



**OPTOLOGICS**



**, Intra Oral Camera System**

*Optologics I.O.C is an vision camera . With its compact design.*

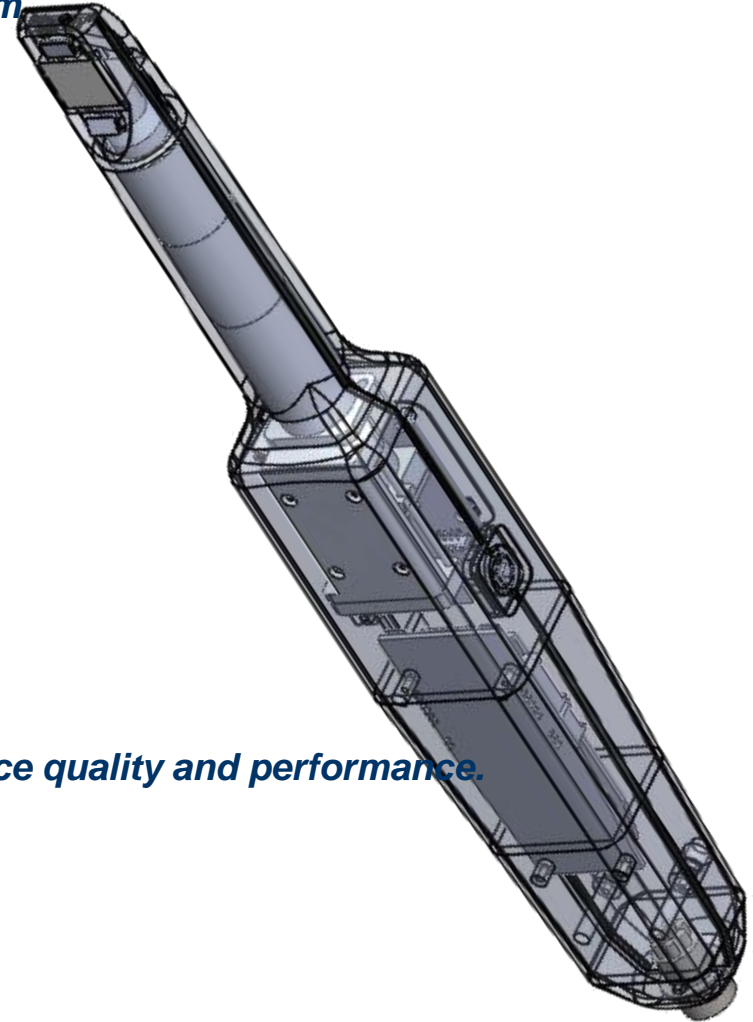
## **Specification**

- **Uncompressed high quality FULL HD video with 30 frame rate**
- **Telecentric Type Prism Optical Layout**
- **High Speed Accuracy Autofocus Algorithm & Image Platform**
- **Fast Auto Focus with continuous tracking**
- **Each zoom step speed control**
- **Real-Time use to serial zoom speed control**
- **Contrast Enhancement ( Local Exposure )**
- **AWB(Automatic White Balance)**
- **AE(Automatic Exposure)**
- **BLC(Back Light Compensation)**
- **DFC(Defective Pixel Correction) on the fly**
- **Remote lens control via standard controller (RS232)**
- **Sony 1/2.8" IMX-291 CMOS, 2Megapixel**
- **Up to 1920X1080 30P resolution or 1280\*720 30P**
- **2D/3D DNR (Digital Noise Reduction)**
- **RS-232 Interface for external control**
- **DC5V (USB Power)**

## **Specification for Camera**

- **Specifications are apt to change without prior notice to enhance quality and performance.**

## **Specification for Lens**



## Optologics Intra Oral Camera Key Features

- *Optical Layout: Prism Optical Type*
- **Ultra Macro Image: 1mm ~**  
**Obtain near and far vision**
- *Resolution: Full HD*
- **Distortion : Almost No Distortion** ( smaller than Liquid Lens Type and VCM Type )
- **Vinnet : Almost No Vignette**
- **Saturaton : Almost No Saturation**
- *Output: USB2.0*
- *Autofocus: Onepush AF Type*  
*Continious AF Type*  
**High Fast AutoFocus Algorithm**
- *Actuator : Micro stepping Motor*  
*Image sensor Moving Type*
- **Optical Axis : Alignment of the lens, Minimization**

## Camera Spec & Optical Spec

항 목		Design Value
Sensor		½.8 inch 4.5 (diagonal)
Wavelength		Visible(400nm ~ 700nm)
F/#		7
Magnification		0.23X
FOV		50deg(diagonal) 15.652mm(H) x 11.739mm(V) at WD 2mm
MTF @75lp/mm	0F	46.7%
	0.7F	45.6%(S) , 46.3%(T)
	1.0F	47.6%(S) , 36.7%(T)
CRA(Max)		5.908deg
Optical Distortion(Max)		< 3.0%
TV Distortion		< 0.8%
Right angle mirror size		(10mm x 10mm)
Construction		11 Glass(Spherical)
Relative illumination		94.2%(1.0 field)
OI(Object ~ image)		105mm (Object ~ image)

## Camera Spec & Optical Spec

MODEL	BVM-O001
Sensor Device	Sony 1/2.8" progressive scan CMOS, 2Megapixel
Total Pixels	1952(H) x 1116(V) 2.18 Megapixel
Effective Pixels	1944(H) x 1104(V) 2.14 Megapixel
Scanning System	Progressive Scan
Horizontal	800TVL
S/N Ratio	More than 50dB (AGC Off)
Shutter Speed	1/60s Default,(Long Exposure Mode, ~1Sec)
Video Output	1920 x 1080 30P / 1280 * 720 30P or 60P
Video Output Format	USB 2.0
Day & Night	IR CUT Filter built in System
Serial Port	RS232
Lens Control	Motorized Lens Control by stepping Motor. (Simplified Adjustment)
2D/3DNR	-
Power Source	DC 5V (USB Powr)
Ambient Temperature	-10°C ~ 60°C

