1440 @ 20/10,<br>1920*1080 @ 60/30, 1280*720 @ 60/30, 1024*574 @ 60/30, 640*480 @ 20/10 | | |
| Video Interface | USB-C | Control Port | USB-C |
| Optical Zoom | Fixed lens | S/N Ratio | 64dB |
| Digital Zoom | 3X | Autofucus | Accelafocus PDAF |
| Polar distance | 3—5 meters | Minimum Lux. | 0.1 lux |
| Sensitivity | -26±2dB RL=2.2KQVs=2.0V | White Balance | Auto/Manual |
| Input Voltage | USB Power Supply | Optics | f3.96mm, F1.8 |
| Dimensions (LxWxH) | 89mm x 48mm | Built-in Mic | 1 |
| Field of View | Diagonal= 80°，Horizontal=65° | Anti-Flicker | 50HZ/60HZ/OFF |
| Sensor Resolution | 8.42 MP | WDR | Supported |
| Casing | CNC Anodized Metal | Net Weight | 0.27KG |

## Features and Specifications

○ 4K Ultra High Definition Video @ 30fps
   and 1080p Full High Definition @ 60fps.

○ Sony 1/2.8" 8.42 MP UHD CMOS Image Sensor.

○ High End Professional Optical Glass
   with over 95% Light Transmission.

○ Digital Zoom up to 2x @ 1080p and 3x @ 720p.

○ Angekis Accelafocus quickly and accurately detects,locks on,and autofocuses in under 0.1 second flat.

## Only Angekis Delivers

○ Built-in Omnidirectional Microphone with Noise Cancellation.

○ Automatic Exposure and Lighting algorithms calculate and
   optimize settings like aperture, shutter speed, ISO, contrast, and more-or
   can be customized with Angekis'custom NECC camera control app.

○ Mounting receiver allows for the use of tripods and other
   optional mounting solutions for the perfect angle.

# COMPACT ONE

**4K clarity, built-in microphones, group auto-framing, and auto-tracking in a compact package.**

## Group Autoframing

Let the Compact One do the work with group auto-framing. As people join your meeting the camera will automatically adjust to get everyone in the picture.

## Metal Housing

CNC machined with a fingerprint-proof, anodized matte surface finish. Elegant, conveniently sized, and a beautiful addition to any space.

## Plug and Play

Enjoy a seamless experience with your go-to video conferencing app. One cable gives you audio, video, and power. Plug it into a USB-B port and you're good **to go!**

## Exceptional Outputs & Controls:

Connects via USB-B. Controlled via IR remote control. Zoom in, zoom out, change the brightness, select a focus, or hand over the image settings to the automatic adjustment program.

| Model | Compact One ACO-01 | | |
|---|---|---|---|
| Sensor | 1/2.8 inch high quality 8.42 megapixel SONY CMOS sensor | | |
| Video Format | YUY2/NV12: 1280*720 @ 15fps;1024*576 @ 20fps;640*480 @ 30fps | | |
| | MJPG: 3840*2160 @ 30fps; 2560*1440 @ 30fps; 1920*1080 @ 30fps; 1280*720 @ 30fps; 1024*576 @ 30fps; 640*480 @ 30fps | | |
| | H.264/H.265: 3840*2160@30;2560*1440@30; 1920*1080@30;1280*720;30;1024*576@30;640*480@30 | | |
| Video Interface | USB 2.0 typeB | Control Port | USB 2.0 (UVC/UAC) |
| Optical Zoom | Fixed lens | S/N Ratio | >50dB |
| Digital Zoom | 4X | Optics | f=2.20mm，F2.2 |
| Polar distance | 3—5 meters | Minimum Lux. | 0.1 lux |
| Sensitivity | -26±2dB RL=2.2KQVs=2.0V | White Balance | Auto/Manua |
| Input Voltage | 4.4~5.25V@500mA (USB port) | Casing | CNC Anodized Metal |
| Dimensions (LxWxH) | 115mm x 36mm x 60mm | Anti-Flicker | 50HZ/60HZ/OFF |
| Field of View | 120° | WDR | Supported |
| Sensor Resolution | 8.42 megapixel | Net Weight | 0.37KG |

# Features and Specifications

○ Ultra HD 4K video over USB 2.0 Type-B

○ 2 x built-in microphones

○ Image Sensor: 1 / 2.8 inch 8MP

○ Driver-free instant connectivity (UVC 1.5)

○ Autoframing on chip

○ ePTZ autotracking on chip

○ 4x lossless digital zoom

○ 120 degree FOV

○ Compatible with Windows, OSX, Linux, and Android (over YUY2 VGA)

# Only Angekis Delivers

○ Ultra Optix Digital Noise Reduction (DNR) image technology keeps your image sharp and clear – even in low light settings.

○ Angekis' group autoframing algorithm gets your whole team together - automatically.

○ Tested for compatibility with all major video conferencing platforms.

○ Built-in monitor mount

# ONE TOUCH AOT-01

| Model | OneTouch AOT-01 |
|---|---|
| Sensor | 1/2.8 inch high quality, 8.42 megapixel SONY CMOS sensor |

| Video Interface | USB-C | 3840*2160@30/25/20/15/10/5fps<br>2592*1944@30/25/20/15/10/5fps<br>2048*1536@30/25/20/15/10/5fps<br>1600*1200@30/25/20/15/10/5fps<br>1920*1080@30/25/20/15/10/5fps<br>1280*720@30/25/20/15/10/5fps<br>1024*576@30/25/20/15/10/5<br>960*540@30/25/20/15/10/5fps |
|---|---|---|

| Optical Zoom | Fixed lens |
|---|---|
| Digital Zoom | 5x |
| FOV | 120° |
| Sensor Resolution | 8.42 megapixel |
| Control Port | USB-C |
| Video Port | USB-C |
| S/N Ratio | >50dB |
| Optics | f=2.20mm，F2.2 |
| Minimum Lux. | 0.1 lux |
| White Balance | Auto/Manual/Indoor/Outdoor |
| Anti-Flicker | 50HZ/60HZ/OFF |
| WDR | Supported |
| Polar Distance | 3~5meters |
| USB Audio | Supported |
| Sensitivity | 38dB 94dB SPL@1KHz |
| Input Volatage | DC port/PoE (Optional) |
| Dimensions | 395mm x 113mmx 112mm |
| Net Weight | 1KG (2.2Lbs) |

## 4K Video，Dynamic Audio，and Mic．1 Cable．1 Touch．

Seamless. It's a word we like to hear when discussing A/V setups. The Angekis One Touch all in one Video and Audio Bar gives you exactly that. Boasting a 4 x beam forming microphone array, 4K video, group auto-framing, 92 dB speakers, and a simple plug and play USB-C connector to handle audio, video, and control, with the Angekis One Touch you've got a solution that works ... with just one touch.

## HD Voice With Angekis Audio Processing Technology

- Advanced audio processing algorithm samples, processes, and refines the spatial characteristics of the sound field.
- Digital noise reduction cleans up ambient sound, refining and cleaning up your audio.
- 360° intelligent sound pickup gives you 3 meters of excellent microphone clarity, and works very well up to 5 meters.
- 48KHz uplink and 48KHz downlink audio sampling rate.
- Perfect full-duplex simultaneous two way communication makes your conversations sound clear and natural.
- Ultra high fidelity voice.
- Room filling sound up to 92dB (at 0.5m).

## 4K Conferencing Video Capture With Real Life Clarity

The 4K, 2160p camera provides exceptional video for online meetings and video streaming, with real time synchronization, fluid movement capture, and smooth framing. It is compatible with all major video conferencing software, including Skype, Zoom, MS Teams, etc., and fits neatly above or below your screen.

## One Touch

Enjoy quick and versatile deployment. A single USB-C connection gives you instant audio and video, plug and play style. No need for any separate microphones, speakers, or cables to clutter the table.

## Group Autoframing

Let One Touch do the work with group auto-framing. As people join your meeting the camera will automatically frame them into view!

