

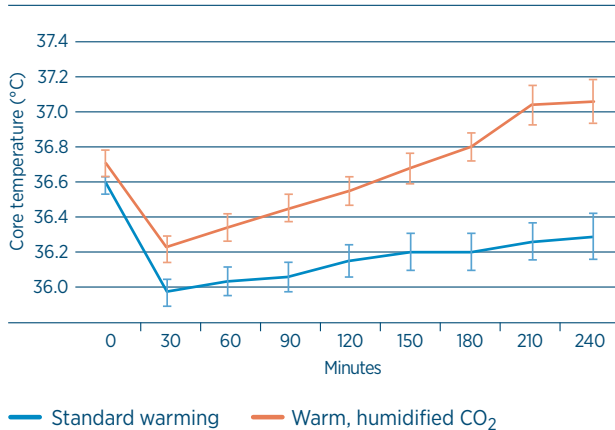
Improve patient outcomes with F&P HumiGard™

The SI400 gas diffuser has been designed to deliver warm and humidified CO₂ into the surgical cavity during open surgery. This provides warmth and humidity through a low-profile diffuser, designed to work with a range of common retraction systems.

HumiGard in laparotomy significantly decreases the incidence of post operative hypothermia¹.

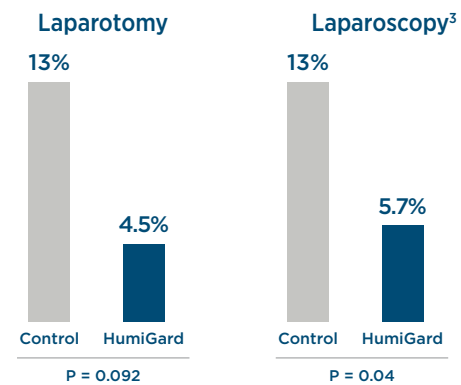
At the end of surgery, 0% of patients in the HumiGard group had a core temperature below 36.0 °C compared with 18% of the control group¹.

Mean core temperature during surgery¹



	Control group n=39	HumiGard group n=40
<36.5 °C at the end of surgery	62%	20%
<36.0 °C at the end of surgery	18%	0%

SSI Rate²



HumiGard may help reduce the incidence of SSIs in laparotomy².

“Intra-operative wound insufflation with warm, humidified CO₂ with HumiGard is a novel technique that may be a valuable adjunct to reduce SSI in patients undergoing open colorectal surgery².”



1. Frey, J.M., Janson, M., Svanfeldt, M., Svenarud, P.K., & van der Linden, J. A. (2012). Local insufflation of warm humidified CO₂ increases open wound and core temperature during open colon surgery: a randomized clinical trial. *Anesthesia and Analgesia*, 115(5), 1204-1211. <https://doi.org/10.1213/ANE.0b013e31826ac49f>.

2. Arachchi A, Lee A, Metlapalli M, Antoniou E, Rajan R, Narasimhan V, Rajagopalan A, Key S, Teoh WMK, Nguyen TC, Lim JT, Chouhan H, Waxman BP, Smith JA. Does intra-operative humidification with warmed CO₂ reduce surgical site infection in open colorectal surgery? A randomized control trial. *ANZ J Surg*. 2023 Apr;93(4):970-979. doi: 10.1111/ans.18116. Epub 2022 Oct 19. PMID: 36259219.

3. Mason, S. E., Kinross, J. M., Hendricks, J., & Arulampalam, T. H. (2017). Postoperative hypothermia and surgical site infection following peritoneal insufflation with warm, humidified carbon dioxide during laparoscopic colorectal surgery: a cohort study with cost-effectiveness analysis. *Surgical endoscopy*, 31, 1923-1929.

System setup



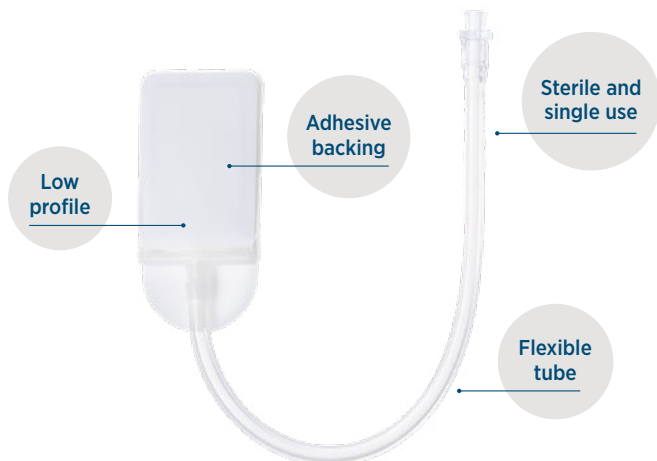
SI400 Key Features

Adhesive backing

To secure the positioning of the diffuser on the retractor.

Mouldable foam head

Designed to work with a range of common retraction systems.



SI400 setup



Remove the Humidified Gas Diffuser from the Tyvek pouch.

Peel off the backing.

Ensuring the Humidified Gas Diffuser is vertical, stick on the retractor.

Press firmly to form against the retractor. Alternatively, pre-bend to shape and place as required.

Connect the diffuser to the insufflation tube.