



Instructions for Use: EndoInspect® PC-Based USB Lumen Inspection System

Safety Visualized™

Product Brand Name(s)	EndoInspect® PC-Based USB Base Unit, EndoInspect® Videoscope & EndoInspect® Fiberscope
Product Number(s)	EP5103- PC-Based USB Base Unit EP5012- 1.9 mm Ø x 190 cm L videoscope EP5013- 1.9 mm Ø x 100 cm L videoscope EP5022- 1.9 mm Ø x 190 cm L videoscope (HI-RES / 518k Pixel) EP5023- 1.9 mm Ø x 100 cm L videoscope (HI-RES / 518k Pixel) EP5018- 1.0 mm Ø x 190 cm L videoscope EP5019- 1.0 mm Ø x 100 cm L videoscope EP5016- .80 mm Ø x 80 cm L fiberscope EP5017- .50 mm Ø x 80 cm L fiberscope EP5211- 16" Flexible Gooseneck Arm w/ C-Clamp
Key Features	EndoInspect® Lumen Inspection Videoscope System • Compact, high-performance PC-based USB inspection platform • Smallest Diameter / Longest Length Scopes Available • Automatic Brightness and White Balance Features • IP Rated System / Safe for Use in Wet Environments • Enables Seamless Image & Video Capture & Syncing w/ Tracking Systems
Intended Use	The EndoInspect® system is designed for use by SPD / CS Technicians in the visual inspection and documentation of medical device lumens and working channels during reprocessing. Our system aids in the visual detection of lumen damage, bioburden deposits, water / moisture, reprocessing tool debris, rust / staining and other common lumen contaminants.
Range of Applications	Medical instruments and devices that require visual inspection and documentation of space restricted lumens and passages that cannot be illuminated or visualized by the unassisted eye.

Product Specifications	IP65 RATED THIS UNIT IS NOT WATERPROOF DO NOT SUBMERGE EndoInspect® PC-Based USB Base Unit: Part # EP5103 • CMOS Optimization: Engineered to maximize the output of high-resolution EndoInspect® CMOS videoscopes. • Universal Scope Port: Single-source base unit that accepts all current and EndoInspect® scope models. • Mounting Versatility: Flexible placement options near workstations or on medical carts via included mounting system and optional ¼-20 gooseneck mount. • LED Brightness Control: LED illumination controls with intensity display for optimized image clarity. • Robust Protection: IP65-rated for dust and water resistance. • Power Efficiency: Powered directly via USB bus, minimizing cable clutter in the inspection area. • Seamless Integration: Plug-and-play USB connectivity for instant image and video recording via PC or laptop and the EndoInspect Viewer app. IP68 RATED CAPABLE OF SUBMERSION TO MAX. DEPTH OF 1 METER EndoInspect® Scope Models: Part #'s EP5012 through EP5023 • Micro-Diameter Optics: High-resolution CMOS videoscopes available in 1.0 mm and 1.9 mm diameters. • Ultra-Thin Fiberscopes: Industry-leading micro-fiberscopes at 0.5 mm and 0.8 mm diameter. • Extended Reach: Scope lengths up to 1900 mm for comprehensive single-pass inspections. • HLD Ready: IP68 rating for full submersion during HLD / soak sterilization. • Interchangeable Design: All scope models are common to the new USB base unit system. • Unmatched Durability: Structurally reinforced sheathing designs to withstand the rigors of device inspection. • Ergonomic Handling: Lightweight / compact scope body design with protective cap for device longevity. • Quick Identification: Each scope model diameter is clearly marked for rapid selection.
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EndoInspect® Viewer Application:

- **Simple / Efficient User Interface:** Easily view, record, compare and archive your inspection data via an intuitive user interface.
- **Touchscreen Ready:** The EndoInspect Scope view is fully touch screen compatible with all Windows PC's that meet minimum system requirements.
- **PC-Driven Control:** Direct-to-computer interface via USB for single click image and video capture.
- **Digital Workflow:** Leverages PC software for intuitive file organization, instant sharing, and comprehensive video review.
- **Image Captures:** .png file format
- **Video Recordings:** .mp4 file format
- **COMPATIBLE PC DEVICE TYPES**
 - Windows Desktop / Laptop / Notebook PC — Yes
 - Windows Tablet with full Windows OS (e.g. Microsoft Surface Pro) — Yes
 - Mac / iPad / Chromebook / Android — Not Supported