## Features:

- 120° wide-angle, distortionless video supporting MJPG, H.264, H.265 and 4K @30fps.
- 5 x Digital Zoom in Full HD.
- 4 x beam forming microphone array
- Full duplex, high fidelity conference audio. As seamless and natural as real life.
- High fidelity and dynamic noise reduction makes your audio crystal clear.
- USB HID Reverse control lets you control your computer setting through the device.
- New Angekis audio processing algorithm.
- 360° coverage, 3-5 meter range pickup, 384ms echo cancellation and dynamic noise reduction.
- Group auto-framing with smooth as silk transitions.
- Comes with a built in mount, but can also accept wall adapter and other options.

# SABER 4K
## Saber-12UFHD36



The Saber 4K provides cutting edge 4K, ultra high definition video over HDMI and IP. The trend towards bigger and better resolution is coming as fast as ever. Future proof your conference room and live event streaming with Angekis.

| Model | Saber 4K (Saber-12UFHD36) | | |
|---|---|---|---|
| Video Format | HDMI (V1.4) | 3840*2160p @ 30/25fps<br>1920*1080p @ 60/50/30/25/59.94/29.97/24fps<br>1920*1080i @ 60/50/59.94fps<br>1280*720p @ 60/50/30/25/59.94/29.97fps | |
| | SDI | 1920*1080p @ 60/50/30/25/59.94/29.97/24fps<br>1920*1080i @ 60/50/59.94fps<br>1280*720p @ 60/50/30/25/59.94/29.97fps | |
| | USB 2.0 | 1280*720p @ 25fps<br>1024*576p @ 30fps<br>960*540p @ 30fps<br>640*360p @ 30fps<br>512*288p @ 30fps | |
| | USB 3.0 | 1920*1080p @ 60/50/30/25fps<br>1280*720p @ 60/50/30fps<br>1280*720p @ 25fps<br>1024*576p @ 30fps | |
| | RJ45 | 3840*2160@1~30/ 1920*1080@1~30 ( Main Stream )<br>1280*720@1~30 /1027*576@1~30 / 640*360@1~30 ( Sub stream ) | |
| Video Interface | HDMI ( V1.4 ), SDI, RJ45, USB3.0 (Compatible with USB2.0) | | |
| Sensor | 1/2.8 inch 8.42MP CMOS sensor | | |
| Zoom | f3.92~ 47.32mm(12x), F1.84- 2.81, View Angle: 72.5° (Far) - 6.3° (Near) | | |
| Rotation Angle | Pan: -170° ~ +170°;     Tilt: -30° ~ +90° | | |
| Rotation Speed | Pan: 0°~120°/s ; Tilt: 0°~80°/s | Preset: | Remote control: 10; RS232: 128; Accuracy: 0.1° |
| Network Speed | 1000M | Minimum Lux | 0.01 lux |
| Video encode | H.264/H.265(default: H.264) | White Balance | Auto / Indoor / Outdoor / Manual / Outauto / Sodium Lamp Auto / |
| Bit Rate Control | Variable Bit Rate, Constant Bit Rate | Exposure | Auto / Manual / Bright / Shutter / Iris |
| Video Bit Rate | 0Kbps-15360Kbps | Focus | Auto / Manual |
| Anti Flicker | OFF / 50Hz / 60Hz | Iris | Auto / Manual |
| PanTilt Flip | Supported | Electric Shutter | Auto / Manual |
| Input Voltage | DC12V / PoE | Gamma | Supported |
| Dimension | 220mm x 190mm x 173mm | WDR | Supported |
| Net Weight | 1.8KG (3.98LBS) | BLC | Supported |
| 2D Noise Reduction | Supported | 3D Noise Reduction | Supported |
| Daisy Chain | Support RS232 Serial Daisy Chain | POE | Supported |
| Control Port | RS232, RS485 (Serial VISCA, Pelco-P/D), RJ45 (VISCA over IP), USB3.0 (UVC1.5), USB2.0 (UVC1.1) | IP Protocol | TCP/IP, HTTP, DHCP, RTSP, RTMP, Onvif 2.4, VISCA over IP (TCP&UDP), SRT |



The Saber 4K is a professional grade Ultra HD video camera that supports IP/LAN, HDMI, SDI, RS232 in/out and USB 3.0 outputs. This versatility and range of integration options is ideal for broadcasting, high end video conferencing and video surveillance applications.

## Features:

- Outputs: IP, HDMI, RS232 in & out, SDI, USB 3.0 and LAN
- 12x Optical Zoom + 2x Digital Zoom, 72.5°field of view
- 3840 x 2160p @ 30 fps Ultra HD Video Resolution
- Automatic access to IP Address
- Smooth PTZ Mechanical Design
- Reverse Ceiling Mountable
- Accurate Pan Tilt Motor Control
- WDR, 3D Noise Reduction feature

- 128 Presets
- Supports RS232/485 Serial Control
- Sony VISCA and PELCO P/D Protocol
- Supports Daisy Chain Feature
- Day/night switch for surveillance applications

# SABER IP 20X
## IP-20FHD60

| Model | | Saber IP20X IP-20FHD60 | |
|---|---|---|---|
| **Video Format** | HDMI(V1.4) | 1920*1080p @ 60/50/30/25/59.94/29.97/24fps<br>1920*1080i @ 60/50/59.94fps<br>1280*720p @ 60/50/30/25/59.94/29.97fps | |
| | SDI | 1920*1080p @ 60/50/30/25/59.94/29.97/24fps<br>1920*1080i @ 60/50/59.94fps<br>1280*720p @ 60/50/30/25/59.94/29.97fps | |
| | USB | 1920*1080p @ 60/50/30/25fps (USB3.0)<br>1280*720p @ 60/50/30fps (USB 3.0)<br>1280*720p @ 25fps (USB3.0 & USB2.0)<br>1024*576p @ 30fps (USB3.0 & USB2.0)<br>960*540p @ 30fps (USB2.0)<br>640*360p @ 30fps (USB2.0)<br>512*288p @ 30fps (USB2.0) | |
| | RJ45 | 1920*1080 @ 1~60fps ( Main Stream )<br>1280*720@1~30 / 1027*576fps @ 1~30fps / 640*360 @ | |
| **Video Interface** | | HDMI ( V1.4 ), SDI, LAN, USB 3.0, USB 2.0 | |
| **Sensor** | | 1/2.8 inch 2.1MP CMOS sensor | |
| **Zoom** | | f4.9~ 98mm(20x), F1.5- 3.0, View Angle:60° ( Far)-3.2° ( Near) | |
| **Rotation Angle** | | Pan: -170° ~ +170°;      Tilt: -30° - +90° | |
| **Rotation Speed** | Pan: 0°~120°/s ;<br>Tilt: 0°~80 /s | White Balance | Auto/Indoor/Outdoor/Manual/<br>Outauto/Sodium Lamp Auto/<br>Sodium Lamp |
| **Preset** | Remote controller:10;<br>RS232:128; Accuracy:0.1° | Exposure | Auto/Manual/<br>Bright/Shutter/Iris |
| **IP Protocol** | TCP/IP, HTTP, DHCP,RTSP<br>, RTMP, Onvif 2.4, VISCA<br>over IP (TCP&UDP), SRT<br>Compatible | Control Port | RS232, RS485 (Serial Visca,<br>Pelco-P/D), RJ45 (VISCA<br>over IP), USB3.0 (UVC1.5),<br>USB2.0 (UVC1.1) |
| **Network Speed** | 1000M | Iris | Auto / Manual |
| **Video encode** | | H.264/H.265(default: H.264) | |
| **Bit Rate Control** | Variable Bit Rate,<br>Constant Bit Rate | Gamma | Supported |
| **Video Bit Rate** | 0Kbps-15360Kbps | WDR | Supported |
| **Focus** | Auto / Manual | BLC | Supported |
| **POE** | Supported | 2D Noise Reduction | Supported |
| **Daisy Chain** | Support RS232<br>serial daisy chain | 3D Noise Reduction | Supported |
| **Minimum Lux** | 0.01 Lux | Anti Flicker | OFF/50Hz/60Hz |
| **Dimension** | 220mm x 190mm x 173mm | Pan Tilt Flip | Supported |
| **Net Weight** | 1.8KG (3.98LBS) | Input Voltage | DC12V/POE |
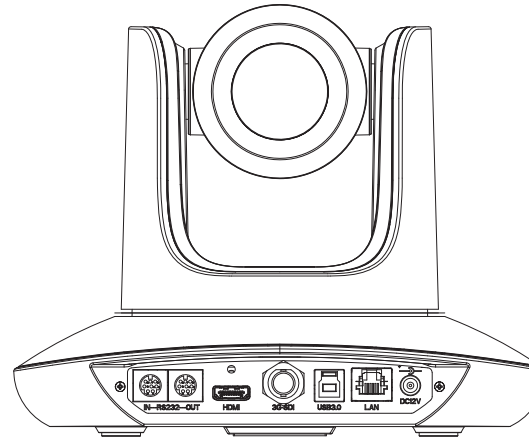
**The Livestreaming Camera with Versatility**

Professional IP livestreaming with 20x zoom. High end performance and incredible connectivity at an unparalleled value.  The Saber IP20X Full HD camera offers smooth pan and tilt movement with a powerful 20x zoom. With a versatile range of interface options and compatibilities, the Saber IP20X easily integrates into your broader A/V setup. Its capabilities give you the power to cover the largest conference rooms, lecture halls, and auditoriums with lightning fast video over IP.

