

| REV                                                                                                                                                                                                                                                                                                                | ECN                                           | Revision History                                                                |                | Date                | Editor    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------------------------------------|----------------|---------------------|-----------|
| A02                                                                                                                                                                                                                                                                                                                | D00059410                                     | 1.Update the manufacturer address<br>2.Add function descriptions and parameters |                | 2019-06-24          | Xu Lin    |
| A01                                                                                                                                                                                                                                                                                                                | D00038964                                     | First Release                                                                   |                | 2017-07-17          | Li Lingyu |
|                                                                                                                                                                                                                                                                                                                    |                                               |                                                                                 |                |                     |           |
|                                                                                                                                                                                                                                                                                                                    |                                               |                                                                                 |                |                     |           |
|                                                                                                                                                                                                                                                                                                                    |                                               |                                                                                 |                |                     |           |
|                                                                                                                                                                                                                                                                                                                    |                                               |                                                                                 |                |                     |           |
|                                                                                                                                                                                                                                                                                                                    |                                               |                                                                                 |                |                     |           |
|                                                                                                                                                                                                                                                                                                                    |                                               |                                                                                 |                |                     |           |
|                                                                                                                                                                                                                                                                                                                    |                                               |                                                                                 |                |                     |           |
|                                                                                                                                                                                                                                                                                                                    |                                               |                                                                                 |                |                     |           |
|                                                                                                                                                                                                                                                                                                                    |                                               |                                                                                 |                |                     |           |
|                                                                                                                                                                                                                                                                                                                    |                                               |                                                                                 |                |                     |           |
| Title                                                                                                                                                                                                                                                                                                              | HDL-35E Light Source Technical Specifications |                                                                                 |                |                     |           |
| This document contains intellectual property information that is proprietary to SonoScape Medical Corp. and is protected by law. Neither the document nor the information contained therein should be used or reproduced in whole or partially, without prior written agreement consent of SonoScape Medical Corp. |                                               |                                                                                 |                |                     |           |
| <br>SONOSCAPE MEDICAL CORP.                                                                                                                                                                                                     |                                               | Document Number<br>901-05131                                                    |                | Distribution Number |           |
|                                                                                                                                                                                                                                                                                                                    |                                               | Version<br>A02                                                                  | Effective Date | Page<br>Page 1 of 5 |           |

## HDL-35E Light Source Technical Specification



**SonoScape**

SonoScape Medical Corp

## 1 Overview

The HDL-35E light source adopts the LED as main lamp. On the basis of its special luminescence mechanism, the LED lamp has high illumination, long service life, and high CRI.

## 2 Advanced Technologies

- Aspheric optical technology
- Capacitor touch screen
- Automatic brightness adjustment

## 3 Functions

- Lamps: on/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. If no button is pressed, the transillumination mode can maintain for 6 - 8 seconds.
  - Press any button to disable the transillumination mode.
- Low brightness protection
- Powering on/off the LED lamp and indications
  - Powering on: Press the **LAMP** button once to turn on the LED lamp and the <LAMP> indicator lights;
  - Powering off: Press and hold the **LAMP** button for 2 seconds to turn off the LED lamp and the <LAMP>

indicator lights off.

- Automatic switch to the spare lamp
- Over-heat protection
- Service time indication of the main lamp
- Abnormal report and processing  
Provide 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 of the main lamp.

## 4 Parameters

- Main lamp: LED, 50W
- Air-feeding levels: low/medium/high
- Light control levels: 1 - 19
- Total luminous flux output of main lamp:  $\geq 600\text{lm}$ , allowance: -10%
- Correlated color temperature (CCT): 5000K - 7000K
- Color rendering index (CRI):  $\geq 90$
- Average service time of the main lamp: 50000 hours (continuous use)
- Emergency lamp: LED lamp, 14W  
Total luminous flux output:  $\geq 80\text{lm}$ , allowance: -10%
- Air-feeding system:
  - Air pump flow level: high/medium/low

- Pressure range: 45Kpa - 65Kpa
- Maximum air flow volume:
  - High: 3.7L/min - 5.5L/min
  - Medium: 3.0L/min - 4.7L/min
  - Low: 2.0L/min - 3.7L/min
- Storage environment
  - Temperature: -5℃ - +40℃
  - Relative humidity: 30% - 80%  
( non-condensing )
  - Atmospheric pressure: 700 hPa - 1060hPa

## 5 Ports

- Endoscope port
- Light source control port
- Power supply port
- Equipotential terminal

## 6 Compatible Equipment

- Image processor: HD-350, HD-350S and HD-320plus
- Video gastroscope: EG-430 Series
- Video colonoscope: EC-430Series
- Trolley: HDT-330

## 7 Size & Weight:

- Size: 460mm (L)×370mm (W)×154mm (H)
- Weight: approx. 11kg

## 8 Safety Standards

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

## 9 Environment Requirements

- Operating environment
  - Temperature: 0℃ - +40℃
  - Relative humidity: 30% - 80% ( non-condensing )
  - Atmospheric pressure: 700 hPa - 1060hPa

- Transportation environment
  - Temperature: -20℃ - +55℃
  - Relative humidity: 20% - 90%  
(non-condensing)
  - Atmospheric pressure: 700 hPa - 1060hPa
- Power supply requirements
  - Input voltage: 100 - 240V AC
  - Frequency: 50/60 Hz
  - Input power: 160 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 the local distributor for more information.

**Manufacturer: SonoScape Medical Corp.**

Address: Room 201 & 202, 12th Building, Shenzhen Software Park Phase II, 1 Keji Middle  
2nd Road, Yuehai Subdistrict, Nanshan District, Shenzhen, 518057, Guangdong, China

Tel: +86-755-26722890

Fax: +86-755-26722850

E-mail: [sonoscape@sonoscape.net](mailto:sonoscape@sonoscape.net)

[www.sonoscape.com](http://www.sonoscape.com)