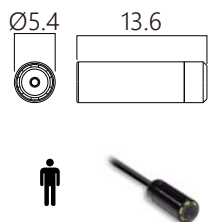


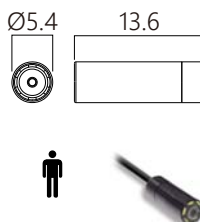
**CCIQ II COLOR CAMERA**

<p><b>Model: TD-B31105</b> front view no lens</p>	<p><b>Model: TD-B31105-77</b> front view 77° lens</p>	<p><b>Model: TD-B31105-88</b> front view 88° lens</p>	<p><b>Model: TD-B31105-93</b> front view 93° lens</p>	<p><b>Model: TD-B31105-158</b> front view 158° lens</p>
<p><b>Model: TD-B31105A</b> built-in microphone, no lens</p>	<p><b>Model: TD-B31105A-77</b> built-in microphone, 77° lens</p>	<p><b>Model: TD-B31105A-88</b> built-in microphone, 88° lens</p>	<p><b>Model: TD-B31105A-93</b> built-in microphone, 93° lens</p>	<p><b>Model: TD-B31105A-158</b> built-in microphone, 158° lens</p>
<p><b>Model: TD-BL31105</b> side view, no lens</p>	<p><b>Model: TD-BL31105-77</b> side view, 77° lens</p>	<p><b>Model: TD-BL31105-88</b> side view, 88° lens</p>	<p><b>Model: TD-BL31105-93</b> side view, 93° lens</p>	<p><b>Model: TD-BL31105-158</b> side view, 158° lens</p>
<p><b>Model: TD-B31105U</b> up view, no lens</p>	<p><b>Model: TD-B31105U-77</b> up view, 77° lens</p>	<p><b>Model: TD-B31105U-88</b> up view, 88° lens</p>	<p><b>Model: TD-B31105U-93</b> up view, 93° lens</p>	<p><b>Model: TD-B31105U-158</b> up view, 158° lens</p>
<p><b>Model: TD-B31105UA</b> built-in microphone, no lens</p>	<p><b>Model: TD-B31105UA-77</b> built-in microphone, 77° lens</p>	<p><b>Model: TD-B31105UA-88</b> built-in microphone, 88° lens</p>	<p><b>Model: TD-B31105UA-93</b> built-in microphone, 93° lens</p>	<p><b>Model: TD-B31105UA-158</b> built-in microphone, 158° lens</p>
<p><b>Model: TD-B31109R</b> round type, no lens</p>	<p><b>Model: TD-B31109R-77</b> round type, 77° lens</p>	<p><b>Model: TD-B31109R-88</b> round type, 88° lens</p>	<p><b>Model: TD-B31109R-93</b> round type, 93° lens</p>	<p><b>Model: TD-B31109R-158</b> round type, 158° lens</p>

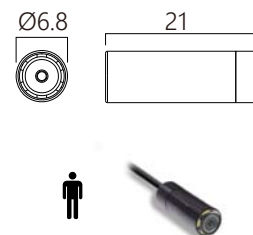
**Model: TD-T31105L-77**  
LED x 6, tube type, 77° lens



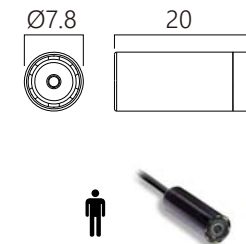
**Model: TD-T31105L-88**  
LED x 6, tube type, 88° lens



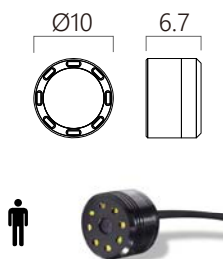
**Model: TD-T31105L-93**  
LED x 6, tube type, 93° lens



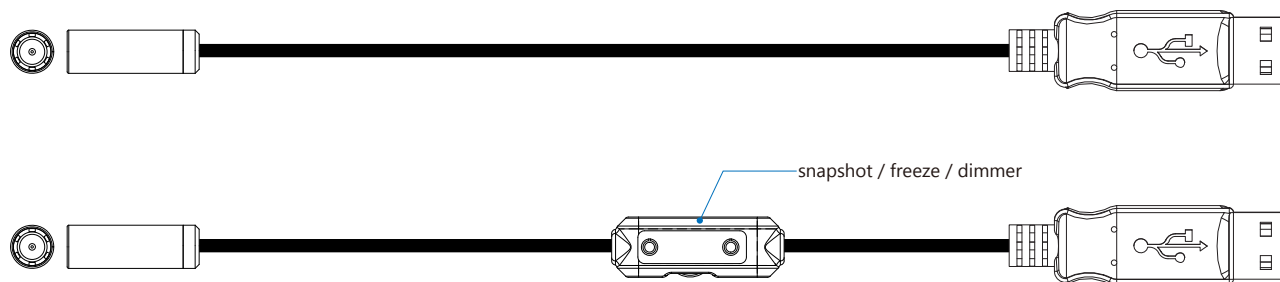
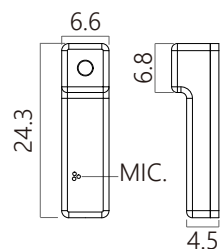
**Model: TD-T31105L-158**  
LED x 8, tube type, 158° lens