**Advantages:**
- Full HD video: with advanced 1/2.8 inch 2.1 MP sensor and high quality 20x lens
- Fast switching between different video formats: 3 seconds or under
- Fast and accurate autofocus
- Easy firmware upgrade (field-upgradable): no need to open the camera housing
- USB 2.0 compatible
- Daisy Chain function: Up to 7 devices with RS232
- Compatible with the majority of videoconferencing software (UVC1.1 protocol standard)
- Multi language OSD menu: supports English, Chinese, Russian, Spanish

**Features:**
- USB 3.0 & HDMI & IP & SDI simultaneous output
- Zoom: 20x Optical Zoom + 2x Digital Zoom
- High resolution video: 1920x1080p @ 60fps
- 60 Degree field of view:
- Ultra smooth PTZ mechanism
- Accurate PT motor control
- Up to 128 presets
- Effective  RS232/485 serial control.
- WDR, 3D-noise reduction function
- Mounts: Wall mount & ceiling mount available
- Sony Visca and Pelco P/D protocol controls

**Now Available in White**

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# SABER PLUS
## U3D-12FHD6

| Model | Saber Plus U3D-12FHD6 | | |
|---|---|---|---|
| Video Format | HDMI(V1.4) | 1920*1080p @ 60/50/30/25/59.94/29.97/24fps<br>1920*1080i @ 60/50/59.94fps<br>1280*720p @ 60/50/30/25/59.94/29.97fps | |
| | SDI | 1920*1080P60/50/30/25/59.94/29.97/24<br>1920*1080i60/50/59.94<br>1280*720P60/50/30/25/59.94/29.97 | |
| | USB | 1920*1080p @ 60/50/30/25fps (USB3.0)<br>1280*720p @ 60/50/30fps (USB3.0 )<br>1280*720p @ 25fps (USB3.0 & USB2.0)<br>1024*576p @ 30fps (USB3.0 & USB2.0 )<br>960*540p @ 30fps (USB2.0)<br>640*360p @ 30fps (USB2.0)<br>512*288p @ 30fps (USB2.0) | |
| | RJ45 | 1920*1080 @ 1-30 ( Main Stream )<br>1280*720 @ 1~30fps / 1027*576 @<br>1~30fps / 640*360 @ 1~30fps (Substream) | |
| Video Interface | HDMI ( V1.4 ), SDI, RJ45, USB 3.0 | | |
| Sensor | 1/2.8 inch 8.51MP CMOS sensor | | |
| Zoom | f3.92~ 47.32mm(12x), F1.8- 2.8, View Angle: 72.5°(Far) - 6.3°(Near) | | |
| Rotation Angle | Pan: -170° ~ +170°;    Tilt: -30° - +90° | | |
| Control Port | RS232, RS485 (Serial VISCA, Pelco-P/D)、RJ45 (VISCA over IP) , USB3.0 (UVC1.5), USB2.0 (UVC1.1) | IP Protocol | TCP/IP, HTTP, DHCP, RTSP , RTMP, Onvif 2.0, VISCA over IP (TCP&UDP) SRT |
| White Balance | Auto/Indoor/Outdoor/ Manual/Outauto/ Sodium Lamp Aut/ Sodium Lamp | Exposure | Auto/Manual/ Bright/Shutter/Iris |
| Preset | Remote controller: 10; RS232: 128; Accuracy: 0.2° | Focus | Auto / Manual |
| Rotation Speed | Pan: 0°~120°/s ; Tilt: 0°~80/s | Iris | Auto / Manual |
| Network Speed | 1000M | | |
| Video encode | IP--H.264/ H.265 (default: H.264) | Gamma | Supported |
| Bit Rate Control | Variable Bit Rate, Constant Bit Rate | WDR | Supported |
| Video Bit Rate | 0Kbps-15360Kbps | BLC | Supported |
| Pan Tilt Flip | Supported | 2D Noise Reduction | Supported |
| POE | Supported | 3D Noise Reduction | Supported |
| Daisy Chain | Supports RS232 serial daisy chain | BLC | Supported |
| Minimum Lux | 0.01 lux | Input Voltage | DC12V/POE |
| Dimension | 220mmx190mmx173mm | Net Weight | 1.8KG (3.98LBS) |

## Technical Specifications

- Video Format: 1080p59.94/50/29.97/25; 720p59.94/50/29.97/25
- Video Output: USB3.0 HDMI, SDI, IP.
- Sensor: 1/2.8 inch 8.5MP CMOS sensor, providing 1920x1080P @60fps.
- Lens: f3.9-6.1mm (12x Zoom), F1.8 – 2.8.
- Field of View: 72.5°.
- Rotation Angle: Pan rotation: ±170°; Tilt rotation: -30°~+90°, support up-side down installation.
- Pan speed:0.1°-150°/s; Tile speed: 0.1°- 80°/s.
- Pre-set: 10 via IR remote setting, (255 via COM setting, pre-set accuracy: 0.2°.
- Support Auto/Manual White Balance, Auto/Manual Exposure (Iris, Shutter).
- Control signal port: USB UVC FECC and 8 pin mini DIN–RS232–VISCA/Pelco-D/Pelco-P protocol.
- Max consumption: 24W.
- Working temperature: -5 - 45°C, Storage temperature: -20 - 60°C.
- Net weight: 1.5KG.
- Dimension: 220x190x173 mm.
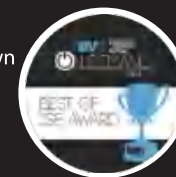


Onscreen controls allow settings to be adjusted via keyboard ＆ mouse (or remotely)

All models are reverse mountable

Winner of Best USB PTZ Camera Award at the 2016 ISE Expo in the Netherlands. The first direct connect USB 3.0 HD PTZ video conference camera with desktop NECC app control. The Saber offers superior performance at an unparalleled price.

- Sleek and intelligent design.
- Crystal clear HD image quality via IP, HDMI, SDI and USB 3.0.
- Low light ability. Excellent image quality even at low lux of 0.01 lux.
- IP, HDMI & USB3.0 simultaneous output.
- Far End Camera Control (FECC) via USB 3.0.
- Desktop app control software included to control the camera and video settings.
- Visca control.
- Utilizing belt drive technology the twin motors of the PTZ are ultra quiet, smooth and provide fast movement.
- Larger FOV at 72.5 degree with no video distortion.
- 2D and 3D DNR offers exceptional video quality and automatic lighting adjustment.
- Fully operational remote control with power function, setting the camera back to the start position.
- Reverse mountable,tripod screw thread at the bottom.

