## GroupThink Enlighten II

GroupThink Enlighten I is a Pan/Tilt/Zoom (PTZ) camera with USB video output.

It is equipped with a 1/2.9-inch HD Color CMOS with 2.1 mega pixel (16:9) and Full HD 1080p output resolution & a high dynamic image of 30 fps.

The superior 20x optical zoom lens, excellent white balance, and exposure mode delivers a clear image even in low light or the extreme contrast of brightness and darkness in a conference room, provide a better conference experience.

The camera covers a wide shooting angle and precise positioning with smooth PTZ operations.

## **Key Features**



**High Quality Speaker Microphone** 

An exceptional speakerphone capable omnidirectional audio pickup with a range of 10m, up to 90 dB loudspeaker, high sensitivity microphone and adaptive vocal tracking for higher hearing clarity.



### **2pcs Expansion Microphones**

Expand the conversation area from 6m/20ft up to 10m/33ft. With 3 one-way microphones and 1 mono cycle speaker that provide 360 degrees' audio pickup, everyone can hear clearly with high intelligible.



**Accurate. Smooth and Silent PTZ** 

Equipped with 340°Pan, & 170° Tilt rotation at adjustable speed and fast & accurate focus to capture any view in conferencing space and 20x zoom.



#### Compatibility

Simply connect a PC or Mac to conduct a meeting within the user's own familiar computing environment. Compatible with Mac and PC so it is easy to plug and play.