**Model: RD-T3110RL-77**  
LED x 8, 77° lens



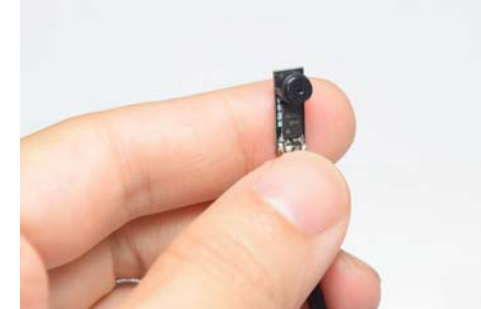
**Model: TD-N31106UA-77**  
built-in Microphone, 77° lens



Item	Cable length	Cable OD
1	10~200 (cm)	1.7 +0.1(mm)
2	10~400 (cm)	2.8 +0.1(mm)
3	10~1000 (cm)	3.5 +0.1(mm)
4	10~1500 (cm)	5.0 +0.1(mm)

## Specification

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
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, YUV
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 (specify which lens)	1.83mm/ F2.0/ 5.0/ 8.0 (77° lens-high depth of field lens-specify in advance) 1.55mm/ F5.7/ 8.0/ 10 (88° lens-high depth of field lens-specify in advance) 1.5mm/ F5.7(93° lens) 1.523mm/ F4.8/ 6.0/ 8.0 (158° lens-high depth of field lens-specify in advance)
View angle	H= 69°; V= 43°; D= 77° (77° lens) H=81°90';V=50°18';D=92°82' (93° lens) H=48.4°; V=78.3°; D=86.8° (88° lens) H=132°; V=65° ; D=158° (158° lens)
LED	white LED x 6 (specify when ordering) *TD-V31111RL series with 8 pcs white LED
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



Model NO. Information

**TD-V31105L-77**

① ② ③ ④ ⑤

① CONNECTOR	② TYPE	③ CAMERA TYPE	④ LED	⑤ LENS
<b>TD</b> USB 2.0 A type	<b>B</b> Board type	<b>31105</b> color	<b>L</b> white LED x 6	<b>77</b> 1.83mm/F2.0(77°)
<b>TM</b> Micro USB OTG B type	<b>VB</b> Board type+dimmer	<b>311M5</b> B/W	<b>L8</b> IR 850nm LED x 6	<b>77</b> 1.83mm/F5.0/F8.0(77°) camera with LED
<b>TT</b> USB type C	<b>T</b> Tube type	<b>31105A</b> color(with MIC.)	<b>L9</b> IR 940nm LED x 6	<b>88</b> 1.55mm/F5.7(88°)
<b>TI</b> Mini USB B type	<b>V</b> Tube type+dimmer	<b>311M5A</b> B/W(with MIC.)		<b>93</b> 1.5mm/F4.0(93°)
<b>FTD</b> USB 2.0 A type	<b>L</b> Snake type (with LED light)	<b>31105U</b> color (up view)		<b>158</b> 1.523mm/F4.8/6.0/8.0 (158° lens)
<b>FTM</b> Micro USB OTG B type	<b>BL</b> Board type (side view)	<b>31109R</b> Color(Round type+MIC.)		
<b>FTT</b> USB type C	<b>VBL</b> Board type (side view)+dimmer	<b>311M9R</b> B/W(Round type+MIC.)		
<b>FTI</b> Mini USB B type	<b>NL</b> Metal enclosure type (side view)	<b>31110R</b> Color(Round type+MIC.)		
<b>RD</b> USB 2.0 A type	<b>VNL</b> Metal enclosure type (side view) +dimmer			
<b>RM</b> Micro USB OTG B type	<b>N</b> Metal enclosure type (up view)			
<b>RT</b> USB type C	<b>VN</b> Metal enclosure type (up view) +dimmer			
<p><b>*FTD/ FTM /FTT/ FTI</b> with snapshot &amp; Freezing frame function</p> <p><b>*RD/ RM /RT</b> for xx-V31110R only</p>		<p><b>*BL31105, BL311M5, B31105U</b> without Tube type</p> <p><b>*B31105, B31109R</b> without side view type</p>	IR LED suggest to choose B/W type	<p><b>77Y: Y:</b> with Day&amp;Night filter</p> <p>93° Lens diameter is 4.95mm</p> <p>158° Lens diameter is 6.25mm</p>

Camera parameter adjustable

Camera parameter can be adjusted on the smartphone via the Misumi app.



- Brightness
- Gain
- Contrast
- Gamma
- White Balance
- Exposure time ABS
- Sharpness
- Backlight Compensation
- HUE
- Saturation
- Mirror
- Flip
- Frame rate  30fps
- Resolution 1920x1080

