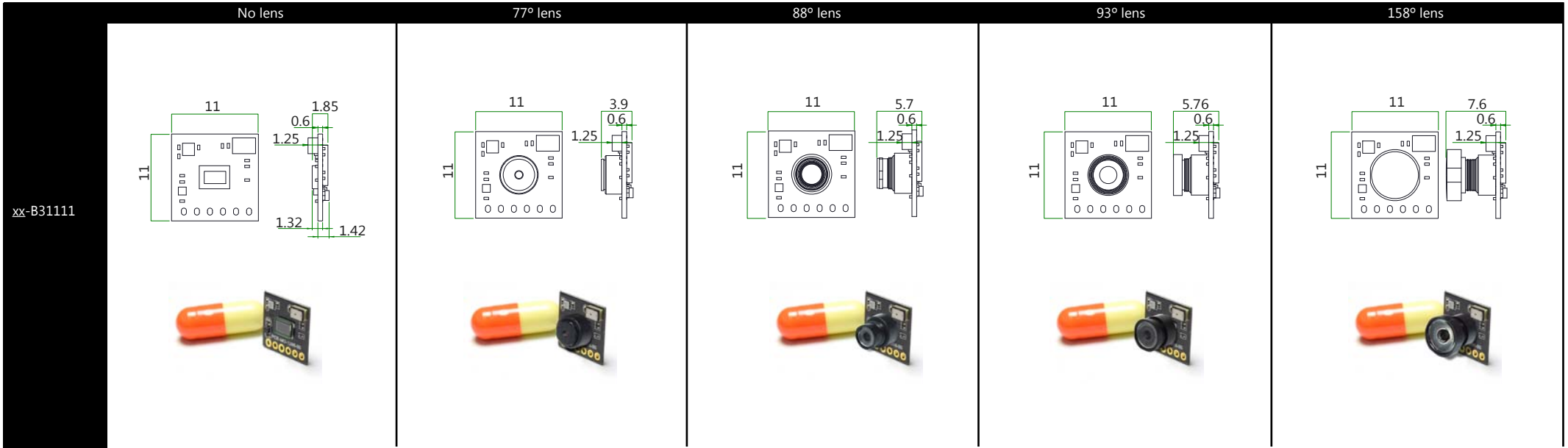


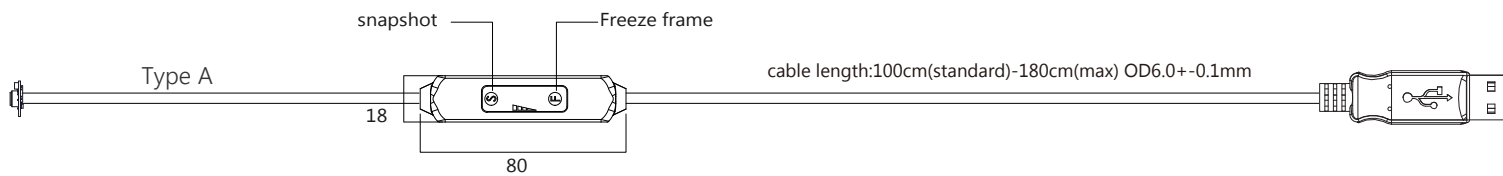
Low temperature, 60fps, 1080p ▶ SYD, TYD series

UNIT:±0.2mm

xx-B31111



Type A	Cable length	Cable OD
1	100~550 (cm)	1.9 ±0.1(mm)
2	100~600 (cm)	2.8 ±0.1(mm)



Low temperature, 60fps, 1080p ▶ SYD, TYD series

SYD-B31111L-77A



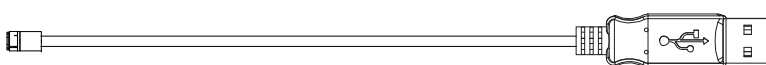
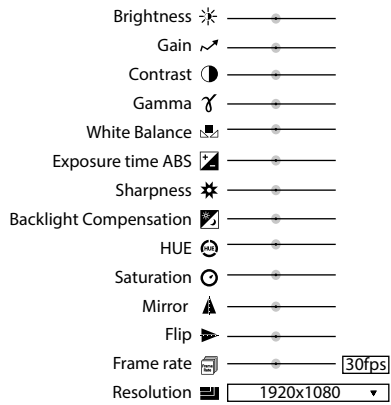
① CONNECTOR	SYD USB 3.0 A type SYT USB Type C TYD USB 3.0 A type TYT USB Type C								
② TYPE	B Board type (module) VB Board type (module)+dimmer								
③ CAMERA TYPE	31111 color 311M11 B/W								
④ LED	L white LED x 6 L8 IR 850nm LED x 6 L9 IR 940nm LED x 6 LH high intensity LED								
⑤ LENS	<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">77 1.83mm/F2.0(77°)</td> <td style="width: 50%;">158 1.523mm/F4.8/6.0/8.0(158° lens)</td> </tr> <tr> <td>77 1.83mm/F5.0/8.0 (77°) camera with LED</td> <td></td> </tr> <tr> <td>88 1.55mm/F5.7(88°)</td> <td></td> </tr> <tr> <td>93 1.5mm/F5.7(93°)</td> <td></td> </tr> </table>	77 1.83mm/F2.0(77°)	158 1.523mm/F4.8/6.0/8.0(158° lens)	77 1.83mm/F5.0/8.0 (77°) camera with LED		88 1.55mm/F5.7(88°)		93 1.5mm/F5.7(93°)	
77 1.83mm/F2.0(77°)	158 1.523mm/F4.8/6.0/8.0(158° lens)								
77 1.83mm/F5.0/8.0 (77°) camera with LED									
88 1.55mm/F5.7(88°)									
93 1.5mm/F5.7(93°)									
⑥ Cable OD	X cable OD: 1.9+ -0.1mm A cable OD: 2.8+ -0.1mm 								