MINIMUM PC HARDWARE REQUIREMENTS TO RUN THE ENDOINSPECT VIEWER

- Processor: Intel Core i5 (7th gen or newer) or AMD equivalent
- RAM: 8 GB
- Storage: 500 MB available disk space (plus space for captured media)
- USB: USB 2.0 port (USB 3.0 recommended)
- Display: 1280 x 720 resolution minimum
- Graphics: Integrated graphics sufficient; dedicated GPU not required

COMPATIBLE OPERATING SYSTEMS

- Windows 11 (64-bit) - Full Support, Recommended
- Windows 10 (64-bit, version 1909 or later) — Full Support
- macOS — Not Supported
- Android — Not Supported
- iOS / iPadOS — Not Supported
- Linux — Not Supported

Note: The EndoInspect Viewer app requires a Windows desktop environment. Devices running mobile, browser-based, or non-Windows operating systems are not compatible.

Complete System
(Videoscope + USB Base
Unit)



Fig. 1

USB Base Unit (Front &
Back)



Fig. 2

Videoscope

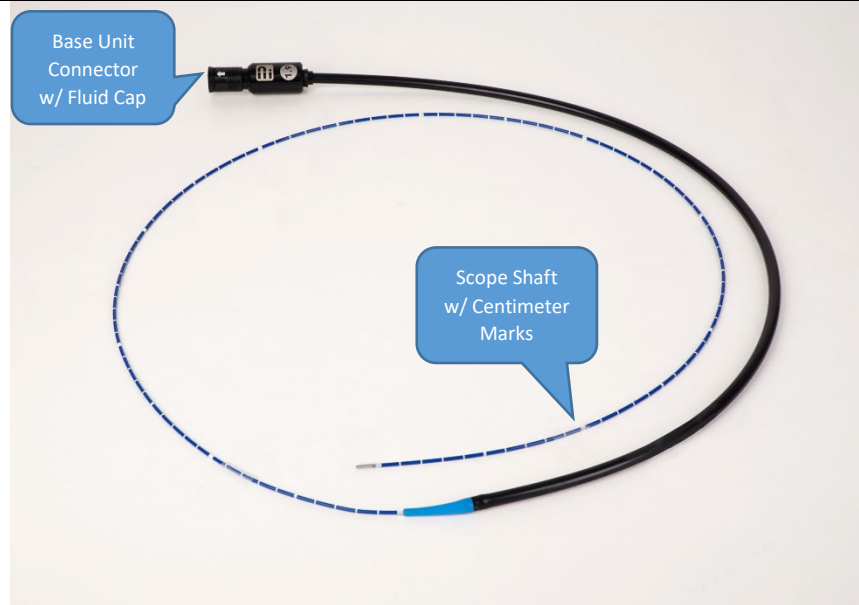
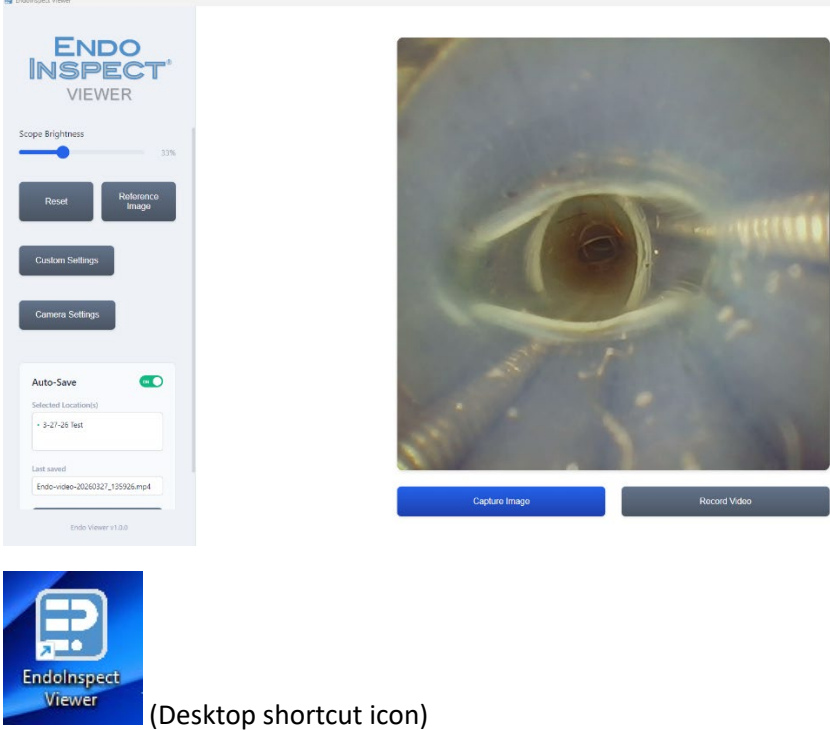


