



# THE CLEAR SOLUTION

FOR LAPAROSCOPIC SURGICAL SMOKE

REVOLUTIONARY  
SURGICAL SMOKE CONTROL





## Revolutionary surgical smoke control

Ultravision™ is an innovative new system that clears surgical smoke from the visual field and prevents its release into the operating theatre during laparoscopic surgery. It achieves this effortlessly and unobtrusively by accelerating the natural sedimentation of the smoke particles as they are created.

### The Problem

Surgical smoke is a significant issue during laparoscopic surgery:

- Smoke rapidly builds up in the enclosed space, impairing the quality of the visual field and slowing down the procedure.
- Release of the smoke into the operating theatre is unpleasant for the surgical team and chronic exposure may have long-term health implications.

Current vacuum-based solutions used in open surgery have proved to be largely ineffective in meeting the needs of the surgical team:

- Vacuum tubing is very narrow, making the process of smoke evacuation inefficient and slow.
- Repeated carbon dioxide replacement increases the risk of post-surgical adhesions and patient cooling.
- Generators are large, cumbersome and noisy, which distracts the surgical team.



### The Solution

Ultravision™ revolutionises the way in which surgical smoke is handled and transforms the operating theatre environment during laparoscopic surgery.

Studies\* have shown that Ultravision™ is:

- **Stunningly effective** – continuously clearing surgical smoke from the operative field of view;
- **Rapid** – much faster than vacuum-based systems;
- **Effortless** – does not require active intervention by the surgical team;
- **Highly efficient** – minimises release of smoke into the operating theatre, including viral size particles;
- **Silent, unobtrusive** – no noisy vacuum system and does not impact on current surgical techniques and instrumentation;
- **Convenient** – no desufflation of the abdominal cavity, no additional carbon dioxide used; and
- **Non-desiccating** – minimises drying out of tissue caused by exchange of carbon dioxide during the procedure.



# 100%

OF PROCEDURES  
COMPLETED WITHOUT THE  
NEED TO VENT SMOKE IN  
TO THE OPERATING ROOM\*

\* Demonstrated in bench studies, preclinical studies and a clinical study on 30 patients undergoing laparoscopic cholecystectomy. DLU-001-007 Rev B





## How it Works

Ultravision™ is based on electrostatic precipitation, a proven technology that is a highly effective means of removing airborne particulates. The system comprises a combination of reusable and single-use components:

- **Ultravision™ generator:** portable, battery-powered energy source.
- **lonwand™ single-use pack:** containing lonwand cable, catheter and trocar.
- **Patient return adaptor:** to allow a shared patient return electrode with the electrosurgery generator.
- **Battery recharging station:** to recharge Ultravision™ batteries.

The process requires low energy, approximately 500–1000 times less than electrosurgical instruments, to function. Operation is very simple and involves:

- Establishing a patient return path, by connecting an electrode either directly to the Ultravision™ generator or via the Asalus patient return adaptor.
- Inserting the lonwand™ into the abdominal cavity using the dedicated trocar/catheter.
- Switching on the Ultravision™ generator before cutting tissue.



Order Number	Description	
DAD-001-015	Ultravision™ System*	
DAD-001-003	Ionwand™ Pack (x10)	
DAD-001-006	Patient Return Adaptor (SOLID)	
DAD-001-007	Patient Return Adaptor (SPLIT)	
DSD-001-034	Battery (x2)	
DAD-001-024	Battery Recharging Station and Power Supply Unit	
DSD-001-035	Power Supply Unit	

\*Includes Generator, Patient Return Adaptors, Batteries and a Recharging Station.



## Our History

Asalus was established to commercialise the inventions arising from the Welsh Institute of Minimal Access Therapy (WIMAT). Based in Cardiff (UK), WIMAT is the leading UK centre for training of laparoscopic and other surgical disciplines.

## Our Vision

Our vision is to become a world leader in the development of new devices for advanced minimal access surgery. We work with leading surgeons to identify and resolve issues commonly experienced when performing complex surgical procedures. Solving these issues will make these techniques easier and faster for the surgical team, safer for the patient, and more cost-effective for the healthcare provider.

## asalus

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