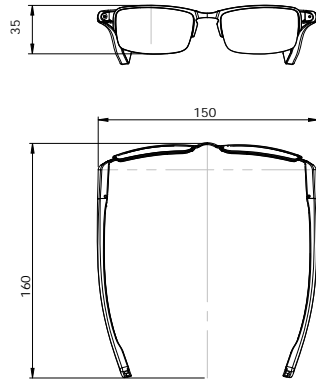


## Hidden Type



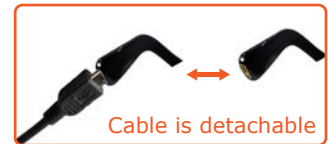
UNIT:±0.5mm

### Feature

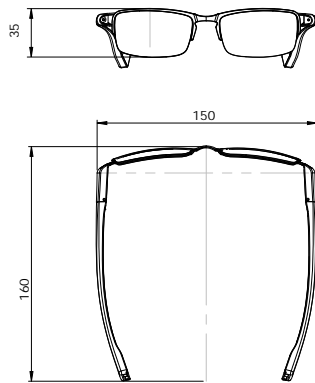
- Hidden Camera
- High performance.
- Full HD image pixel
- Multifunction glasses:  
 Reading glasses and Spy glasses.  
 The most inconspicuous camera just looks like everyday glasses.

## Specification

Model	HS-1200FDC
Max. frame rate	1920x1080@ 30fps MJPG/ 3fps YUV 1280x720@ 30fps MJPG/ 12fps YUV 640x480@ 30fps MJPG/ 30fps YUV 320x240@ 30fps MJPG/ 30fps YUV
pixel size	1.4 μm x 1.4 μm
Image sensor	1/6" Digital CMOS Camera Module
Image area	2.7288x1.5498mm
Scan mode	progressive
Sensitivity	553 mV/(Lux-sec)
Dynamic range	73.3 dB @ 15.5x gain
UVC format	MJPEG, YUY2
Storage temperature	-30 to 60 Degree C
Working temperature	-10 to 45 Degree C
Interface	USB 2.0 (Compliant with USB Video Class 1.1 standard)
Built-in Lens	1.83mm/F2.0
View angle	H= 70°; V= 42.7°; D= 77.3°
Operating system	Windows XP, windows Vista, window 7, windows 8
Power source	DC 5V (Micro USB OTG B type)
Power current	160mA
Dimension(mm)	160x150



**Hidden Type**



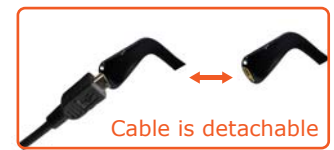
**Feature**

- High Sensitivity!
- High Performance.
- Compact and lightweight.
- Multifunction glasses:  
 Reading glasses and Spy glasses.  
 The most inconspicuous glasses  
 camera just looks like  
 everyday glasses.

**Specification**

unit : mm (±0.5)

Model	HSJ-1200C
Video system	NTSC / PAL
Pixel size	1.75µm
Number of effective pixels	642 X 484 (NTSC & PAL)
Image sensor	1/13" CCIQ II Color Camera
Resolution(TV Lines)	480 TV Lines
S/N Ratio	34 dB
Dynamic range	66 dB
Shutter Type	Electronic Rolling Shutter (ERS)
Sensitivity	1.2V /Lux.sec
Sensor scan mode	progressive scan
Minimum illumination	5 Lux / F2.8
Frame Rate	30 Field/sec(NTSC) , 25 Field/sec(PAL)
Horizontal sync frequency	NTSC -15.734kHz , PAL - 15.625kHz
Vertical sync frequency	NTSC - 60Hz , PAL - 50Hz
Camera consumption	0.45
Video output	1Vp-p , 75ohm composite
Built - lens	1.33mm/F2.0
View angle	H= 45°4' ; V=34° 7' ; D= 55° 3'
Storage temperature	-30 to 60 Degree C
Working temperature	-10 to 45 Degree C
Power source	DC 5 V
Power current	160 mA(max)
Dimension(mm)	150 x 160 x 35



Model	Image / Pin define	Note
HS-1200C		G : GND A : AUDIO P : DC POWER V : VIDEO
HSJ-1200C		

**Order information**

LED indicator	7	6	5	4	3	2	1	
function	AGC gain (value)	200	150	100	80	60	40	20

LED indicator	7	6	5	4	3	2	1	
function	Frame rate (fps)	1 fps	2 fps	4 fps	6 fps	10 fps	15 fps	30 fps(NTSC) 25 fps(PAL)

◎ **How to adjust "frame rate" and "AGC gain" :**

1. Press the "Up" or "Down" button to select function ,according to the chart.
2. The LED indicator blinks ,according to the number of time user presses the button.
3. Every function adjustment takes 5 sec.
4. AGC gain: 20 , Frame rate: 30fps(NTSC), 25fps(PAL) is for normal endoscopy application.