Fig. 3

Videoscope Storage Tray (example)



Fig. 4

Viewer Application (example)	 (Desktop shortcut icon) Fig. 5
Shipping & Storage	Scope products to be shipped and stored in their original packaging when not in use. Keep product storage temperatures between 60-78 degrees F. Keep products free from dust, liquids and strong magnetic fields during storage.
Instructions for Using Product(s)	
Description of Use	Carefully insert the correct sized EndoInspect® visual inspection scope into the channel or lumen to be inspected. Do not force the scope shaft into your device... scope insertion into lumen or channel should be smooth and easy.
Preparations for Use	1. Carefully unpack and set up equipment in desired location. 2. Assemble on benchtop or chosen mounting option in desired location. 3. Install the EndoInspect® Scope Viewer application on your PC. 4. Plug in the USB base unit into your PC's chosen USB port using the supplied cables. 5. Choose the correct configuration EndoInspect® inspection scope, remove connector soaking cap and plug connector into the #EP5103 USB base unit. Align white arrows and insert connector upwards until locked. 6. Launch the EndoInspect® Viewer application. 7. Your EndoInspect® visual inspection system is now ready to use.

Viewer Application- Features & Controls

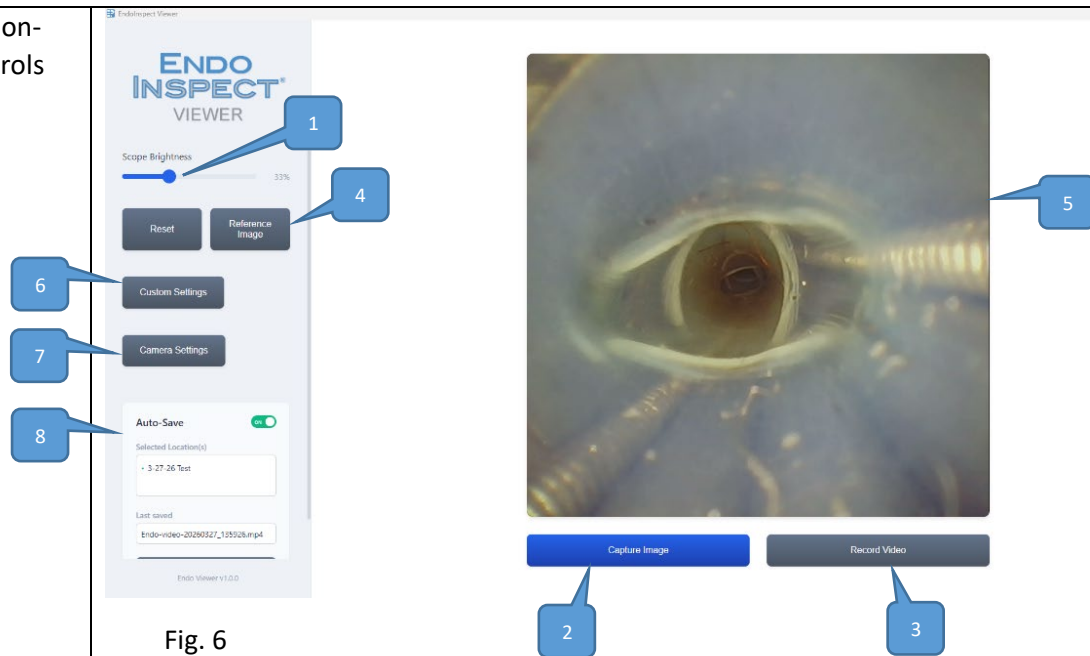


Fig. 6

On Screen Display Component Identification (ref. Fig. 6 above)

1. **Scope Brightness Adjustment**- Touch or click / drag your mouse cursor to slide this button left / right to adjust the scopes brightness based on device inspection needs.
2. **Image Capture Button**- Touch or mouse click to initiate a still image capture. A still image will be captured with every button touch / click.
3. **Video Record Button**- Touch or mouse click button to initiate a video recording (tap to start video recording – tap again to end video recording).
4. **Reference Image Button**- Touch or mouse click this button to load and display any captured system image. Once loaded, user can select to view the reference image in small or large format (small format shown below).

