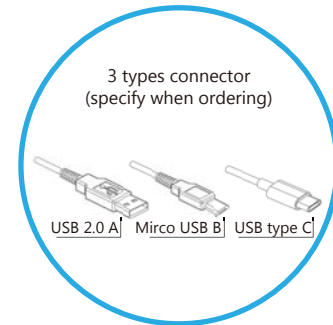
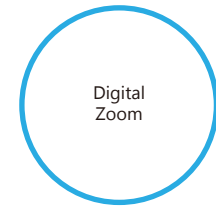


(Camera size depending on the different lens)

| | | | | | | |
|--|---|--------------------------------|-----------------------|-----------------------|-------------------|----------------------|
| Dimension(±0.2mm) & Image | | | | | | |
| Model | TD-BL20903 | TD-B20903U | TD-B20903 | TD-V20903L | TD-B20908R | RD-V20909RL |
| Type | Modul type | Modul type | Modul type | with Metal enclosure | Modul type | with Metal enclosure |
| Application | Endoscope/ Inspection / Hidden | Endoscope/ Inspection / Hidden | Endoscope/ Inspection | Endoscope/ Inspection | Inspection/Hidden | Robot/Hidden |
| Freeze & Snapshot | (specify when ordering) | | | | | |
| Max. frame rate | 1280x720@ 30fps MJPG | | | | | |
| Pixel size | 1.4 μm x 1.4 μm | | | | | |
| Image sensor | 1/9" Digital CMOS Camera Module | | | | | |
| Image area | 1.819 x1.033 mm | | | | | |
| Scan mode | progressive | | | | | |
| Sensitivity | 585mV/Lux-sec | | | | | |
| Dynamic range | 68.4dB @16x gain | | | | | |
| UVC format | MJPEG | | | | | |
| 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 when ordering) | 1.32mm/F3.5 (76° lens) 1.08mm/F4.0 (105° lens) 1.00mm/F4.8 (128° lens) (Camera size depending on the different lens) | | | | | |
| View angle (order in advance) | H= 69°; V= 42°; D= 76° (76° lens) H= 78°; V= 57°; D= 105° (105° lens) H= 118°; V= 76°; D= 128° (128° lens) | | | | | |
| LED | (specify when ordering-white/IR 940nm/IR 850nm) | | | | | |
| Shutter | rolling shutter | | | | | |
| Operating system | Windows XP, Windows Vista, Window 7, Windows 8, windows 10 | | | | | |
| Power source | DC 5V (USB/with power board) | | | | | |
| Power current | 120mA | | | | | |



TD-B20903L-128

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- 2
- 3
- 4
- 5

| 1 Connector | | 2 Camera Type | | 3 Type | | 4 LED | | 5 LENS | |
|---|----------------------|---------------|--|--------|-----------------------------------|-------|-------------|--|------------------------------------|
| TD | USB 2.0 A type | B | Board type | 20903 | color | L | white LED | 76 | 1.32mm/F3.5 (76°) suggest with LED |
| TM | Micro USB OTG B type | VB | Board type+dimmer function | 209M3 | B/W | L9 | IR940nm LED | 76 | 1.32mm/F2.0 (76°) |
| TT | USB type-C | BL | Board type (left side view only) | 20908R | color (round type) | L8 | IR850nm LED | 128 | 1.0mm/F4.8 (128°) |
| FTD | USB 2.0 A type | VBL | Board type (left side view only)+dimmer function | 20903U | color (up view) | | | | |
| FTM | Micro USB OTG B type | T | Tube type | 20909R | color (round type-with enclosure) | | | | |
| FTT | USB type-C | V | Tube type+dimmer function | | | | | | |
| RD | USB 2.0 A type | | | | | | | | |
| RM | Micro USB OTG B type | | | | | | | | |
| RT | USB type-C | | | | | | | | |
| FD, FM, FT : with snapshot +freez function | | | | | | | | H= 69°; V= 42° ; D= 76° (76° lens) H= 118°; V= 76°; D= 128° (128° lens) | |
| RD, RM, RT : for xx-T20909R only | | | | | | | | | |