# **Product Specification**

Camera Specification           Image Sensor         1/2.9° HD Color CMOS           Effective Pixel         2.1 mega pixel (16:9)           Focal Length         F=5.35-96.3mm           Horizontal Angle         Near-end 63.2° ~ Far-end 3.54°           Horizontal Resolution         1080P (30/25), 720P (30/25)           Video interface         USB 2.0           Video output format         1080P, 720P           Horizontal rotation angle         340° ~ ±170°           Signal Standard         NTSC/PAL           Vertical rotation angle         90° (upward), 30° (downward)           Zoom         20x optical zoom           Communication interface         USB, RS-232C, RS-485           Communication protocol         VISCA, PELCO-D/P           Baud rate         9600/38400bps           Preset         64 Pre-set positions           Image flip         Support image vertical flip           Remote control         Infrared wireless remote-control P/T/Z           Support         Windows, Apple Mac           Size         250x160x180mm           Gain Control         Auto/manual           Pocus         Auto/manual           Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)           Speaker Microphone         External i	Model	GroupThink Enlighten II
Effective Pixel         2.1 mega pixel (16:9)           Focal Length         F=5.35-96.3mm           Horizontal Angle         Near-end 63.2°∼Far-end 3.54°           Horizontal Resolution         1080P (30/25), 720P (30/25)           Video interface         USB 2.0           Video output format         1080P, 720P           Horizontal rotation angle         340° ~ ±170°           Signal Standard         NTSC/PAL           Vertical rotation angle         90° (upward), 30° (downward)           Zoom         20x optical zoom           Communication interface         USB, RS-232C, RS-485           Communication protocol         USB, RS-232C, RS-485           Communication protocol         VISA, PELCO-D/P           Baud rate         9600/38400bps           Preset         64 Pre-set positions           Image flip         Support image vertical flip           Remote control         Infrared wireless remote-control P/T/Z           Support         Windows, Apple Mac           Size         250x160x180mm           Gain Control         Auto/manual           Focus         Auto/manual           Pan:Tilt Movement Range         Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)           Speaker Microphone         External interface<	Camera Specification	
Focal Length         F=5.35-96.3mm           Horizontal Angle         Near-end 63.2° ∼ Far-end 3.54°           Horizontal Resolution         1080P (30/25), 720P (30/25)           Video interface         USB 2.0           Video output format         1080P, 720P           Horizontal rotation angle         340° ∼ ±170°           Signal Standard         NTSC/PAL           Vertical rotation angle         90° (upward), 30° (downward)           Zoom         20x optical zoom           Communication interface         USB, RS-232C, RS-485           Communication protocol         VISCA, PELCO-D/P           Baud rate         9600/38400bps           Preset         64 Pre-set positions           Image flip         Support image vertical flip           Remote control         Infrared wireless remote-control P/T/Z           Support         Windows, Apple Mac           Size         250x160x180mm           Gain Control         Auto/manual           Focus         Auto/manual           Pan/Tilt Movement Range         Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)           Speaker Microphone         USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface           Power Supply         USB power supply (5V/ 500mA)      <	Image Sensor	1/2.9" HD Color CMOS
Horizontal Angle Near-end 63.2*~Far-end 3.54* Horizontal Resolution 1080P (30/25), 720P (30/25) Video interface USB 2.0 Video output format 1080P, 720P Horizontal rotation angle 340* ~ ±170* Signal Standard NTSC/PAL Vertical rotation angle 20x optical zoom Communication interface USB, RS-232C, RS-485 Communication protocol ViSCA, PELCO-D/P Baud rate 9600/38400bps Preset 64 Pre-set positions Image flip Support image vertical flip Remote control Infrared wireless remote-control P/T/Z Support Size 250x160x180mm Gain Control Auto/manual Focus Auto/manual Pan/Tilt Movement Range Pan: 340* (max speed 100*/S), Tilt: 170* (max speed 80*/S) Speaker Microphone External interface USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface Power Supply USB power supply (5V/ 500mA) Power Consumption VICCI level B Operating environment  0 ~ 40*C Working humidity: 20 ~ 85% (no frost)	Effective Pixel	2.1 mega pixel (16:9)
Horizontal Resolution         1080P (30/25), 720P (30/25)           Video interface         USB 2.0           Video output format         1080P, 720P           Horizontal rotation angle         340° ~ ±170°           Signal Standard         NTSC/PAL           Vertical rotation angle         90° (upward), 30° (downward)           Zoom         20x optical zoom           Communication interface         USB, RS-232C, RS-485           Communication protocol         VISCA, PELCO-D/P           Baud rate         9600/38400bps           Preset         64 Pre-set positions           Image flip         Support image vertical flip           Remote control         Infrared wireless remote-control P/T/Z           Support         Windows, Apple Mac           Size         250x160x180mm           Gain Control         Auto/manual           Focus         Auto/manual           Pan/Tilt Movement Range         Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)           Speaker Microphone         External interface           External interface         USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface           Power Supply         USB power supply (50// 500mA)           Power Consumption         5W <th< th=""><th>Focal Length</th><th>F=5.35-96.3mm</th></th<>	Focal Length	F=5.35-96.3mm
Video interface USB 2.0 Video output format 1080P, 720P  Horizontal rotation angle 340° ~ ±170° Signal Standard NTSC/PAL  Vertical rotation angle 90° (upward), 30° (downward)  Zoom 20x optical zoom Communication interface USB, RS-232C, RS-485  Communication protocol VISCA, PELCO-D/P  Baud rate 9600/38400bps Preset 64 Pre-set positions Image flip Support image vertical flip  Remote control Infrared wireless remote-control P/T/Z  Support Windows, Apple Mac  Size 250x160x180mm  Gain Control Auto/manual  Focus Auto/manual  Focus Auto/manual  Pan/Tilt Movement Range Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)  Speaker Microphone  External interface USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface Power Supply USB power supply (5V/ 500mA)  Power Consumption 5W  Radio interference standard VCCI level B  Operating environment 0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Horizontal Angle	Near-end 63.2°∼Far-end 3.54°