(Ref. Fig. 7)

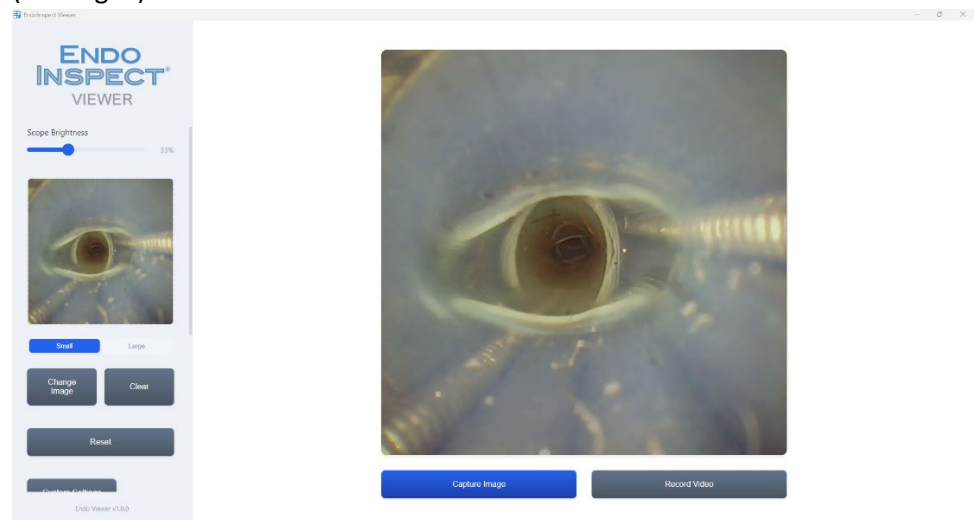


Fig. 7

When the large button is selected, your reference image will be displayed in side by side (1:1) format with your live scope image (reference image on left / live image on right / Ref. Fig. 8). Tap or mouse click the three dashed lines on the right side of the viewer display to return to the home screen (see red arrow). Please note that you can record still images and video captures while in this display mode. Still images can be captured while an active video is recording by tapping / mouse clicking the Capture Image button.

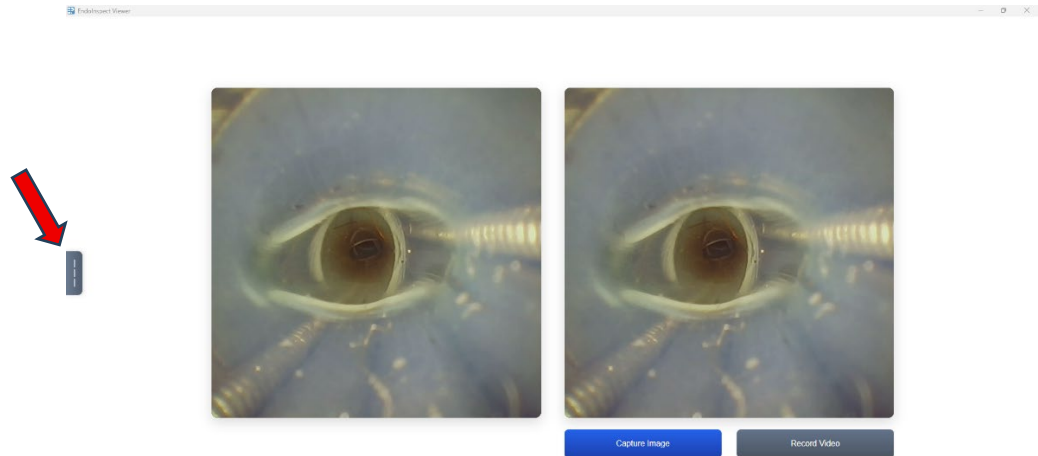


Fig. 8

5. Live Image Area- This is the area where your EndoInspect® inspection scopes live image will be displayed.
6. Custom Settings Button- Touch or mouse click this button to load and display a menu that allows users to adjust / save / load saved image display settings. Selecting the Reset button will restore all display settings to their factory defaults.

