Canon

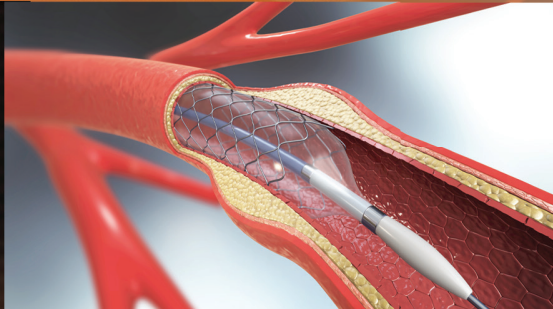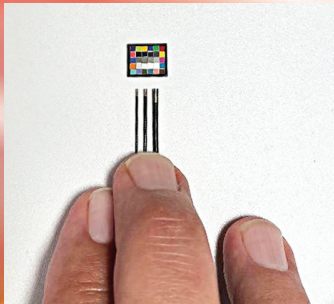**Innovative Video Borescope Inspection Solution**

SV-2000
1.6 mm Ø, 400 x 400, CMOS
1.05 mm Ø, 200 x 200, CMOS
0.89 mm Ø, 400 x 400, CMOS

The innovative **SV-2000** is a cutting-edge chip-on-tip video borescope camera which supports a diverse range of inspection applications. When getting into tight spaces, the SV-2000 has the capacity to deliver full-color, high resolution video inspections and image capture.

The SV-2000 is ideally suited for a variety of inspections including catheters, tooling, machined parts, and assembly process monitoring. Two new control systems provide automatic brightness control, multi-sensor compatibility, and image capture of still images or video clips. All of the SV-2000 scopes are fully sealed and water resistant for disinfection or use in wet environments.

Features include:

Two control unit options:
1. Tablet with integrated touchscreen display and on-board recording
2. CCU for use with external display (not included) and recording to USB media

Three rugged, flexible scope configurations:
- 1.6 mm x 1.9m, 120° FOV, 400 x 400 resolution
- 1.05 mm x 1.2m, 120° FOV, 200 x 200 resolution
- 0.89 mm x 1.2m, 120° FOV, 400 x 400 resolution

- All scopes water resistant IPX7
- All scopes are plug and play with CCU or tablet
- Scope handle 1/4 x 20 thread mount

10" class touchscreen CCU features:
- On-board image recording & playback
- Image annotation
- Image export to USB media
- Magic Light feature for brightness control

Both control units include:
- HDMI® and USB 3.0 outputs
- USB 3.0 output for streaming connection to PC
- Manual and Auto brightness control
- White Balance and Calibration functions
- Firmware updates via USB

VSSV2000 090122V1a

SV-2000

FLEXIBLE CHIP-ON-TIP
DIGITAL VIDEO BORESCOPE SYSTEM WITH ILLUMINATION
1.6 MM Ø x 1.9M
1.05 MM Ø x 1.2M
0.89 MM Ø x 1.2M

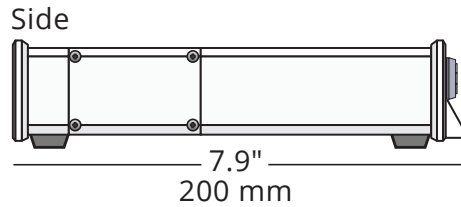## Performance Specifications

SYSTEM COMPONENTS

MODEL	SV-2H01N 1.6 mm x 1.9m	SV-2H02N 1.05 mm x 1.2m	SV-2H03N 0.89 mm x 1.2m
Scope assembly diameter	1.6 mm	1.05 mm	0.89 mm
Scope sheath length tip-to-handle mount	1.9m	1.2m	1.2m
Cable length handle mount to CCU	2.0m	2.0m	2.0m
Total cable and sheath length, tip to CCU	3.9m	3.2m	3.2m
LED location	Handle mount	Handle mount	Handle mount
Illumination	LED coupled glass fiber bundle	LED coupled glass fiber bundle	LED coupled glass fiber bundle
SENSOR			
Type	CMOS Progressive	CMOS Progressive	CMOS Progressive
Size (optical format)	1.1 x 1.1 (1/18")	0.64 x 0.64 (1/36")	0.65 x 0.65 (1/31")
Pixel matrix	400 x 400	200 x 200	400 x 400
Electronic shutter	Rolling	Rolling	Rolling
OPTICS			
FOV - field of view	120°	120°	120°
Depth of focus	5 to 50 mm	3 to 50 mm	3 to 30 mm
Magnification - depends on viewing distance	up to 12x	up to 12x	up to 12x
F number	f 5.0	f 2.8	f 2.8
Focal length	0.418 mm	0.175 mm	0.175 mm
Water resistance rating	IPX7	IPX7	IPX7
Camera head / handle mounting	1/4 - 20 threaded socket	1/4 - 20 threaded socket	1/4 - 20 threaded socket
Handle dimensions	85 x 44 x 39 mm (3.3 x 1.7 x 1.5")	85 x 44 x 39 mm (3.3 x 1.7 x 1.5")	85 x 44 x 39 mm (3.3 x 1.7 x 1.5")