# SABER LIGHT 5X
## U3-5FHD6
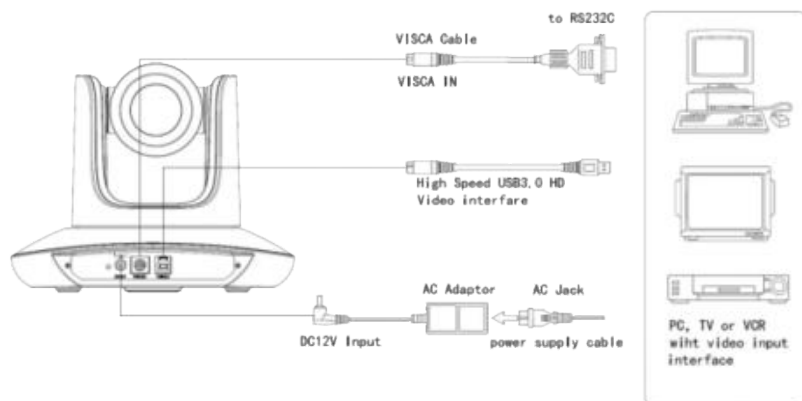


Everything you love about the Saber but at a lean, mean price.
Can be powered solely through the USB 3.0 port.

**Product Highlights:**

○ The same amazing award winning image quality as the rest of the original Saber Series.
○ Power, Video, and Control over a single USB 3.0 (note: to achieve stable power supply via USB 3.0 cable, we suggest only using the 3m USB 3.0 cable supplied by the factory)
○ Advanced DSP, 1/2.8 inch 2MP image sensor, and high quality 5x zoom 90 degree FOV optical lens, provides fluid motion and a crystal clear image.
○ 90°degree FOV
○ 5x Optical Zoom + 2x Digital Zoom.
○ Fast and accurate autofocus performance
○ Easy firmware upgrades

| Model | Saber Light (U3-5FHD6) | | |
|---|---|---|---|
| Video Format | YUY2 (USB3.0) | 3840*2160@10; 2592*1944@15; 2048*1536@20; 1600*1200@30; 1920*1080@25/30; 1280*720@25/30; 1024*768@25/30; 1024*576@25/30; 800*600@25/30 | |
| | MJPG (USB 3.0interface which supportUSB2.0) | 3840*2160@30; 2592*1944@30; 2048*1536@30; 1600*1200@30; 1920*1080@30; 1280*720@30; 1024*768@30; 1024*576@30; 800*600@30; H.264/H.265(USB3.0 back support USB2.0): 3840*2160@20; 2592*1944@30; 2048*1536@30; 1600*1200@30; 1920*1080@30; 1280*720@30; 1024*768@30; 1024*576@30; 800*600@30 | |
| | YUY2 (USB2.0) | 1920*1080@10; 1280*720@15; 1024*768@25; 1024*576@30; 800*600@30; 640*480@30 | |
| Video Interface | USB 3.0 (Compatible with USB 2.0) | | |
| Sensor | 1/2.8 inch 2.1MP CMOS Sensor | | |
| Lens | 3.1 ~15.5mm(5x), F2 ~2.8, Field of View: 90°(wide)-26.5°(tele) | | |
| Pan/tilt Rotation | Pan:± 170°, Tilt:-30°~+90°; reverse mountable | | |
| Pan/tilt Speed | Pan: 0.1 ° - 120 °/s; Tilt: 0.1 °-80°/s | | |
| Presets | 10 via IR remote setting, 128 via VISCA control, preset accuracy: 0.1° | | |
| Control Port | RS232, RS485 (Serial VISCA, Pelco-P/D), USB3.0(UVC1.5), USB2.0(UVC1.1) | | |
| White Balance | Auto / Manual / AutoTracking / OnePush / Indoor / Outdoor / Sodium Lamp / Fluorescent Lamp | | |
| Focus | Auto/Manual | 2D Noise Reduction | Supported |
| Iris | Auto/Manual | 3D Noise Reduction | Supported |
| WDR | Supported | Gamma Setting | Supported |
| BLC | Supported | Mirror Image | Supported |
| Input Voltage | 5V 1000Ma (USB 3.0) 12V DC1A (Power Adapter) | Anti Flicker | OFF/50Hz/60Hz |
| Dimensions | 220mm x 190mm x 173mm | Min. Lux | 0.01 Lux |
| Mount | Reverse Mountable, Wall Mountable | Net Weight | 1.25KG(2.8LBS) |

# SABER U2
## U2-10FHD30

**Effortless elegance with incredible zoom. 12x optical plus 12x digital zoom plus USB 2.0 compatibility means you'll never miss a thing.**

**12x Optical + 12x Digital Zoom**

12x Optical + 12x Digital zoom gets you up close and personal. Even in the largest conference rooms, the Saber U2's zoom capabilities will give you the power to see everything with incredible detail. With both manual and auto focus options at your fingertips, your video conferencing equipment will be as detail oriented as your team.

**72.5° FOV**

With a 72.5° FOV you can fit the whole team on one field.  Enjoy the wide view,  or use the lossless zoom to zoom in on a particular person or object.  Angekis products are capable,  reliable,  and beautiful.  Get the most out of your workspace while improving the aesthetic atmosphere.

**Effortless Elegance**

The Saber U2 is a plug and play device that is instantly compatible with your favorite video conferencing software, as well as any hardware running UVC 1.5. It works with just about any Windows, OSX, Android, or Linux device without needing to install drivers. We've also chosen to use USB 2.0 on the Saber U2 in order to make it easy for people running older devices to stay current when it comes to their A/V. You know what they say: Keep It Simple, Silly.

| Model | Saber U2 U2-12FHD30 | |
|---|---|---|
| Video Format | MJPG | 1080p @ 30fps, 720p @ 30fps, 640*480p @ 30fps |
| Video Interface | USB 2.0 | |
| Sensor | 1/2.8 inch high quality2.1MP CMOS sensor | |
| Lens | F3.92~47.32mm(12x), F1.8 -14, Field of view: 72.5°(wide)-6.3°(tele) | |
| Pan/tilt Rotation | Pan:±170°; Tilt:-30°~+90°, reverse mountable | |
| Pan/tilt Speed | Pan: 0.1°-120%；Tilt: 0.1°-80% | |
| Preset | 10 via IR remote setting, 128 via VISCA control, preset accuracy: 0.1° | |
| Control Port | RS232, RS485 (Serial VISCA, Pelco-P/D), USB2.0(UVC1.1) | |
| Min. Lux | 0.01 Lux | |
| White Balance | Auto/Manual | |
| Focus | Auto/Manual | |
| Iris | Auto/Manual | |
| WDR | Supported | |
| BLC | Supported | |
| 2D Noise Reduction | Supported | |
| 3D Noise Reduction | Supported | |
| Input Voltage | DC12V | |
| Dimension | 148mm x 132mm x 161mm | |
| Net weight | 1.25KG (2.8LBS) | |

**Specifications:**

○  Video: MJPG 1080p @ 30fps
○  Video Connection: USB 2.0
○  Control: RS232/485
○  1/2.8 inch 2.1MP image sensor
○  UVC 1.5 Protocol
○  12x Optical + 12x Digital Zoom
○  Lens: F3.92~47.32mm (12x)
○  F1.8-14
○  FOV = 72.5° (wide) 6.3° (tele)
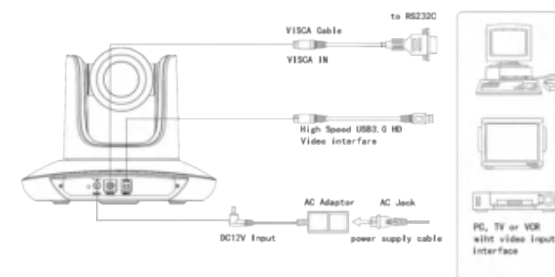
## NDI Low Latency Protocol

With Angekis cameras being recognized for their class leading video imaging and auxiliary technologies, it makes perfect sense to merge these capabilities with Newtek®'s NDI video over IP protocol.

The Angekis Saber IP20X and Saber 4K PTZ cameras now come in NDI versions. The Saber 4K NDI and Saber IP20X NDI run on the NDI H|X protocol, giving them incredibly low bandwidth usage for high quality images. The Saber IP20X Full NDI runs on the Full NDI protocol, giving this camera ultra low latency video over IP capabilities.

All Angekis NDI cameras combine full spectrum video output interfaces (including LAN, 3G-SDI, HDMI and USB 3.0), making them versatile and perfect for use for just about any live streaming application. All Angekis NDI Cameras support power, video and control via a single Ethernet cable, simplifying set up and installation for live streaming systems.