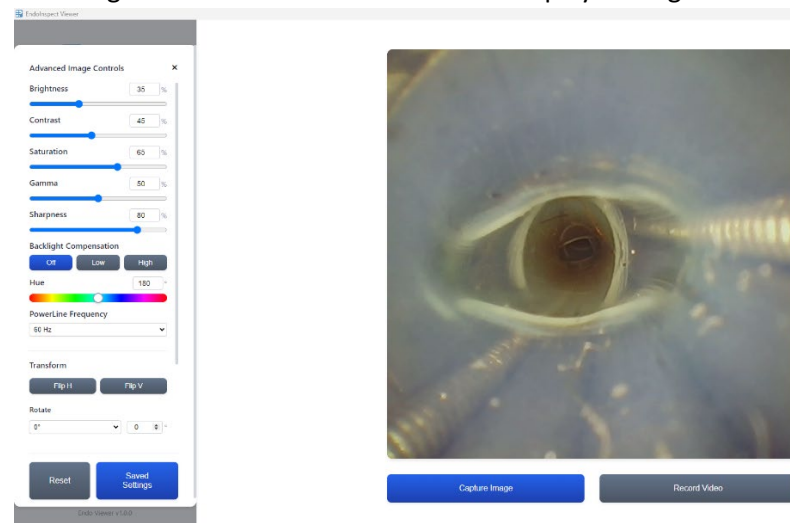


Fig. 9

7. Camera Settings- Touch or mouse click this button to load and display a list of camera devices that can be displayed using the EndoInspect® Scope viewer. **Note- viewer is only compatible with EndoProcess products.**

8. **Auto Save Menu-** Touch or mouse click this button to toggle on / off, load and display menus pertaining to the saving of captures image and video files. Select a location name, destination folder and file naming convention from the available menus. (Ref. Fig. 10)

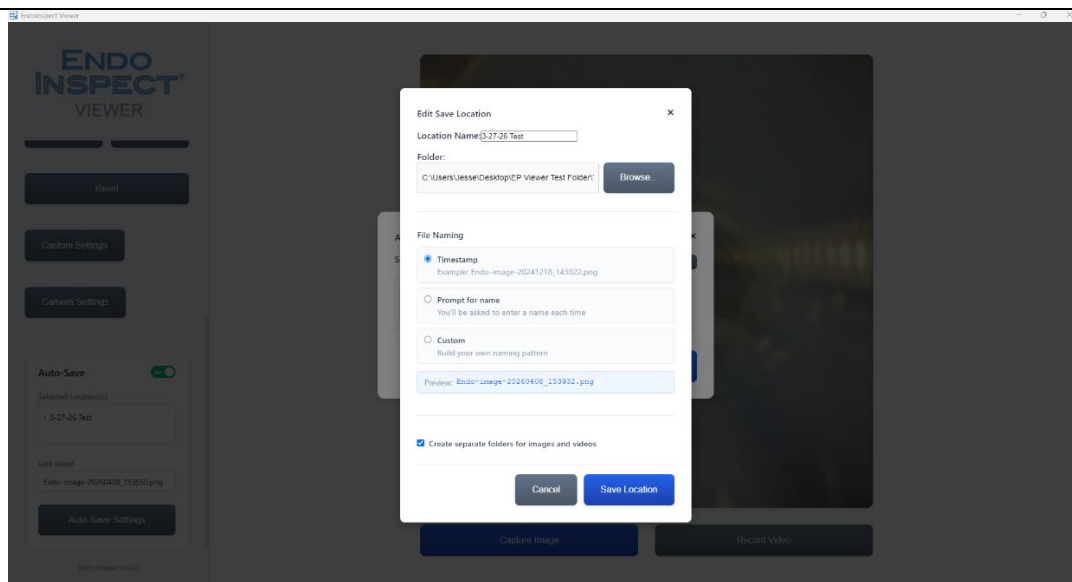


Fig. 10

Contradictions for Use

The EndoInspect® visual inspection system is not a medical product, has no sterilization efficacy and is not intended or rated for patient contact.

Documentation

Warranty Statement

EndoProcess LLC certifies that all our factory borescopes and accessories will be free of defects in materials and workmanship for one year from the date of first retail purchase.
NO WARRANTY COVERAGE AGAINST USER DAMAGE / WEAR CAUSED BY USAGE & HANDLING / INCORRECT CLEANING.