CCU & TABLET CONFIGURATIONS	SV-2D01N Non-display CCU	SV-2T01N Tablet
Display	External (not included)	Integrated, 10" class touchscreen
Touchscreen format	N/A	Capacitive
Output	Simultaneous HDMI, USB 3.0 (UVC)	Switchable HDMI, USB 3.0 (UVC)
Output frame rate	30 fps	30 fps
PC required for use	No	No
Recorded image formats	.PNG stills, MPEG4 clips	.PNG stills, MPEG4 clips
Image record	Image capture to USB media	Image capture, review, annotation, export/import USB media
Key functions	Auto/Manual brightness white balance, calibration	Auto/Manual brightness Magic Light ROI brightness control white balance, calibration
Water resistance rating	None	None
CCU dimensions W L H	140 x 200 x 43 mm (5.5 x 7.9 x 1.7")	251 x 48 x 206 mm (9.9 x 1.9 x 8.1")
CCU weight	0.95 kg (2.1 lbs)	1.25 kg (2.8 lbs)
Mounting	N/A	VESA 75, internal kickstand
Power input	12V DC, 0.6A	12V DC, 0.6A
Environmental	Operating temperature: 10 ° to 35 °C Humidity: up to 75% non-condensing Storage temperature: -20 ° to 70 °C	Operating temperature: 10 ° to 35 °C Humidity: up to 75% non-condensing Storage temperature: -20 ° to 70 °C
Included accessories	12V DC power adapter 6' HDMI cable 6' USB 3.0 cable type A to type B USB media FAT32 16GB minimum	12V DC power adapter 6' HDMI cable 6' USB 3.0 cable type A to type B USB media FAT32 16GB minimum

System Component Dimensions
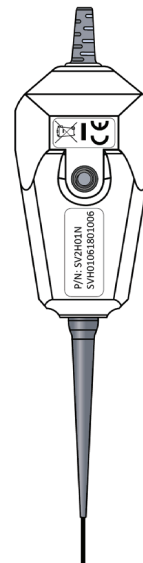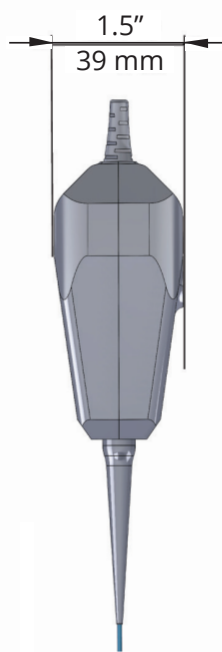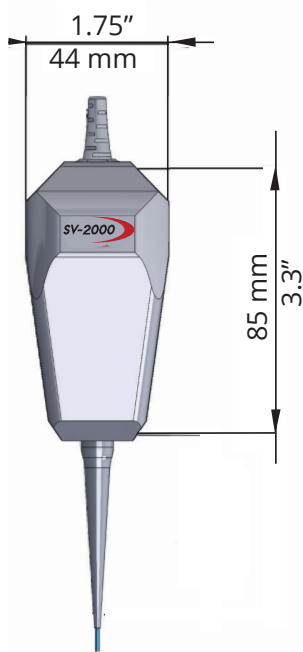
CCU

Front

SV-2000

1.7" — 43 mm

5.5" — 140 mm

Rear
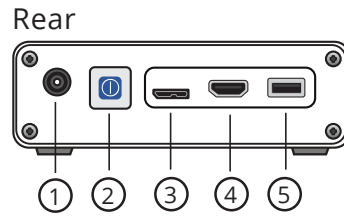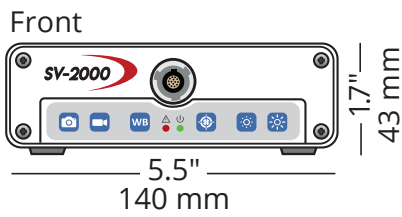
1. Power input
2. ON/OFF button
3. Streaming USB 3.0 out
4. HDMI output
5. USB media recording

① ② ③ ④ ⑤

Side

7.9" — 200 mm

SCOPE HANDLE

1.75" — 44 mm
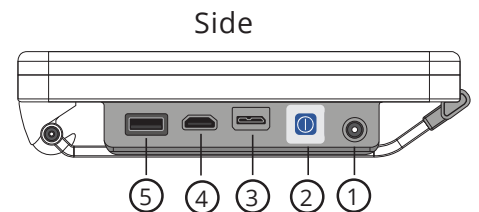
SV-2000

3.3" — 85 mm

1.5" — 39 mm

P/N: SVZH01N
SVH01061801006

Convenient 1/4 - 20 threaded tripod mount for attaching to a fixture or holder.