The Angekis NDI range features broadcast frame rates and NDI video output designed for video production professionals. Utilizing the latest professional camera control technologies, remote camera operation has never been this easy. Broadcasters simply connect to an IP network, then connect using professional 3G SDI, Ethernet connected NDI, and/or traditional HDMI, which can all be used simultaneously. Utilizing optical zoom lenses up to 20x, video production with Angekis cameras can reliably capture close up shots up to 52 feet (16 meters) away.

| Model | Saber IP20X Full NDI (FNDI-20FHD60) | | |
|---|---|---|---|
| **Video Format** | HDMI(V1.4) | 1920*1080P60/59.94/50/30/29.97/25/24/23.98<br>1920*1080I60/59.94/50<br>1280*720P60/59.94/50/30/29.97/25 | |
| | SDI | 1920*1080P60/59.94/50/30/29.97/25/24/23.98<br>1920*1080I60/59.94/50<br>1280*720P60/59.94/50/30/29.97/25 | |
| | USB Type-C | YUY2: 1920*1080P6; 1280*960P10;<br>1280*720P13; 1024*768P16;<br>800*600P25; 640*480P30;<br>640*480P30<br><br>MJPG: 1920*1080P30; 1280*960P30;<br>1280*720P30; 1024*768P30;<br>800*600P30; 640*480P30;<br>640*480P30 | |
| | NDI® | 1920*1080P60/59.94/50/30/29.97/25/24/23.98<br>1920*1080I60/59.94/50<br>1280*720P60/59.94/50/30/29.97/25 | |
| **Supported Protocol** | **Full NDI®** | Control Port | RS232, RS485 (Serial Visca, Pelco-P/D    J45 (VISCA over IP, USB2.0(UVC1.1) |
| **Video Interface** | HDMI (V1.4), SDI, Full NDI, USB 3.0 (Compatible with USB2.0) | Exposure | Auto/Manual/Bright/Shutter/Iris |
| **Sensor** | 1/2.8 inch 2.1MP CMOS sensor | Focus | Auto / Manual |
| **Zoom** | f4.9～98mm(20X), F1.5- 3.0<br>View Angle: 60°(Far)-3.2°(Near) | Iris | Auto / Manual |
| **Rotation Angle** | Pan: -170° ~ +170°;      Tilt: -30° ~ +90° | | |
| **Rotation Speed** | Pan: 0°~120°/s ; Tilt: 0°~80°/s | Gamma | Supported |
| **Preset** | Remote controller: 10;<br>RS232: 128; Accuracy: 0.1° | WDR | Supported |
| **Network Speed** | 1000M | BLC | Supported |
| **Video encode** | IP -- H.264/H.265 | 2D Noise Reduction | Supported |
| **Bit Rate Control** | Variable Bit Rate,<br>Constant Bit Rate | 3D Noise Reduction | Supported |
| **Video Bit Rate** | 1024Kbps~10240Kbps | Anti Flicker | OFF/50Hz/60Hz |
| **POE** | Supported | Pan Tilt Flip | Supported |
| **Daisy Chain** | Support RS232<br>Serial Daisy Chain | Input Voltage | DC12V/POE(IEEE802.3af) |
| **Minimum Lux** | 0.1lux | Dimension | 220mm × 190mm × 173mm |
| **White Balance** | Auto/Indoor/Outdoor/Manual/Push/Sodium Lamp Auto/Sodium Lamp | Net Weight | 1.4KG |

# NDI®

## CAMERA RANGE
### Saber 4K NDI H|X

| Model | Saber 4K NDI NDI-12UFHD36 | |
|---|---|---|
| Video Format | HDMI(V1.4) | 3840*2160p @ 30/25fps<br>1920*1080p @ 60/50/30/25/59.94/29.97/24fps<br>1920*1080i @ 60/50/59.94fps<br>1280*720p @ 60/50/30/25/59.94/29.97fps |
| | SDI | 1920*1080p @ 60/50/30/25/59.94/29.97/24fps<br>1920*1080i @ 60/50/59.94fps<br>1280*720p @ 60/50/30/25/59.94/29.97fps |
| | USB | 1920*1080p @ 60/50/30/25fps (USB3.0)<br>1280*720p @ 60/50/30fps (USB3.0)<br>1280*720p @ 25fps (USB3.0 & USB2.0)<br>1024*576p @ 30fps (USB3.0 & USB2.0)<br>960*540p @ 30fps (USB2.0）<br>640*360p @ 30fps (USB2.0)<br>512*288p @ 30fps (USB2.0) |
| | IP | 3840*2160 @ 1~30fps / 1920*1080 @ 1~30fps（Main Stream）<br>1280*720 @ 1~30fps / 1027*576 @ 1~30fps /<br>640*360 @ 1~30fps（Substream) |
| | NDI | 3840*2160 @ 15~30fps,1920*1080@15~30,<br>1280*720@15~30,1027*576@15~30,<br>640*360@30 (low bandwidth mode) |
| Supported Protocol | TCP/IP, HTTP, RTSP, DHCP, RTMP, Onvif (2.4), NDI/HX , Visca over IP (TCP & UDP), HTML5, VISCA, Pelco P, Pelco D | Control Port | RS232, RS485 (Serial VISCA, Pelco-P/D), RJ45 (VISCA over IP), USB3.0 (UVC1.5), USB2.0 (UVC1.1) SRT Compatible |
| Video Interface | HDMI（V1.4, SDI, NDI/HX, USB3.0, USB .0) | Exposure | Auto/Manual/Bright/Shutter/Iris |
| Sensor | 1/2.8 inch 8.51MP CMOS sensor | Focus | Auto / Manual |
| Zoom | f3.92~47.32mm(12X), F1.8- 2.8 View Angle: 72.5°(Far)- 6.3°(Near) | Iris | Auto / Manual |
| Rotation Angle | Pan: -170° ~ +170°;      Tilt: -30° ~ +90° | | |
| Rotation Speed | Pan: 0°~120°/s ; Tilt: 0°~80°/s | Gamma | Supported |
| Preset | Remote controller: 10; RS232: 128; Accuracy: 0.1° | WDR | Supported |
| Network Speed | 1000M | BLC | Supported |
| Video encode | IP -- H.264/H.265 | 2D Noise Reduction | Supported |
| Bit Rate Control | Variable Bit Rate, Constant Bit Rate | 3D Noise Reduction | Supported |
| Video Bit Rate | 1024Kbps~20480Kbps | Anti Flicker | OFF/50Hz/60Hz |
| POE | Supported | Pan Tilt Flip | Supported |
| Daisy Chain | Support RS232 Serial Daisy Chain | Input Voltage | DC12V/POE(IEEE802.3af) |
| Minimum Lux | 0.1lux | Dimension | 220mm × 190mm × 173mm |
| White Balance | Auto/Indoor/Outdoor/Manual/ Push/Sodium Lamp Auto/ Sodium Lamp | Net Weight | 1.5KG |