Warnings / Cautions

General Warnings

1. Training is required to successfully use the EndoInspect® visual inspection system. Please consult this document carefully and contact your sales representative for system training and support (company contact information below).
2. Do not force any EndoInspect® scope product into any area where resistance or scraping is felt above normal friction... choose a smaller diameter EndoInspect® inspection probe for use.
3. Do not kink or bend any EndoInspect® product scope shaft into an area with a bend radius that is smaller than recommended below (date is product specific— based on diameter of scope shaft) or scope failure could occur.

		Scope Shaft Minimum Bend Radius Chart	EP Part #	
		1.9 mm scope models= 35 mm min. bend R.	EP5012, EP5013, EP5022, EP5023	
		1.0 mm scope models= 25 mm min. bend R.	EP5018, EP5019	
		.8 mm scope model= 17 mm min. bend R.	EP5016	
		.5 mm scope model= 10 mm min. bend R.	EP5017	
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Preparation for Use	1. Inspect each system component daily before use to look for any debris, damage, or wear. 2. Wipe scope shaft using a 70% IPA (isopropyl alcohol) moistened wipe.
Scope Cleaning:	1. All EndoInspect® scope models are IP68 rated for full submersion in liquids and can be submersed for cleaning and High-Level Disinfection (HLD). Full cleaning should be performed if scope becomes visibly soiled, otherwise daily preparation with 70% IPA (isopropyl alcohol) moistened wipe is sufficient prior to each use. High-Level Disinfection is OPTIONAL. ***You must install rubber cap on scope connector before liquid submersion and / or sterilization*** Align white arrows and push rubber cap firmly into place (see Fig. 11 below).  Fig. 11 <u>SCOPE CLEANING:</u> Cleaning should be performed if the scope becomes visibly soiled after use. All EndoInspect® scope models can be cleaned with the following list of products: a. 70% IPA (isopropyl alcohol) moistened wipe b. Neutral detergents / solutions c. OxyCide®, Oxivir®, SaniCloth® wipes (or hospital approved low level disinfectant) 1. Follow the manufacturer's guidelines for use of the above cleaning products. 2. After cleaning, rinse complete EndoInspect® scope assembly in clean water and wipe down with lint free cloth. <u>HIGH-LEVEL DISINFECTION (OPTIONAL)</u> The following list of products can be used for High-Level Disinfection (HLD). a. Cidex® OPA (preferred) b. Glutaraldehyde 1. Follow the manufacturer's recommended guidelines for mixing instructions and soak time. 2. After HLD is complete, rinse complete EndoInspect® scope assembly in clean water and wipe down with a lint free wipe.
Scope Cleaning-Automated:	1. EndoInspect® system components <u>ARE NOT COMPATIBLE</u> with any automated scope cleaning / reprocessing systems.

Scope Sterilization:	1. All EndoInspect® inspection scope models are compatible with the following sterilization systems. a. STERRAD® (ASP.com) 100S, 50, NX, and 100NX systems b. STERIS V-PRO® Low Temperature Sterilizer systems
USB Base Unit Cleaning	1. The EndoInspect® USB base unit assembly can be cleaned (wipe down) with the following list of products (please follow the manufacturers recommended guidelines)... <u>DO NOT SUBMERGE USB BASE UNIT ASSEMBLY</u> c. 70% IPA (isopropyl alcohol) moistened wipe d. Neutral detergents / solutions e. OxyCide®, Oxivir®, SaniCloth® wipes (or hospital approved low level disinfectant) 2. After cleaning is complete, wipe down EndoInspect® USB base unit assembly with a lint free wipe moistened with water. Disinfectants and other cleaning chemicals should not be left to dry on the components.
Customer Service Contact	
Manufacturer Contact Information	EndoProcess LLC 648 American Legion Hwy. Westport, MA 02790 info@endoprocess.com 1-508-206-8627
Authorized Sales Representative Contact Information	
Trademarks	EndoInspect® is a registered trademark of EndoProcess LLC Oxivir® is a registered trademark of JohnsonDiversey Inc. Cidex® is a registered trademark of Advanced Sterilization Products (J&J) OxyCide® is a registered trademark of Ecolab Sani Cloth® is a registered trademark of PDI, Inc. STERRAD® is a registered trademark of Advanced Sterilization Products (J&J) V-PRO® is a registered trademark of STERIS