Image sensor	1/6" CMOS Color	
Pixel size(μm)	1.4 x 1.4	
Snapshot & freeze function	specify when ordering	
Camera parameter setting on smartphone	support	
Max. frame rate	standard	1920 x 1080; 1280 x 720; 640 x 480 60 fps MJPG/YUV
	fixed	1920x1080 @60 fps MJPEG/YUV 1280x720 @90 fps MJPEG/YUV 640x480 @120 fps MJPEG/YUV 320 x 240 @ 240 fps MJPEG/YUV
Image area	2.7288x1.5498mm	
Scan mode	progressive	
Sensitivity	553 mV/(Lux-sec)	
Dynamic range	73.3 dB @ 15.5x gain	
UVC format	MJPEG / YUY	
Storage temperature	-30 to 60 Degree C	
Working temperature	-10 to 45 Degree C	
Lens (specify which lens)	1.83mm/ F2.0/ 5.0/ 8.0 (77° lens-high depth of field lens-order in advance) 1.55mm/ F5.7/ 8.0/ 10(88° lens-high depth of field lens-order in advance) 1.5mm/F5.7(93° lens) 1.523mm/ F4.8/ 6.0/ 8.0(158° lens-high depth of field lens-order in advance)	
View angle (order in advance)	H= 69°; V= 43°; D= 77° (77° lens) H=48.4°; V=78.3°; D=86.8° (88° lens) H=81°90';V=50°18';D=92°82' (93° lens) H=132°; V=65° ; D=158° (158° lens)	
LED	white LED x 6 (dimmer or high intensity LED-optional)	
Power source	DC 5V (USB)	
Power current	NO LED / 160mA with LED 6pcs / 190mA	
Operating system	Windows XP, windows Vista, window 7, windows 8, windows 10, Linux, MAC OSX	
Interface	USB 3.0	

CAMERA PARAMETER ADJUSTABLE

Camera parameter can be adjusted on the smartphone via the Misumi app and PC viewer software AMCAP.



USE SPECIAL FILTER AND OPTICAL PANEL FOR SECURITY APPLICATION



OTHER INFORMATION

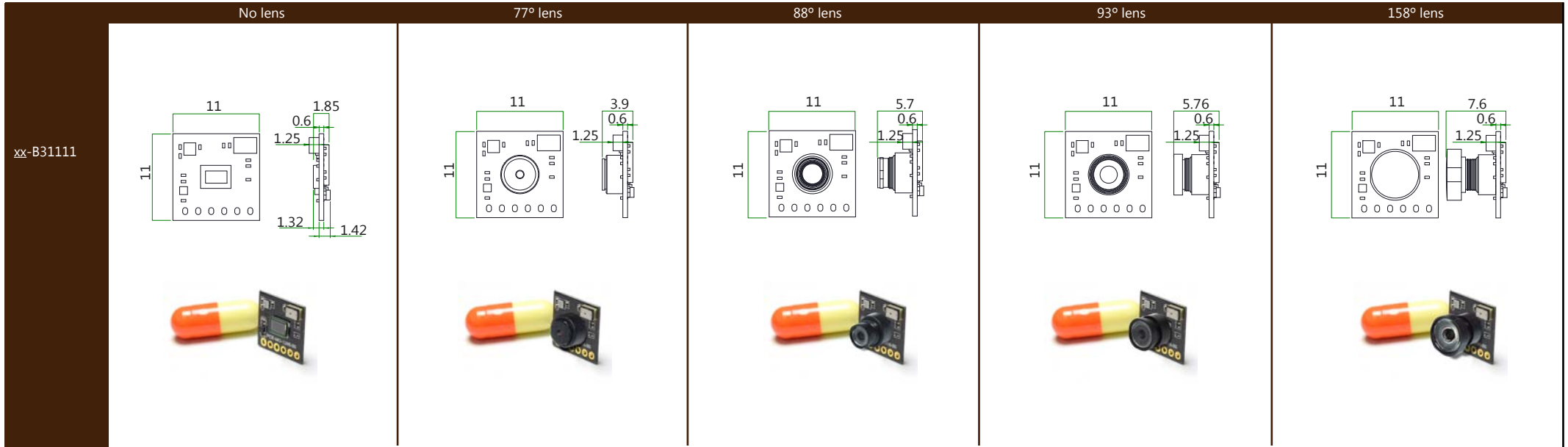
Camera Resolution	Support to 1080p
Loop Recording	Overwrites older video files, only keeps latest files. No more worry about SD card capacity
2 method to Record	1. Record video via DVR button; 2. Record video via APP
Small & Slim	Fit for more application
Internet IP connection	NO limit of distance