TABLET

Front

9.9" — 251 mm

8.1" — 206 mm

1

SV-2000

SV-2000

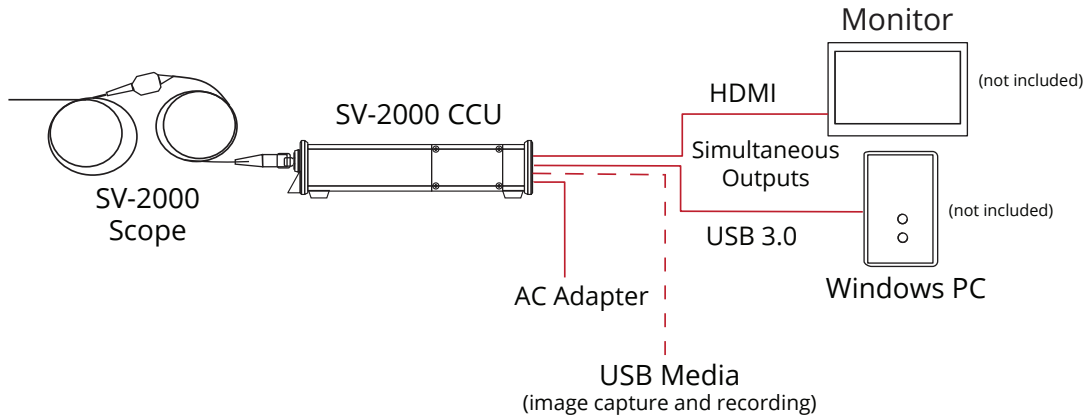1.9" — 48 mm

⑦

⑥

Side

⑤ ④ ③ ② ①
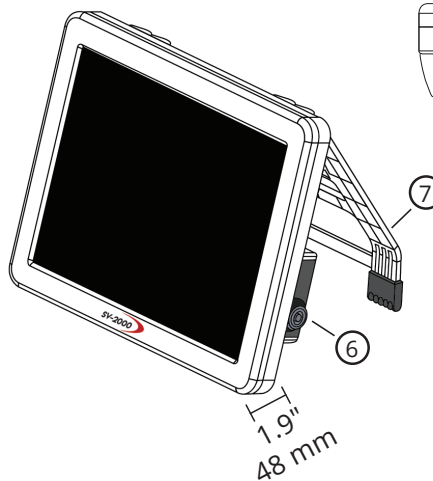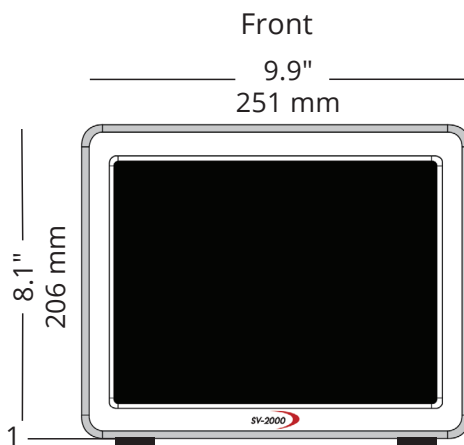
1. Power input
2. ON/OFF button
3. Streaming USB 3.0 out
4. HDMI output
5. USB media import/export
6. Scope input
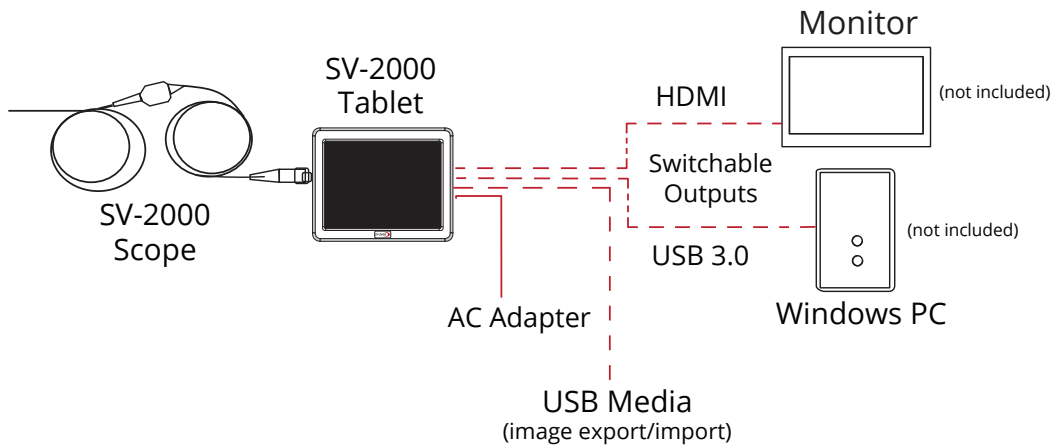7. Tablet kickstand

Optional Connection Configurations

Connection
using SV-2000 CCU

SV-2000 CCU

Monitor

HDMI

(not included)

Simultaneous
Outputs

USB 3.0

(not included)

Windows PC

SV-2000
Scope

AC Adapter

USB Media
(image capture and recording)

Connection
using SV-2000 tablet

SV-2000
Tablet

Monitor

HDMI

(not included)

Switchable
Outputs

(not included)

USB 3.0

Windows PC

SV-2000
Scope

AC Adapter

USB Media
(image export/import)

Note: SV-2000 is not for use in surgical endoscope and
medical instrument inspection applications.

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