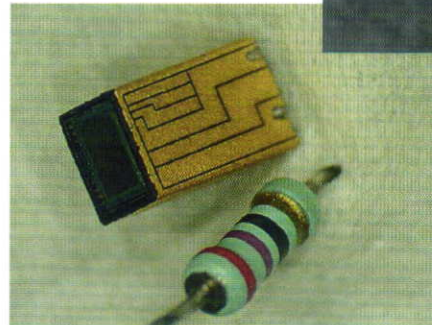
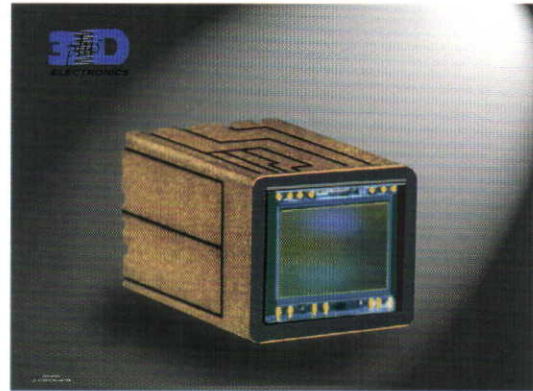




# Color CCD MicroCamera Head 1/6” SMCC06048

## Features:

- Extremely miniaturized color CCD camera (3.8 \* 3.8 \* 8.74 mm)
- Light Weight (0.27 g)
- High resolution (Ye, Cy, Mg and G complementary color mosaic filters)
- High sensitivity and low smear
- No voltage adjustment (Reset Gate and substrate bias are not adjusted)
- Low dark current
- Excellent anti blooming characteristics
- Continuous variable-speed shutter
- Field period readout system
- Variable charge-storage time electronic shutter
- Recommended range of exit pupil distance : -10 mm to  $-\infty$



## General Description:

The 3D Micro Camera is a highly miniaturized, light weight, high performance and easy-to-use color CCD Camera for endoscopes applications.

It embeds state-of-the art Sony color CCD sensors with high resolution and sensitivity, low smear and dark current, and excellent anti blooming characteristics.

The embedded electronics grant the  $\mu$ camera with a long cables driving capability: up to 10 meters of cable can be connected between the camera head and the base station (greater length of cable can be studied on specific request).

It is available for PAL and NTSC video systems.

The  $\mu$ camera is packaged through 3D PLUS MCM-V technology qualified for harsh environment applications (vibrations, mechanical shocks, thermal, humidity).

A DSP controlled Electronic Board can be connected to the camera head and is providing the user with all the  $\mu$ camera settings and control functions like color, brightness, contrast, image window set-up, ...

## Ordering Information:

Part number	Video Format		Cable Length
SMCC06048	P : PAL N : NTSC	-	"blank" (No data) : No cable Between 1.0 and 9.9 meters : <b>XX</b> => X.X meters Beyond 10 meters : study on specific request

3D Plus does not provide any optical system (lens or filter) on this product.



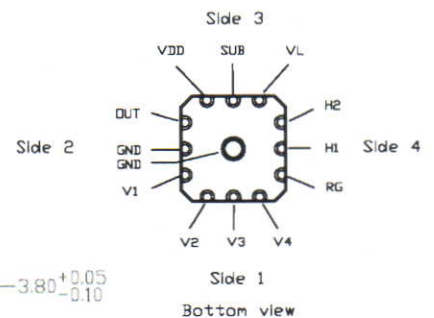
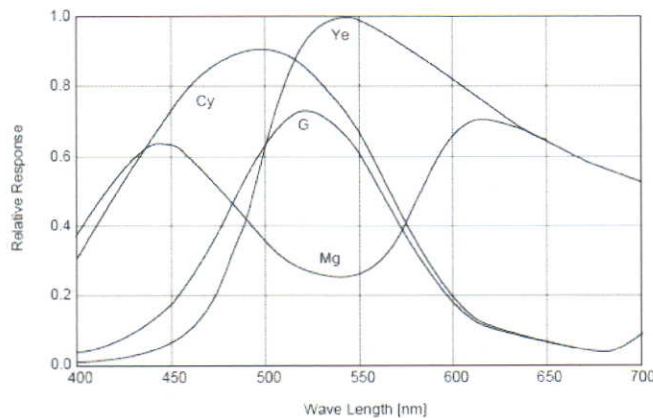
# Color CCD MicroCamera Head 1/6"

## SMCC06048

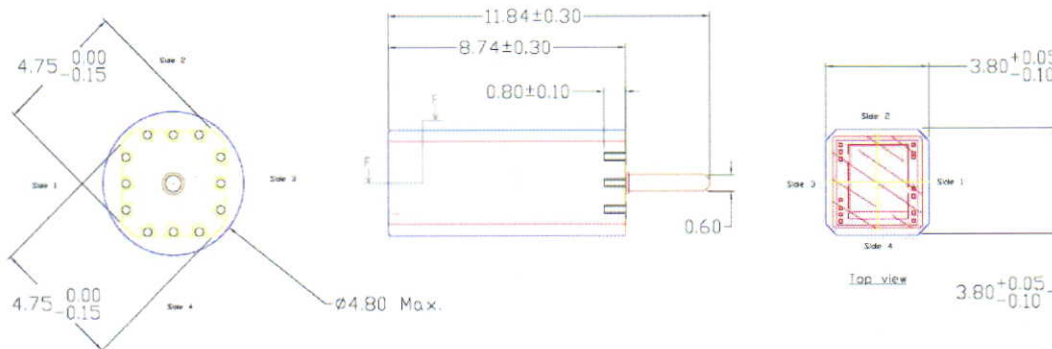
### Technical features:

<i>Features</i>		
Video System	PAL	NTSC
Image Sensor	Interline 1/6" CCD	
Reference	SONY CCD Image Sensor ICX239AKE	SONY CCD Image Sensor ICX238AKE
Number of effective pixels	440.000 pixels	380.000 pixels
Active Pixel Size	3.275 $\mu\text{m}$ (H) * 3.150 $\mu\text{m}$ (V)	3.200 $\mu\text{m}$ (H) * 3.725 $\mu\text{m}$ (V)
Active Image Area	2.46 mm * 1.83 mm	2.46 mm * 1.84 mm
Number of picture elements	752 (H) * 582 (V)	768 (H) * 494 (V)
<i>Environment</i>		
Temperature (storage)	-30°C / +80 °C	
Temperature (operating)	- 10 °C / +60°C	
Relative humidity	60% or less	
<i>Dimensions</i>		
Dimensions	3.8 * 3.8 * 8.74 mm	
Weight	0.27 g.	

### Spectral Sensitivity Characteristics (excludes both lens characteristics and light source characteristics)



### Mechanical drawing and Pin assignment:



### Main Sales Office:

<b>FRANCE</b>	3D PLUS 641, rue Hélène Boucher ZI. 78532 BUC Cedex	Tel : 33 (0)1 30 83 26 50	Fax : 33 (0)1 39 56 25 89	Web : <a href="http://www.3d-plus.com">www.3d-plus.com</a> e-mail : <a href="mailto:sales@3d-plus.com">sales@3d-plus.com</a>
<b>North America</b>	3 D PLUS USA, Inc. 2570 Eldorado Parkway, Suite 150 McKinney, TX 75070	Tel : (1) 214 733-8505	Tel : (1) 214733-8506	e-mail : <a href="mailto:jquinn@3d-plususa.com">jquinn@3d-plususa.com</a>