

OTTO Medical Technologies GmbH

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Camera

With latest developed image processing technology, OTEK1108 delivers the clearest, sharpest picture, which makes the brightness uniform and constant, the resolution of edge is clear and optimized depth of field. Even in the case of high sensitivity, it can ensures low SNR, guarantee the best image definition and excellent picture quality concurrently. The whole system supports multi-disciplinary use, and provides the corresponding system setting mode for different surgical applications and supports individual storage, which is more convenient for doctors to operate.



Camera Head

OTEK1108 uses high resolution and sensitivity image sensors. Ergonomic design and optimized surface treatment provide users best grip during operation. The Camera built-in custom button, and C-shaped interface can be configured with a variety of coupler, highly optimized for general use.



In order to avoid flicker and interference problems, OTEK 1108 uses native progressive scanning method to ensure picture stable. The System can also provide the clearest detail and incomparable natural color rendition at the highest spatial and temporal resolution, even the finest variations in the tissue structure can be distinguished. For users, OTEK1108 not only reduces the visual fatigue caused by monitors, but also enhances the ability to perform minimally invasive surgery.

The endoscopic camera system has 3CMOS, which supports 16:9 input format and ensure image with resolution of 1920×1080 pixels. These factors provide users higher quality image and corresponding larger image area.

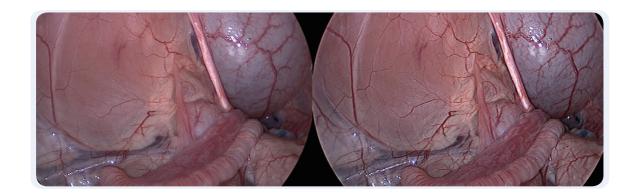


Key Features



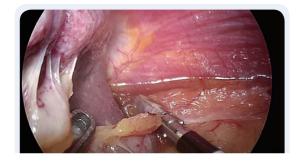
- 3 1/3" 16:9 image sensors with more than 6Mega effective pixels in total
- High sensitivity requires less light from illumniation
- New image enhancement functions on clarity and color
- High interference immunity from electrosurgery
- Flexible filters for using with fiber flexible scope
- Full digital chain achieved on DVI-D, HDMI(1), or 3G-SDI digital output
- Up to 2,5x digital zoom function and freeze function
- Mirror, flip, rotation function
- Full HD resolution video recording and image capturing (optional)

• Edge enhancement – see more details

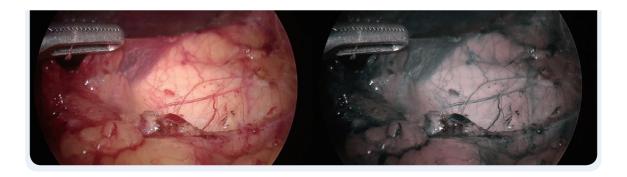


Full High Definition Image System

• Color enhancement – see more underneath surface







• Light Enhancement – brighter at shadow area







| Camera Controller | • |
|-------------------|---|
| Output | Analog Video Output (OPTIONAL): |
| | 1×Y/PB/PR or RGB: 0.7 V (p-p) (on HD-Sub 15 Female connector) |
| | 2×S-Video on Mini-Din 4 Female Connectors |
| | 2×Composite Video on BNC Connectors |
| | Digital Video Output |
| | 2×3G-SDI/HD-SDI (OPTIONAL) |
| | 2×DVI on DVI-D Connector |
| | Peripherals Control: |
| | 2×controllable peripherals, via 3.5mm stereo Jack connector, |
| | named ACC1, ACC2 |
| Connectivity | Bus Interface |

| Camera Head | |
|---------------|---|
| Image Sensor | 1/3"CMOS Progressive Scan |
| Cable Length | 3m |
| Endocoupler | For Standard Eye Piece |
| Function Keys | 4 Individually Programmable Function Keys |

| System | | |
|----------------------|--|--|
| Image Resolution | 1920x1080P | |
| Standard Compliance | IEC/EN 60601-1: I | |
| Classification | Camera Head: BF | |
| Directive Compliance | CE Mark | |
| | Classification (according to directive 93/42/EEC): Class I | |

Full High Definition Image System

| Dimensions / Weight | | |
|---------------------|---------------------------------|--|
| Camera Head | L/W/H 57×38×43 | |
| Camera Controller | W/H/D 342×85×352 | |
| Weight | Camera Head Approx. 90g | |
| | Camera Controller Approx. 5.1kg | |
| Power Connection | 100 - 120/200 - 240 V | |
| Power Consumption | 40 VA | |
| Current Rate | 0.5 A | |
| Main Frequency | 50/60 Hz | |
| Fuse A | 2×T 1,0 A E | |





LED Light Source

To be a cost-effective lighting device OTEL2108 LED light source performs high efficiency and exceptional service life, which is longer than 20000 hours.

OTEL2108 is almost silent during working. The noise generates by the light source is no more than 30 dB, which is four times quieter than the traditional light source. It can provide a comfortable operating environment for users and reduces interference.

Features

- High Intensity Illumination, deliver much more light than a 250W halogen lamp and comparable with a 180W or even a 300W xenon lamp.
- Unparalleled long life time of LED Lamp, reduce contingencies caused by light bulbs, etc.
- Super Silent, Noise not exceeding 30 dB, low operational cost
- Consistent color temperature when dimming, maintaining consistent visual vision
- Manual or automatic light intensity adjustment, the light can be manually adjusted via the control buttons on the front panel, alternatively, the output light intensity can be automatically adjusted depending on the input composite video signal of standard definition or Y signal of high definition video via the BNC connector on the rear panel of the light source.



Image System Accessories



Note: the end of the fiber-guided beam of light is highly focused, generating a large amount of heat in the focus. When a cold light source is in operation, the end of the optical fiber guide beam must not be placed on the patient's covering or skin, because strong light can cause the patient to burn or catch fire.



Uniform Illumination and autoclavable, with color code, can be easily distinguished, stored, and with STORZ/WOLF/OLYMPUS adapter.

| Item No. | Length | Color Code |
|----------|--------|------------|
| JS20DD | 2.0m | Blue |
| JS25DD | 2.5m | Red |
| JS30DD | 3.0m | Green |

Camera Optic Couplor



Camera Optic Couplor with fixed-focus, F18, F20, F22,F25, F28, F32, F35



Camera Optic Couplor with zoom, F18-F35