Video output format       1080P, 720P         Horizontal rotation angle       340° ~ ±170°         Signal Standard       NTSC/PAL         Vertical rotation angle       90° (upward), 30° (downward)         Zoom       20x optical zoom         Communication interface       USB, RS-232C, RS-485         Communication protocol       VISCA, PELCO-D/P         Baud rate       9600/38400bps         Preset       64 Pre-set positions         Image flip       Support image vertical flip         Remote control       Infrared wireless remote-control P/T/Z         Support       Windows, Apple Mac         Size       250x160x180mm         Gain Control       Auto/manual         Focus       Auto/manual         Pan/Tilt Movement Range       Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)         Speaker Microphone       External interface         External interface       USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface         Power Supply       USB power supply (5V/ 500mA)         Power Consumption       5W         Radio interference standard       VCCI level B         Operating environment       0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Horizontal Resolution	1080P (30/25), 720P (30/25)
Horizontal rotation angle       340° ~ ±170°         Signal Standard       NTSC/PAL         Vertical rotation angle       90° (upward), 30° (downward)         Zoom       20x optical zoom         Communication interface       USB, RS-232C, RS-485         Communication protocol       VISCA, PELCO-D/P         Baud rate       9600/38400bps         Preset       64 Pre-set positions         Image flip       Support image vertical flip         Remote control       Infrared wireless remote-control P/T/Z         Support       Windows, Apple Mac         Size       250x160x180mm         Gain Control       Auto/manual         Focus       Auto/manual         Pan/Tilt Movement Range       Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)         Speaker Microphone       External interface         External interface       USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface         Power Supply       USB power supply (5V/ 500mA)         Power Consumption       5W         Radio interference standard       VCCI level B         Operating environment       0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Video interface	USB 2.0
Signal Standard NTSC/PAL  Vertical rotation angle 90° (upward), 30° (downward)  Zoom 20x optical zoom  Communication interface USB, RS-232C, RS-485  Communication protocol VISCA, PELCO-D/P  Baud rate 9600/38400bps  Preset 64 Pre-set positions  Image flip Support image vertical flip  Remote control Infrared wireless remote-control P/T/Z  Support Windows, Apple Mac  Size 250x160x180mm  Gain Control Auto/manual  Focus Auto/manual  Pan/Tilt Movement Range Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)  Speaker Microphone  External interface USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface  Power Supply USB power supply (5V/ 500mA)  Power Consumption 5W  Radio interference standard VCCI level B  Operating environment 0 - 40°C Working humidity: 20 ~ 85% (no frost)	Video output format	1080P, 720P
Vertical rotation angle  90° (upward), 30° (downward)  Zoom  20x optical zoom  Communication interface  USB, RS-232C, RS-485  Communication protocol  VISCA, PELCO-D/P  Baud rate  9600/38400bps  Preset  64 Pre-set positions  Image flip  Support image vertical flip  Remote control  Infrared wireless remote-control P/T/Z  Support  Windows, Apple Mac  Size  250x160x180mm  Gain Control  Auto/manual  Focus  Auto/manual  Focus  Auto/manual  Pan/Tilt Movement Range  Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)  Speaker Microphone  External interface  USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface  Power Supply  USB power supply (5V/ 500mA)  Power Consumption  SW  Radio interference standard  VCCI level B  Operating environment  0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Horizontal rotation angle	340° ~ ±170°
Zoom 20x optical zoom Communication interface USB, RS-232C, RS-485 Communication protocol VISCA, PELCO-D/P Baud rate 9600/38400bps Preset 64 Pre-set positions Image flip Support image vertical flip Remote control Infrared wireless remote-control P/T/Z Support Windows, Apple Mac Size 250x160x180mm Gain Control Auto/manual Focus Auto/manual Pan/Tilt Movement Range Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S) Speaker Microphone External interface USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface Power Supply USB power supply (5V/ 500mA) Power Consumption 5W Radio interference standard VCCI level B Operating environment 0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Signal Standard	NTSC/PAL
Communication interface USB, RS-232C, RS-485  Communication protocol VISCA, PELCO-D/P  Baud rate 9600/38400bps  Preset 64 Pre-set positions  Image flip Support image vertical flip  Remote control Infrared wireless remote-control P/T/Z  Support Windows, Apple Mac  Size 250x160x180mm  Gain Control Auto/manual  Focus Auto/manual  Pan/Tilt Movement Range Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)  Speaker Microphone  External interface USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface  Power Supply USB power supply (5V/ 500mA)  Power Consumption 5W  Radio interference standard VCCI level B  Operating environment 0 ~40°C Working humidity: 20 ~85% (no frost)	Vertical rotation angle	90° (upward), 30° (downward)
Communication protocol  Baud rate 9600/38400bps  Preset 64 Pre-set positions Image flip Support image vertical flip Remote control Infrared wireless remote-control P/T/Z  Support Windows, Apple Mac Size 250x160x180mm  Gain Control Auto/manual  Focus Auto/manual  Pan/Tilt Movement Range Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)  Speaker Microphone  External interface USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface Power Supply USB power supply (5V/ 500mA)  Power Consumption  Radio interference standard VCCI level B  Operating environment  Over Supply Vision of the standard of the set o	Zoom	20x optical zoom