# NDI®

## CAMERA RANGE
### Saber IP20X NDI H|X

| Model | Saber IP20X NDI H|X (NDI-20FHD60) | | |
|---|---|---|---|
| Video Format | HDMI (V1.4) | 1920*1080P @ 60/50/30/25/59.94/29.97/24 fps<br>1920*1080I @ 60/50/59.94 fps<br>1280*720P @ 60/50/30/25/59.94/29.97 fps | |
| | SDI | 1920*1080P @ 60/50/30/25/59.94/29.97/24 fps<br>1920*1080I @ 60/50/59.94 fps<br>1280*720P @ 60/50/30/25/59.94/29.97 fps | |
| | USB 2.0 | 1280*720P @ 25 fps<br>1024*576P @ 30 fps<br>960*540P @ 30 fps<br>640*360P @ 30 fps<br>512*288P @ 30 fps | |
| | USB 3.0 | 1920*1080P @ 60/50/30/25 fps<br>1280*720P @ 60/50/30 fps<br>1280*720P @ 25 fps | |
| | IP | Mainstream: 1920*1080 @ 3~60fps; 1280*720 @ 3~60fps; 1024*576 @ 3~60fps<br>Substream: 1280*720 @ 3~60fps; 1024*576 @ 3~60fps; 640*360 @ 3~60fps | |
| | NDI | 1920*1080 @ 3~60fps; 1280*720 @ 3~60fps;<br>1024*576 @ 3~60fps; 640*360 @ 30fps (low broadband mode) | |
| Zoom | f4.9~98mm(20x), F1.5 – 3.0, View Angle: 60°(Far)-3.2°(Near) | White Balance | Auto / indoor / outdoor / manual / outauto / sodium Lamp Auto / sodium lamp |
| Video Interface | HDMI (V1.4), SDI, NDI|HX, USB3.0 (Compatible with USB2.0) | Exposure | Auto / manual / bright / shutter / iris |
| Sensor | 1/2.8 inch, 2.1MP CMOS Sensor | | |
| Daisy Chain | Supports RS232 Serial Daisy Chain | Focus | Auto / Manual |
| Minimum Lux | 0.1lux | Iris | Auto / Manual |
| Rotation Angle | Pan:±170°; Tilt:-30°~+90°, | 2D/3D DNR | Supported |
| Rotation Speed | Pan: 0.1°-120°/s; Tilt: 0.1°-80°/s | Gamma | Supported |
| Preset | Remote Control：10, RS232: 128, Accuracy：0.1° | WDR | Supported |
| | | BLC | Supported |
| Network Speed | 1000M | Anti Flicker | OFF/50Hz/60Hz |
| Video Encoding | H.264&H.265 | Pan Tilt Flip | Supported |
| Bit Rate Control | Variable Bit Rate, Constant Bit Rate | Input Voltage | DC12V/POE |
| Video Bit Rate | 1024Kbps~10240Kbps | Dimensions | 220mm×190mm×173mm |
| POE | Supported | Net Weight | 1.4KG（3.1LBS） |
| Control Port | RS232, RS485 (Serial Visca, Pelco-P/D, RJ45 (VISCA over IP, USB3.0 (UVC1.5), USB2.0(UVC1.1) | IP Protocol | TCP/IP, HTTP, DHCP, RTSP, RTMP, Onvif 2.4, VISCA over IP (TCP&UDP), NDI (H|X), SRT Compatible |

# COMPARISON CHART

| | Saber 4K | Saber IP20X | Saber Plus | Saber Light | Blade 4K | Blade VS | One Touch | Compact One |
|---|---|---|---|---|---|---|---|---|
| **Picture** |  |  |  |  |  |  |  |  |
| **Target Market** | High End quality ProAV& videoConference Environments | High quality ProAV& Video Conference Environments | Medium to Large Conference Rooms | Small to Medium Conference Rooms | High End Video Conference Environments | Medium to Large Conference Rooms | Huddle Rooms | Huddle Rooms |
| **Optical and Digital Zoom** | 12x Optical + 2x Digital | 20x Optical + 2x Digital | 12x Optical + 2x Digital | 5x Optical + 2x Digital | 15x HD Lossless 5x 4K Optical | 10x Optical + 10x Digital | 5x Lossless | 4x Lossless |
| **Video Output** | HDMI, SDI, RJ45 (LAN), and USB 3.0 and simultaneous Output (1080p) | HDMI, SDI. RJ45 (LAN), and USB 3.0 and simultaneous Output (1080p) | HDMI, SDI, RJ45 (LAN), and USB 3.0 and simultaneous Output (1080p) | USB 3.0 | USB 3.0 | USB 2.0 | USB 2.0 type-C | USB 2.0 (Type-B) |
| **Pan Rotation Degree** | 340 | 340 | 340 | 340 | 350 | 350 | N/A | N/A |
| **View Angle** | 72.5° HFOV no distortion | 60° HFOV no distortion | 72.5° HFOV no distortion | 90° HFOV no distortion | 86.5° HFOV no distortion | 62.5° HFOV no distortion | 120° HFOV no distortion | 120° HFOV no distortion |
| **Max Resolution** | 4K 30fps (HDMI & IP), 1080p 60fps, USB 3.0 & 3G SDI | 1080p 60fps over SDI, USB 3.0, HDMI&IP | 1080p 60fps over SDI, USB 3.0, HDMI | 1080p 60fps | 4K 30fps | 1080p 30fps | 4K 30fps | 4K 30fps |
| **Video Format** | H.264, H.265 over IP, YUY2 via USB 3.0 | H.264, H.265 over IP, YUY2 USB 3.0 | H.264, H.265 over IP, YUY2 via USB 3.0 | YUY2 uncompressed | YUY2, MJPG, H.264 | YUY2, MJPG | YUY2, MJPG,H.264 | YUY2, MJPG, H.264, H.265 |
| **Control** | IR Remote, RS232&485 VISCA,desktop app control- NECC. IP protocols | IR Remote, RS232&485 VISCA,desktop app control- NECC. IP protocols | IR Remote, RS232&485 VISCA,desktop app control- NECC. IP protocols | IR remote, VISCA and desktop app control | ZoomRooms UVC, IR remote control Controller  VISCA via RS232&485, Angekis NECC onscreen app control, 128 presets via RS232 Joystick | ZoomRooms UVC,VISCA via USB 2.0 & RS232, Angekis NECC onscreen app control, IR Remote, 128 presets via RS232 Joystick | RF Remote, desktop app control NECC OSD Menu | IR remote, desktop app control NECC OSD Menu |
| **OSD Menu** | English, Chinese, Spanish, Russian | English, Chinese, Spanish, Russian | English, Chinese, Spanish, Russian | English, Chinese | English, Chinese | English, Chinese | English, Chinese | English, Chinese |
| **Preset** | 10 on Remote,128 VISCA | 10 on Remote,128 VISCA | 10 on Remote,128 VISCA | 10 on Remote,128 VISCA | 10 on Remote,128 VISCA | 10 on Remote,128 VISCA | 3 Presets | 3 Presets |
| **Ultra Optix 3D Noise Reduction** | Auto & Manual 2D+3D noise reduction | Auto & Manual 2D+3D noise reduction | Auto & Manual 2D+3D noise reduction | Auto & Manual 2D+3D noise reduction | Auto & Manual 2D+3D noise reduction | Auto & Manual 2D+3D noise reduction | Auto & Manual 2D+3D noise reduction | Auto & Manual 2D+3D noise reduction |
| **BLC** | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **Exposure Compensation** | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **IR Transfer / IR Pass** | Yes | Yes | Yes | Yes | Yes | Yes | No | No |
| **Daisy Chain via RS232** | Yes (Up to 7 Cameras) | Yes (Up to 7 Cameras) | Yes (Up to 7 Cameras) | No | No | No | No | No |
| **FECC** | Yes | Yes | Yes | Yes | Yes | Yes | No | No |
| **Video "mute"** | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **Sharpness, WDR, Backlight refine via remote** | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| **Camera Select** | Yes | Yes | Yes | No | No | No | No | No |
| **Dynamic Startup** | No | No | No | No | Yes | No | No | No |
| **Reverse Mountable** | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No |
| **Day/Night Switch for Surveillance** | Yes | Yes | No | Yes | Yes | Yes | No | No |
| **Warranty** | 3 Years | 3 Years | 3 Years | 3 Years | 3 Years | 3 Years | 3 Years | 3 Years |

# Introducing the all new BLADE.

## The new Angekis Blade range gets a complete redesign.

This isn't just a tune up - it's a technological overhaul.

**FlexiControl**
Our groundbreaking FlexiControl system enhances your conferencing experience, giving you an incredible range of options for precision camera control.

FlexiControl features:
- VISCA over USB (VS model), IP (4K model) and RS232 (both models).
- Our proprietary near end camera control (Available for free to download on our website)
- ZoomRoom RF remote control support.
- AnyAngle RF remote control support.

**UltraOptix**
Ultra Optix Digital Noise Reduction (DNR) imaging technology reduces 3D video noise through the use of an innovative algorithm that filters out and corrects digital distortions. The result is a balanced image that renders with unrivalled clarity, sharpness, and definition - especially in low light situations.

