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A03	ECN00061	Update the parameter	2019-08-20	Xu Lin
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VLS-50 Series Light Source Technical Specifications



SonoScape

SONOSCAPE MEDICAL CORP.

1 Overview

The VLS-50 series light source system is designed to realize multispectral illumination by a white light LED and a blue-violet LED. The white light LED is featured with high luminous flux (≥ 600 lm), and the blue-violet LED enables to highlight the superficial mucosal micro-vessels, benefiting to identification and diagnosis of the lesion parts.

2 Advanced Technologies

- Multispectral illumination
- Aspheric optical technique
- Capacitor touch screen
- Quick luminous flux adjustment based on current regulation
- High color rendering index and high luminous flux in the white light mode
- High brightness and specific spectra in the special light modes
- Two special light modes
- Fast light mode switch in millisecond order

3 Functions

- Power switch: on/off
- Powering on/off the light source:
 - Powering on: press the **LIGHT**

button to enlighten the lamp and the <LIGHT> indicator illuminates.

- Powering off: press and hold the **LIGHT** button for about 2 seconds to power off the lamp and the <LIGHT> indicator lights off.

- Brightness adjustment:
 - Modes: automatic and manual
 - Adjusting levels: 1–19
- Air-feeding pressure adjustment :
 - low/medium/high
- Transillumination function:
 - Press the **TRANS** button to enable this function. The transillumination mode can maintain for 6–8 seconds if no button is pressed.
 - Press any button to disable the transillumination mode.
- Services time indication:
 - The elapsed time of the light source is counted every other minute and the left time is indicated when the light source is powered on.
 - The service time indicator flashes when the elapsed time reaches 10000 hours.
- Over-heat protection
- Abnormal report and processing:

Provide the LED flashing, buzzer alarming and so on according to the malfunction processing requirements.

- Power-down protection:

Provide power-down protection for the light control mode, light control level, air pump powering on/off, air pump flow level and service time

4 Parameters

- Air-feeding level: four levels off/low/medium/high
- Light control level: level 1–19
- Total luminous flux output : ≥ 600 lm, allowance: -10%
- Service time: 10000 hours (continuous use)
- Air-feeding system:
 - Air-pump flow levels: high, medium, low
 - Pressure range: 45 Kpa – 65 Kpa
 - Maximum air flow volume:
 - High: 3.7 L/min – 5.5 L/min
 - Medium: 3.0 L/min – 4.7 L/min
 - Low: 2.0 L/min – 3.7 L/min

5 Ports

- Endoscope port

- Light source control port
- Power supply input port
- Equipotential terminal
- Optical fiber cable port
- Water bottle connector

6 Compatible Equipment

- Image processors: HD-550
- Video gastroscopes: 550 series video gastroscopes (EG-550/EG-550L)
- Video colonoscopes: 550 series video colonoscopes (EC-550/EC-550T/EC-550/ EC-550L/T)
- Trolley: HDT-330

7 Size and Weight

- Size: 473 ± 5 mm(L) \times 370 ± 5 mm(W) \times 154 ± 5 mm (H)
- Weight: 13kg (approx.)

8 Standards

- IEC 60601–1:2005+A1:2012
- IEC60601–2–18:2009
- IEC 60601–1–2:2014

9 Environment Requirements

- Operation environment
 - Temperature: 0°C – $+40^{\circ}\text{C}$

- Relative humidity: 30% – 80%
(non-condensing)
- Atmosphere pressure: 700 hPa –
1060 hPa
- Storage environment
 - Temperature: -5°C – +40°C
Relative humidity: 30% – 80%
(non-condensing)
 - Atmosphere pressure: 700 hPa –
1060 hPa
- Transportation environment
 - Temperature: -20°C – +55°C
 - Relative humidity: 20% – 90%
(non-condensing)
 - Atmosphere pressure: 700 hPa –
1060 hPa
- Power supply requirements:
 - Input voltage: 100 – 240V AC
50/60 Hz
 - Input power: 300 VA

NOTE:

- The specifications of this system may change without any prior notification.
- Some products or features may not be available in some countries.
- Please contact your local SonoScape sales representative for more information.

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