

March 20th, 2020

**Dear Valued Customer,**

As you may be aware, SAGES recently released their *Recommendations Regarding Surgical Response to COVID-19 Crisis*. As part of those recommendations, they highlighted the risk of virus release during laparoscopy with carbon dioxide and suggested the use of devices to filter released CO<sub>2</sub> for aerosolized particles. Biologic material is a known component of surgical smoke. The aerodynamic size of COVID-19 has been reported in the range of 0.06 – 0.14 μm<sup>1</sup>; HIV viruses has been reported as 0.12 μm<sup>2</sup>; HPV has been reported as 0.055 μm<sup>3</sup>; and Hepatitis C has been reported as 0.06 μm<sup>4</sup> in diameter. Based upon this published data, capture of even these sub-0.1 μm particles is possible.

In order to best serve our customers during these challenging times, CONMED is pleased to offer two solutions that provide continuous active smoke evacuation and filtration for laparoscopic procedures. When used with the AirSeal® iFS, both the AirSeal® Tri-Lumen Tubing (ASM-EVAC1) and Bifurcated Smoke Evacuation Tubing (SEM-EVAC) offer continuous smoke evacuations through a 0.01 μm ULPA filter. While it is possible for abdominal gas to vent out the top of the AirSeal® Access Port and bypass the filter, a similar release of abdominal gas can occur with conventional insufflators and trocars during instrument exchange, instrument manipulation and leaks. Laparoscopic smoke evacuation systems with appropriate filters may reduce the risk associated with surgical smoke exposure, but the complete elimination of risk is practically unrealistic. Patient and provider safety are always of paramount concern for CONMED. We are proud to partner with you to assist in anyway we can to serve your patients and protect medical professionals.

Please refer to the attached AirSeal® System brochure or contact your local CONMED representative with any further questions.

**Stay Safe,**

**CONMED – Advanced Surgical**

1. Cascella M, Rajnik M, Cuomo A, et al. Features, Evaluation and Treatment Coronavirus (COVID-19) [Updated 2020 Mar 8]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK554776/> <<https://www.ncbi.nlm.nih.gov/books/NBK554776/>>
2. Fisher, Bruce; Harvey, Richard P.; Champe, Pamela C. (2007). Lippincott's Illustrated Reviews: Microbiology. Lippincott's Illustrated Reviews. Hagerstown, MD: Lippincott Williams & Wilkins. p. 3. ISBN 978-0-7817-8215-9.
3. IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. Human Papillomaviruses. Lyon (FR): International Agency for Research on Cancer; 2007. (IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, No. 90.) 1, Human Papillomavirus (HPV) Infection. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK321770/>
4. Hepatitis C virus--proteins, diagnosis, treatment and new approaches for vaccine development. Hossein Keyvani, Mehdi Fazlalipour, Seyed Hamid Reza Monavari, Hamid Reza Mollaie. Asian Pac J Cancer Prev. 2012; 13(12): 5931–5949.



## AirSeal® System

The World's only intelligent and integrated access system for laparoscopic and robotic surgery, representing a revolutionary transformation of conventional insufflation, trocar, and filtered tubing systems.



**HELIXAR™**  
ELECTROSURGICAL GENERATOR  
WITH ABC TECHNOLOGY



**VCARE®**  
UTERINE MANIPULATOR



**ANCHOR®**  
SPECIMEN BAG



To learn more about these and other innovative products, call 800-448-6506 or visit [CONMED.com](http://CONMED.com).

# AirSeal® iFS

The AirSeal iFS is the World's first "3-in-1" insufflation management system and features unmatched capabilities in providing a stable pneumoperitoneum, constant smoke evacuation\*, and valve-free access.