**AnyAngle Remote Supported**
Tired of unresponsive remote controls? Utilising RF technology our new AnyAngle remotes does just that. It works at any angle, all the time, every time, even if there is an object in the way.

**Dynamic Startup**
The default position isn't for everyone. Dynamic startup allows you to change the camera's startup angle, setting the view right where you need it. A perfect solution for lectures.

Angekis®

# BLADE VS
## U2-10FHD3





| Blade VS U2-10FHD3 | | |
|---|---|---|
| **Resolution** | MJPG | 1080p @ 30fps, 720p @ 30fps, 640*480p @ 30fps |
| | YUV | 640*480p @ 30fps |
| **Video Interface** | USB 2.0 | |
| **Sensor** | 1/2.8 inch, 2.1MP CMOS | |
| **Lens** | F4.7~47.mm(10X),F1.8-14, HFOV:62.5°(Wide)-6.43°(Tele) | |
| **P/T Rotation** | Pan: ±170°; Tilt:-30°~+90°, Reverse Mountable | |
| **P/T speed** | Pan: 0.1°-120°/s; Tilt: 0.1°-80°/s | |
| **Presets** | 10 via IR remote setting, 128 via VISCA control, preset accuracy: | |
| **Control** | RS232, RS485, USB 2.0 | |
| **Min. Lux** | 0.01 lux | |
| **White Balance** | Auto/Manual | |
| **Focus** | Auto/Manual | |
| **Iris** | Auto/Manual | |
| **WDR** | Supported | |
| **BLC** | Supported | |
| **2D DNR** | Supported | |
| **3D DNR** | Supported | |
| **Input Voltage** | DC12V | |
| **Dimension** | 200mm x 143mm x 152mm | |
| **Net Weight** | 1.25KG | |

## A Leap Ahead

The new Blade VS delivers an amazing suite of features along with the superb optics you've come to expect from Angekis. Technical improvements and a class leading build quality complement the Blade's brilliantly sharp resolution and stunning color production, all at a groundbreaking price.

### Product Highlights:

- 10x optical zoom,10x digital zoom option.
- Full HD resolution at 30fps via USB 2.0.
- Video format YUY2 and Mjpg.
- Day/night version switch.
- $62.5^{\circ}$FOV.
- $350^{0}$ pan rotation.
- Visca over USB2.0, RS232 . 128 presets.
- IR remote controller, 10 presets.
- ZoomRoom remote Controller supported.
- On screen NECC via custom Angekis app.
- Video mute control.
- Kensington lock hole.
- 3D noise reduction.

Flexi Control

UltraOptix

Dynamic Startup

# BLADE 4K

## U3-UFHD36

| Blade 4K U3-UFHD36 | | |
|---|---|---|
| **Resolution** | MJPG | 3840x2160p @ 30fps, 1080p @ 30fps, 720p @ 30fps, 640*480p @ 30fps with USB 3.0 |
| | YUV | 1080p 30/25fps, 720p 30/25fps, 640x480p 30fps |
| **Video Interface** | | USB 3.0 |
| **Sensor** | | 1/2.8 inch, 8.42MP CMOS |
| **Lens** | | F4.7~47.mm(10x), F1.8-14, HFOV: 86.5°(Wide)-6.43°(Tele) |
| **P/T Rotation** | | Pan: ±170°; Tilt:-30°~-+90°, Reverse Mountable |
| **P/T speed** | | Pan: 0.1°-120°/s; Tilt: 0.1°-80°/s |
| **Presets** | | 110 via IR remote setting, 128 via VISCA control, preset accuracy: 0.1° |
| **Control** | | RS232, RS485, UVC |
| **Min. Lux** | | 0.01 lux |
| **White Balance** | | Auto/Manual |
| **Focus** | | Auto/Manual |
| **Iris** | | Auto/Manual |
| **Shutter** | | Auto/Manual |
| **WDR** | | Supported |
| **BLC** | | Supported |
| **2D DNR** | | Supported |
| **3D DNR** | | Supported |
| **Input Voltage** | | DC12V |
| **Dimension** | | 200mm x 143mm x 152mm |
| **Net Weight** | | 1.25KG |

## Breaking new ground in optics and performance.

The new Blade series delivers class leading optics and crystal clear life-like video. Your next in person meeting will feel dull by comparison. We've delivered significant technological improvements including USB VISCA and UVC control options, as well as ZoomRoom controller support. A custom built NECC app rounds out the suite of control options. These are precision controls you can rely on. Advanced RF technology allows the AnyAngle and the ZoomRoom remotes to be used from any angle, and go right through objects in the way. Improvements to the camera's optics produce brilliantly sharp images in a small, smart and solid form factor at an impressive price. Did we mention the 3 year warranty?

## Product Highlights:

- 86.5 Degree wide angle FOV.
- 5 x 4K + 15x HD zoom over USB3.0.
- Up to 4K resolution at 30fps and Full HD at 30fps.
- Video format: YUY2, MJPG.
- Video outputs: USB3.0.
- Visca over RS232. 128 presets.
- Zoom Room remote Controller supported.
- Angekis near end on screen app control.

- IR remote control with 10 presets.
- RS232 joystick or 128 presets
- OSD settings menu via remote.
- Video mute control.
- Kensington lock hole.
- 3D noise reduction.
- Day/night vision switch.

Flexi Control    UltraOptix    Dynamic Startup    AnyAngle

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# AUDIO
## SOLUTIONS

# CLEARTALK
# WIRELESS ASP-04

2.4G wireless digital conference speakerphone with
omnidirectional MIC and wireless charging dock

The ASP04 is a 2.4G wireless communication speakerphone with charging dock,It is compatible with all kinds of hardware
video conference systems,education training systems,net work monitoring systems,remote medical systems,network
monitoring systems,smart city systems,conference recording systems and more,Simultaneously picks up audio and plays
sounds without any interference.

## Wireless and compact

- Connects to a computer via 2.4ghz RF wireless technology
- Built in high powered speakers
- Built in echo cancellation chip
- Intelligent tuning band
- Strong anti-interference ability
- Plug and play, no drivers required
- Compatible and optimized for windows
- Includes wireless charging dock

- Connectivity: 2.4GHZ wireless dongle
- Pick-up radius: 3m
- Audio interface: 3.5 mm
- Speaker: Built in high powered speakers
- 3 x mics: 360 degree or omni directional
- 7-10 hours battery life

1. Speakerphone
2. Charging Dock
3. 2.4Ghz Wireless Dongle
4. Power Adaptor
5. USB Cable for Charging Dock.

# CLEARTALK
## ASP-05

Digital conference speakerphone with omnidirectional MIC



The ASP05 is a wired speakerphone designed for huddle spaces or small sized conference rooms that seat up to 6 participants.Whilst compact,the ASP-05 packs a punch with high end audio that delivers clear and crisp sound for your everyday conferencing needs.

## Clear and crisp

○ Connects to a computer via USB
○ Built in high powered speakers
○ Built in echo cancellation chip
○ Intelligent tuning band
○ Full duplex
○ Strong anti-interference ability
○ Plug and play, no drivers required
○ Compatible and optimized for windows

○ Pick-up radius: 6m
○ Audio interface: 3.5 mm
○ Speaker: Built in high powered speakers
○ 3 x mics: 360 degree or omni directional



1. Speakerphone
2. USB Charging Cable

# CLEARTALK Anchor
## ASP-06
Portable USB speakerphone with Bluetooth and dongle



The ASP06 Cleartalk Anchor is a portable USB omnidirectional speakerphone that is both wired via USB and wireless via bluetooth.Its the perfect solutin for remote working and remote learning.
The speakerphone comes equipped with a bluetooth adaptor enabling the speakerphone to be placed wirelessly in any location cable and clutter free.With one to one bluetooth technology,you can be guaranteed there will be no clash or interference with other devices.You can install multiple ASP-06 units in the one room with no issues.

## The portable powerhouse

○ Connects to a computer via USB or wireless bluetooth.
○ Intelligent dynamic noise reduction.
○ Auto gain.
○ Full duplex technology.
○ Echo cancellation.
○ Up to 90db volume.
○ Up to 10hrs battery life.
○ Compact & portable.