Baud rate9600/38400bpsPreset64 Pre-set positionsImage flipSupport image vertical flipRemote controlInfrared wireless remote-control P/T/ZSupportWindows, Apple MacSize250x160x180mmGain ControlAuto/manualFocusAuto/manualPan/Tilt Movement RangePan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)Speaker MicrophoneUSB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interfacePower SupplyUSB power supply (5V/ 500mA)Power Consumption5WRadio interference standardVCCI level BOperating environment0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Communication interface	USB, RS-232C, RS-485
Preset 64 Pre-set positions  Image flip Support image vertical flip  Remote control Infrared wireless remote-control P/T/Z  Support Windows, Apple Mac  Size 250x160x180mm  Gain Control Auto/manual  Focus Auto/manual  Pan/Tilt Movement Range Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)  Speaker Microphone  External interface USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface  Power Supply USB power supply (5V/ 500mA)  Power Consumption 5W  Radio interference standard VCCI level B  Operating environment 0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Communication protocol	VISCA, PELCO-D/P
Image flipSupport image vertical flipRemote controlInfrared wireless remote-control P/T/ZSupportWindows, Apple MacSize250x160x180mmGain ControlAuto/manualFocusAuto/manualPan/Tilt Movement RangePan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)Speaker MicrophoneExternal interfaceUSB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interfacePower SupplyUSB power supply (5V/ 500mA)Power Consumption5WRadio interference standardVCCI level BOperating environment0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Baud rate	9600/38400bps
Remote control Infrared wireless remote-control P/T/Z  Support Windows, Apple Mac  Size 250x160x180mm  Gain Control Auto/manual  Focus Auto/manual  Pan/Tilt Movement Range Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)  Speaker Microphone  External interface USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface  Power Supply USB power supply (5V/ 500mA)  Power Consumption 5W  Radio interference standard VCCI level B  Operating environment 0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Preset	64 Pre-set positions
Support Windows, Apple Mac  Size 250x160x180mm  Gain Control Auto/manual  Focus Auto/manual  Pan/Tilt Movement Range Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)  Speaker Microphone  External interface USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface  Power Supply USB power supply (5V/ 500mA)  Power Consumption 5W  Radio interference standard VCCI level B  Operating environment 0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Image flip	Support image vertical flip
Size 250x160x180mm  Gain Control Auto/manual  Focus Auto/manual  Pan/Tilt Movement Range Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)  Speaker Microphone  External interface USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface  Power Supply USB power supply (5V/ 500mA)  Power Consumption 5W  Radio interference standard VCCI level B  Operating environment 0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Remote control	Infrared wireless remote-control P/T/Z
Gain Control Auto/manual  Focus Auto/manual  Pan/Tilt Movement Range Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)  Speaker Microphone  External interface USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface  Power Supply USB power supply (5V/ 500mA)  Power Consumption 5W  Radio interference standard VCCI level B  Operating environment 0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Support	Windows, Apple Mac
Focus Auto/manual  Pan/Tilt Movement Range Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)  Speaker Microphone  External interface USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface  Power Supply USB power supply (5V/ 500mA)  Power Consumption 5W  Radio interference standard VCCI level B  Operating environment 0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Size	250x160x180mm
Pan/Tilt Movement Range Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)  Speaker Microphone  External interface USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface  Power Supply USB power supply (5V/ 500mA)  Power Consumption 5W  Radio interference standard VCCI level B  Operating environment 0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Gain Control	Auto/manual
Speaker MicrophoneExternal interfaceUSB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interfacePower SupplyUSB power supply (5V/ 500mA)Power Consumption5WRadio interference standardVCCI level BOperating environment0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Focus	Auto/manual
External interface  USB 2.0 full speed interface, 3.5mm audio input and output interface, DC power interface  Power Supply  USB power supply (5V/ 500mA)  Power Consumption  5W  Radio interference standard  VCCI level B  Operating environment  0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Pan/Tilt Movement Range	Pan: 340° (max speed 100°/S), Tilt: 170° (max speed 80°/S)
Power SupplyUSB power supply (5V/ 500mA)Power Consumption5WRadio interference standardVCCI level BOperating environment0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Speaker Microphone	
Power Consumption5WRadio interference standardVCCI level BOperating environment0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	External interface	
Radio interference standard VCCI level B  Operating environment 0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Power Supply	USB power supply (5V/ 500mA)
Operating environment 0 ~ 40°C Working humidity: 20 ~ 85% (no frost)	Power Consumption	5W
	Radio interference standard	VCCI level B
	Operating environment	0 ~ 40°C Working humidity: 20 ~ 85% (no frost)
Working temperature	Working temperature	
Microphone Speaker 3 one-way microphone and 1 monocycle speaker	Microphone Speaker	3 one-way microphone and 1 monocycle speaker
Volume & Frequency Up to 85dB 300 ~ 20,000Hz	Volume & Frequency	Up to 85dB 300 ~ 20,000Hz



SNR Ratio	≥50dB
Signal Processing	Adaptive echo canceller, noise reduction
Supported Environment	Windows & Mac OS X 10.5 (Intel Processor only)
Dimension (LXWXH)	350x350x55 mm / 405x350x130 mm (before / after packing)
Net Weight/Gross Weight	1.84kg
Accessories	Speakerphone, 2 expansion microphones, USB cable (2m), 2 RJ22 telephone cord,(3.5m), power cable (1.5m), power extension cable (3.5m), 0.5mm audio cable, Y" type 1 point 2 audio expander, product manual, warranty card
Noise Reduction	2D/3D
Work Temperature	-10°C-~50°C
Storage Temperature	-20°C~60°C