Stable  
Pneumoperitoneum

Constant  
Smoke Evacuation

High Flow  
Insufflation

AirSeal Mode



Smoke Evacuation Mode



Standard Insufflation Mode



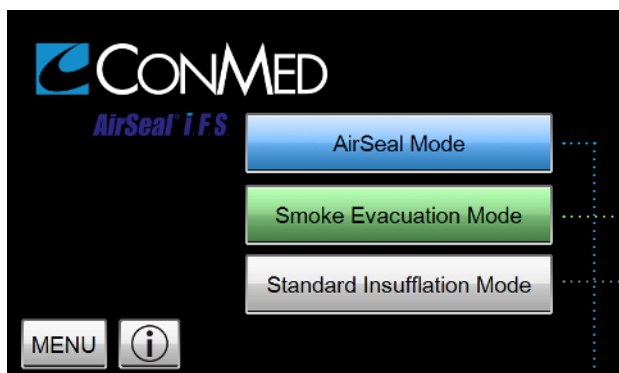
# AirSeal® Access Ports

- Valve-free access to abdominal cavity
- Intact specimen removal
- Unimpeded introduction and removal of needles, clips, sutures, and mesh



# AirSeal<sup>®</sup> Filtered Tube Sets

The AirSeal iFS is capable of operating in three distinct modes, each of which uses a specific filtered tube set to maximize system performance.



## AirSeal Mode

Tri-Lumen Filtered Tube Set

- Optimizes gas flow to provide stable pneumoperitoneum
- Facilitates smoke evacuation and filtration with 0.01 $\mu$  ULPA filter
- Use with AirSeal Access Port

## Smoke Evacuation Mode

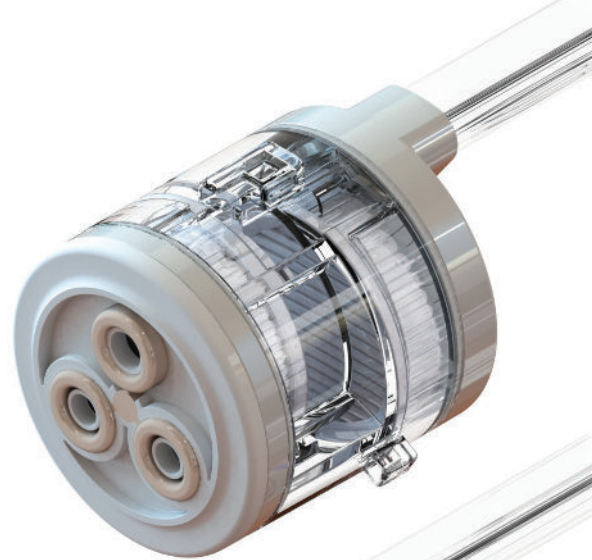
Bifurcated, Dual-Lumen Filtered Tube Set

- Provides high flow insufflation
- Facilitates smoke evacuation and filtration with 0.01 $\mu$  ULPA filter
- Use with two conventional trocars

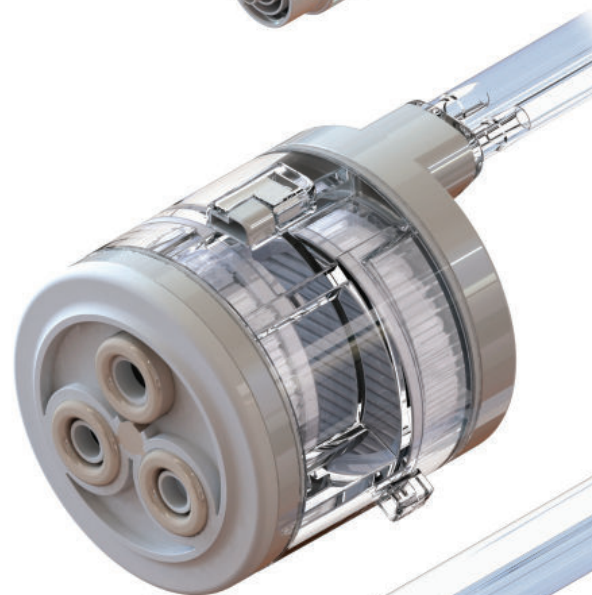
## Standard Insufflation Mode

Single-Lumen Filtered Tube Set

- Provides high flow insufflation
- Use with conventional trocars



Tri-Lumen  
Filtered Tube Set



Bifurcated,  
Dual-Lumen  
Filtered Tube Set



Single-Lumen  
Filtered Tube Set

# Use for Robotic and Laparoscopic Surgery

By providing stable pneumoperitoneum, constant smoke evacuation\*, and valve-free access to the abdominal cavity, the AirSeal® System has been demonstrated to reduce procedure time, resulting in increased operating efficiency.<sup>1</sup>

<b>SURGEON</b>
<b>PROCEDURAL PERFORMANCE</b>
Stable Pneumoperitoneum
Constant Smoke Evacuation*
Valve-Free Access

<b>HOSPITAL</b>
<b>FISCAL PERFORMANCE</b>
Reduced Operative Time <sup>1</sup>
Increased Operating Efficiency <sup>1</sup>
Reduced PACU Time <sup>7</sup>

## Low Pressure Laparoscopy

















Data shows that low pressure laparoscopy was previously difficult to accomplish due to the limitations associated with conventional insufflation. AirSeal System's unique ability to maintain pneumoperitoneum and constantly remove smoke\* enables surgeons to operate at lower pressure without compromising exposure.