○ Pick-up radius: up to 4m.
○ Pair to any bluetooth device.
○ Speaker: Built in high powered speakers
○ 360 degree pickup
○ 1 to 1 bluetooth technology.



Speakerphone with USB cable & wireless dongle.

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# ANGEKIS ASP-10
## SPEAKERPHONE
All in one speakerphone designed for professional video conferences in medium to large boardrooms

With an enhanced audio pick up range of 5 meters,  ASP-10 is the perfect audio solution for medium sized conference rooms.  Enjoy 3D gesture controls to mute and unmute the device,  HID reverse control functionality to synchronize input and output across your computer, speakers,  and speakerphone,  and straightforward plug and play functionality via the included USB cable.

## Extend your range.

- Connects to a computer via USB.
- Intelligent dynamic noise reduction.
- Auto gain.
- Full duplex technology.
- 384ms Echo cancellation.
- 3D gesture control.
- Compact & portable.

- Pick-up radius: up to 5m.
- Speaker: Built in high powered speakers
- 360 degree pickup



1         2      3

1. Speakerphone
2. USB cable 3m
3. USB extension 1.8m

# CLEARTALK
## WIRELESS DAISY CHAIN ASP-04D-2
2.4G wireless digital conference speakerphone
with omnidirectional MIC



The ASP04D is a twin unit 2.4GHz wireless communication speakerphone set. The perfect solution for larger conference, education and event spaces that require a larger audio pickup area. Both units seamlessly synchronize and simultaneously pick up and play audio without interference.

## Expand your audio

- Connects to a computer via 2.4ghz RF wireless technology
- Built in high powered speakers
- Built in echo cancellation chip
- Intelligent tuning band
- Strong anti-interference ability
- Plug and play, no drivers required
- Compatible and optimized for windows

- Connectivity: 2.4GHZ wireless dongle
- Pick-up radius: 6m
- Audio interface: 3.5 mm
- Speaker: Built in high powered speakers
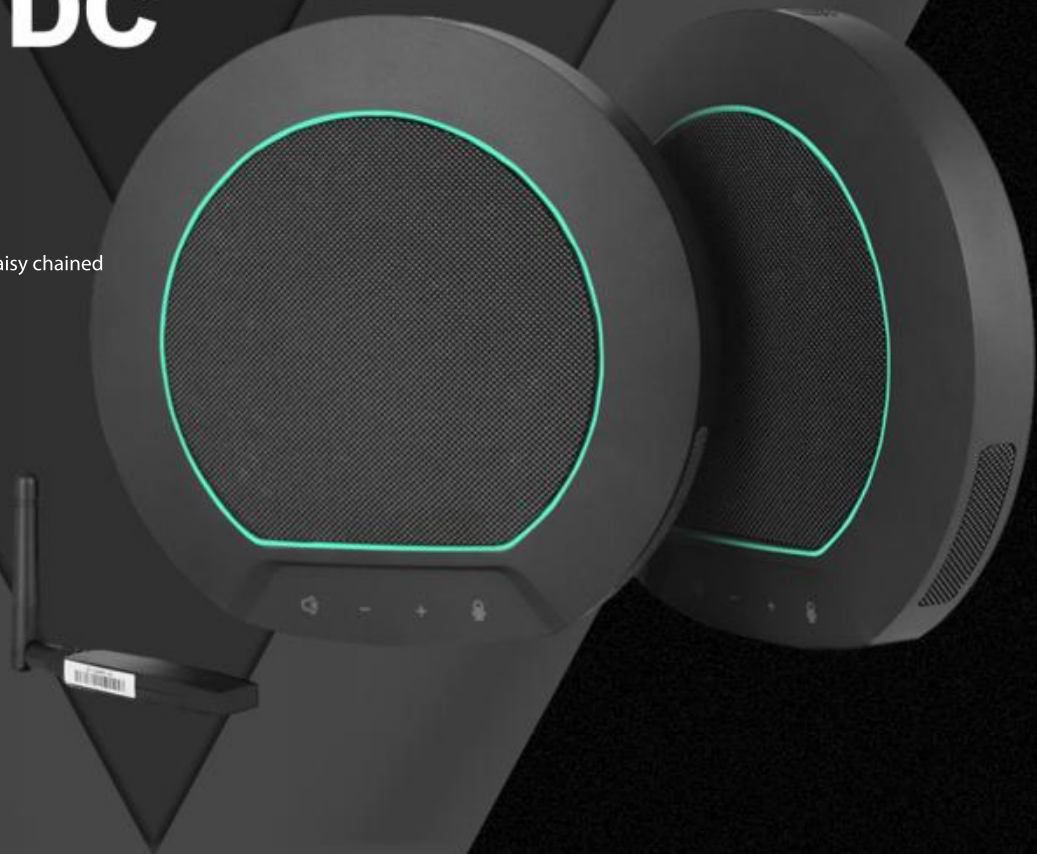- 3 x mics: 360 degree or omni directional
- 7-10 hours battery life



1. Speakerphone
2. USB Charging Cables
3. Power Adaptor
4. 2.4ghz Wireless Dongle

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# Cleartalk HD DC
## ASP-10D-2
### Conference Speakerphone

2 x all in one speakerphones, designed for professional video conferences and daisy chained

together to cover the largest conference rooms.

Two ASP-10 speakerphone units daisy chained together with wireless functionality.  Enjoy 3D gesture controls to mute and unmute the device,  HID reverse control functionality to synchronize input and output across your computer,  speakers, and speakerphone,  and straightforward plug and play functionality via the 2.4 GHz wireless USB dongle.  Each unit has a range of up to 5m,  and with two of them you can double your coverage.

## Expand your audio

- Connects to a computer via 2.4 GHz USB dongle
- Intelligent dynamic noise reduction
- Automatic gain control
- Full duplex communication
- 384ms echo cancellation
- 3D gesture control
- Compact and portable

1.  Speakerphone
2.  Speakerphone
3. 2.4 GHz Dongle
4. USB cable
5. USB cable

1        2        3      4     5

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# Ceiling Mic Pro
## ASP-C-01
Built-in interaction and recording, simplifying your operation



High tech audio in a professional package.  Two HD voice area ceiling microphones,  combined with an advanced Digital Signal Processor unit,  deliver sophisticated audio production capabilities for the largest spaces.  For advanced audio controls and output options,  the DSP central unit supports 6 road 3.81mm phoenix based MIX and AEC inputs,  as well as Speaker,  REC and AEC outputs. Additional ports include a USB Type-B control port that plugs right into just about any Windows or Mac OSX machine.  Plug it in,  fire up your favorite audio and video editing software,  and get down to business.

## Audio processing made easy

- 48 KHz sampling rate
- Adaptive echo cancellation
- Adaptive noise supression
- Intelligent sound mixing
- Supports 24 bit A/D and D/A
- Adopts bare wire phoenix interface
- 6 way balanced output

- High noise reduction
- 10m pickup radius
- Adaptive algorithm
- Adaptive speech gain adjustment
- Smart mixing

**Includes**:
ASP-C-01 Master, Hanging Mic, Power Adaptor
Speaker  Line, REC Line, AEC line, b-type USB line, mixer line



ASP-C-01

# Ceiling Mic HD
## ASP-C-02

Third Generation AUCTOPUS Audio Processing



The Ceiling Mic HD ASP-C-02 delivers high tech audio in a compact package. Two HD voice area ceiling microphones, combined with an advanced Digital Signal Processor unit, deliver incredible audio production capabilities for the largest spaces. With a pick up range of 10 meters each, you can cover a full lecture hall, large conference room, or other event space with clear and precise audio through the versatile USB Type-B connector.

## A simple & effective audio solution.

- 48 KHz sampling rate
- Adaptive echo cancellation
- Adaptive noise supression
- Intelligent sound mixing
- Supports 24 bit A/D and D/A
- Adopts bare wire phoenix interface
- 6 way balanced output

- High noise reduction
- 10m pickup radius
- 3rd Generation AUCTOPUS audio processing
- Adaptive speech gain adjustment
- Smart mixing

Includes:
ASP-C-02 Master, Hanging Mic *2, Power Adaptor
Speaker Line, b-type USB line *1

# Angekïs®

WEB

https://www.angekis.com