⚠ **Frame rate is "1fps" , "2fps" , "4fps" , "6fps" , "10fps" , "15fps" , "30fps(NTSC) , 25fps(PAL)" ,AGC gain should be set at "20" first.**

⚠ **When AGC gain is at 200 , 150 , 100 , 80 , 60 , 40 , frame rate value will be different according to external environment.**

**Hidden Type**

Mobile digital video recorder +



◀HSJ-1200C

Order information (Various DVR can connect to HSJ-1200C as below:)

Image							
Model	MP-VRM203HD	MP-300E	MP-400E	MP-455E	MP-600SD	WF-AV100	WF-AV200
Display	N/A	2.5" TFT	2.5" TFT	2.5" LTPS TFT	3.5" touch screen TFT	N/A	N/A
External Memory	support up to SDHC 64GB	support up to SDHC 32GB	support up to SDHC 128GB	support up to SDHC 32GB, Built-in flash memory 128 MB	support up to SDHC 32GB	support up to SDHC 64B	support up to SDHC 64B
Function	1.Self-timer Mode, 2.PreviewOSD displaying icons , 3.Setup REC. , 4.Normal REC. , 5.Loop overwrite REC. 6.Motion detect, 7.Snapshot	1.PreviewOSD displaying icons , 2.Schedule REC. , 3.Normal REC. , 4.Loop overwrite REC. 5.IR Remote control 6.Snapshot 7.monitor sleep mode	1.PreviewOSD displaying icons , 2.Schedule REC. , 3.Normal REC. , 4.Loop overwrite REC. 5.IR Remote control 6.Snapshot 7.monitor sleep mode	1.PreviewOSD displaying icons , 2.Schedule REC. , 3.Normal REC. , 4.Snapshot, 5.monitor sleep mode	1.PreviewOSD displaying icons , 2.Schedule REC. , 3.Normal REC. , 4.Loop overwrite REC. 5.IR Remote control, 6.Motion detect, 7.Snapshot 8.monitor sleep mode	1.Normal REC.	1.Normal REC.
Compression	H.264	H.264	H.264	MPEG4	MPEG4	H.264	H.264
Video Input	analog signal input (NTSC/PAL)	analog signal input (NTSC/PAL)	analog signal input (NTSC/PAL)	analog signal input (NTSC/PAL)	analog signal input (NTSC/PAL)	analog signal input (NTSC/PAL)	analog signal input (NTSC/PAL)
Video Input Interface	Ø2.5mm phone plug	Ø2.5mm phone plug	Ø2.5mm phone plug	Mini 4 pin(female)	Ø2.5mm phone plug	Ø2.5mm phone plug	Ø2.5mm phone plug
File format	(.mov), (.jpg)	(.avi), (.jpg)	(.avi), (.jpg)	(.wav/.mp3/.asf/.wma), (.jpg)	(.avi), (.jpg)	(.avi)	(.avi)
Video resolution	HD 720p / max 30 fps	D1 720x480	D1 720x480	VGA 640 x 480	D1 720x480	D1 720x480	D1 720x480
Photo resolution	HD 720p	D1 720x480	D1 720x480	VGA 640 x 480	VGA 640 x 480	N/A	N/A
Date and time stamping	Support	Support	Support	Support	Support	Support	Support
WiFi function	N/A	N/A	N/A	N/A	N/A	Support	Support
App/Apk	N/A	N/A	N/A	N/A	N/A	Android / IOS	Android / IOS
Battery	N/A	NP-60 (1030mAh)	NP-60 (1030mAh)	NP-60 (1030mAh)	NP120 (2000mAh)	N/A	1100mAh
Power input/charging	5V/520mA	5V	5V	5V	5V	5V	5V
Dimension(mm)	32x68	63.5(L)x95.5(H)x21(W)	63.5(L)x95.5(H)x21(W)	63.5(L)x95.5(H)x21(W)	93(L)x70(H)x28(W)	54.5(L)x28(H)x10(W)	73(L)x36.6(H)x12(W)