\* Except when in standard insufflation mode.

### References:

1. George AK, Wimhofer R, Viola KV, Pernegger M, Costamoling W, Kavoussi LR, Loidl W. World J Urol. 2015 Mar 1.
2. Joshipura VP, Haribhakti SP, Patel NR, et al. A prospective randomized, controlled study comparing low pressure versus high pressure pneumoperitoneum during laparoscopic cholecystectomy. Surg Laparosc Endosc Percutan Tech. 2009 Jun;19(3):234-40.
3. Yasir, M, Mehta KS, Bandy VH, et al. Evaluation of post-operative shoulder tip pain in low pressure versus standard pressure pneumoperitoneum during laparoscopic cholecystectomy. Surgeon. 2012 Apr;10(2):71-4.
4. Hua J, Gong J, Yao L, et al. Low-pressure versus standard-pressure pneumoperitoneum for laparoscopic cholecystectomy: a systematic review and meta-analysis. Am J Surg. 2014 Jul;208(1):143-50.
5. Gurusamy KS, Samraj K, Davidson BR. Low pressure versus standard pressure pneumoperitoneum in laparoscopic cholecystectomy. Cochrane Database Syst Rev. 2009 Apr 15;(2):CD006930.
6. Sroussi, J, Rigouzzo A, Elies A, et al. Laparoscopic Surgery at low (7mm) pressure with AirSeal® System. Presented at 2013 AAGL Meeting. Publication Pending.
7. Ramshaw, B., et al. Laparoscopic Ventral Hernia Surgery using AirSeal System. Surgical Technology International. 2016.

## Ordering Information

	Description	Unit of Measure	Qty Per Box	Catalog Number
	AirSeal iFS Intelligent Flow System 120V	Unit	1	AS-iFS1
	AirSeal iFS Intelligent Flow System 230V	Unit	1	AS-iFS2
	AirSeal Cart for use with iFS	Unit	1	AS-iCart
	Tri-Lumen Filtered Tube Set for use with iFS AirSeal Mode	Box	6	ASM-EVAC1
	Bifurcated Smoke Evac Filtered Tube Set for use with iFS Smoke Evacuation Mode	Box	6	SEM-EVAC
	Single Lumen Filtered Tube Set for use with iFS Standard Insufflation Mode	Box	10	SIM-TUB
	5mm Access Port and Low Profile Obturator Bladeless Optical Tip, 75mm Length	Box	6	iAS5-75LP
	5mm Access Port and Low Profile Obturator Bladeless Optical Tip, 100mm Length	Box	6	iAS5-100LP
	5mm Access Port and Low Profile Obturator Bladeless Optical Tip, 120mm Length	Box	6	iAS5-120LP
	5mm Smooth Access Port with Blunt Tip 150mm Length (for use with single site surgical platforms)	Box	1	iASB5-150
	8mm Access Port and Low Profile Obturator Bladeless Optical Tip, 100mm Length	Box	6	iAS8-100LP
	8mm Access Port and Low Profile Obturator Bladeless Optical Tip, 120mm Length	Box	6	iAS8-120LP
	12mm Access Port and Palm Grip Obturator Bladeless Optical Tip, 100mm Length	Box	6	iAS12-100LPI
	12mm Access Port and Palm Grip Obturator Bladeless Optical Tip, 120mm Length	Box	6	iAS12-120LPI
	12mm Access Port and Obturator Blunt Tip, 100mm Length	Box	6	iAS12-100
	12mm Access Port and Obturator Blunt Tip, 120mm Length	Box	6	iAS12-120
	12mm Access Port and Obturator Bladeless Optical Tip, 150mm Length	Box	6	iAS12-150