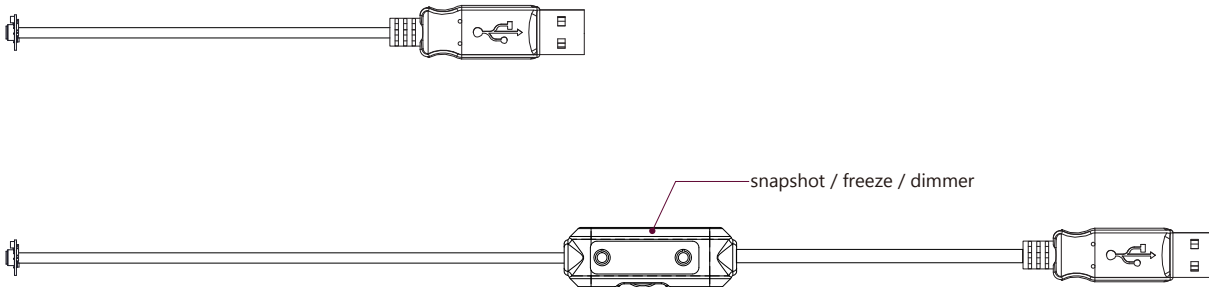
See-through camera with 1080P resolution and a special filter. It can see-through special material and project vein locator onto the skin (must use high power infrared LED).

1080p ▶ FTD, TD series

UNIT:±0.2mm



CABLE OPTIONAL



Item	Cable length	Cable OD
1	10~150 (cm)	0.35 +0.1(mm) enameled wire
2	10~200 (cm)	0.9 +0.1(mm)
3	10~200 (cm)	1.5 +0.1(mm)
4	10~200 (cm)	1.7 +0.1(mm)
5	10~400 (cm)	2.8 +0.1(mm)
6	10~1000 (cm)	3.5 +0.1(mm)
7	10~1500 (cm)	5.0 +0.1(mm)

1080p ▶ **FTD, TD series**

TD-B31111L-77A

- ① ② ③ ④ ⑤ ⑥

① CONNECTOR	TD USB 2.0 A type	FTD USB 2.0 A type (snapshot+freeze)
	TM Micro USB OTG B type	FTM Micro USB OTG B type (snapshot+freeze)
	TT USB type C	FTT USB type C (snapshot+freeze)
	TI Mini USB B type	FTI Mini USB B type (snapshot+freeze)
② TYPE	B Board type (module)	
	VB Board type (module)+dimmer	
③ CAMERA TYPE	31111 color	
	311M11 color	
④ LED	L white LED x 6	
	L8 IR 850nm LED x 6	
	L9 IR 940nm LED x 6	
	LH high intensity LED	
⑤ LENS	77 1.83mm/F2.0(77°)	
	77 1.83mm/F5.0/8.0 (77°) camera with LED	
	88 1.55mm/F5.7(88°)	
	93 1.5mm/F5.7(93°)	
	158 1.523mm/F4.8/6.0/8.0(158° lens)	

Image sensor	1/6" CMOS Color
Pixel size(μm)	1.4 x 1.4
Snapshot & freeze function	specify when ordering
Camera parameter setting on smartphone	support
Max. frame rate	1920x1080 @ 15~30fps MJPEG/ 5fps YUV 1280x720 @ 15~30fps MJPEG/ 10fps YUV 960x540; 848x480@15~30fps MJPEG/ 20fps YUV 640x480; 640x360; 424x240; 320x240; 320x180; 176x144; 160x120@15~30fps MJPEG; 30fps YUV
Image area	2.7288x1.5498mm
Scan mode	progressive
Sensitivity	553 mV/(Lux-sec)
Dynamic range	73.3 dB @ 15.5x gain
UVC format	MJPEG / YUY
Storage temperature	-30 to 60 Degree C
Working temperature	-10 to 45 Degree C
Lens (specify which lens)	1.83mm/ F2.0/ 5.0/ 8.0 (77° lens-high depth of field lens-order in advance) 1.55mm/ F5.7/ 8.0/ 10(88° lens-high depth of field lens-order in advance) 1.5mm/F5.7(93° lens) 1.523mm/ F4.8/ 6.0/ 8.0(158° lens-high depth of field lens-order in advance)
View angle (order in advance)	H= 69°; V= 43°; D= 77° (77° lens) H=48.4°; V=78.3°; D=86.8° (88° lens) H=81°90';V=50°18';D=92°82' (93° lens) H=132°; V=65°; D=158° (158° lens)
LED	white LED x 6 (dimmer or high intensity LED-optional)
Power source	DC 5V (USB)
Power current	NO LED / 160mA with LED 6pcs / 190mA
Operating system	Windows XP, windows Vista, window 7, windows 8, windows 10, Linux, MAC OSX
Interface	USB 2.0