Sensors

Large variety of sensors designed for optimal patient comfort.



TS-AAW TS-AF

TS-AP TS-SA-D



▼ SINGLE PATIENT USE

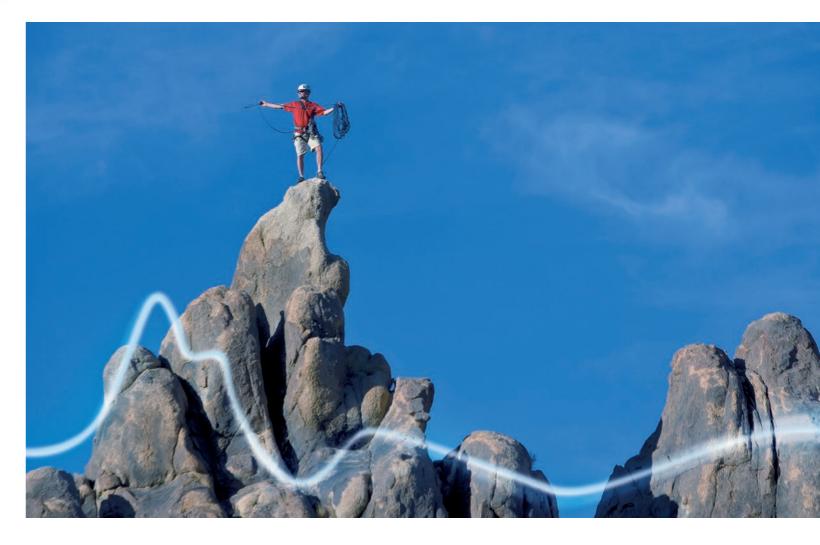


These references require compatible interconnect cable. Integrated sensors also available.

▼ REUSABLE Adult TS-SA-D Con > 30 kg Classic Adult, Pediatric TS-F-D ≥ 20 kg Adult, Wrap Pediatric, TS-W-D Infant ≥3 kg Adult, Skin sensitive Pediatric, TS-SE-3 Infant, Neonate

GE TruSignal* sensors are intended for use in continuous non-invasive arterial oxygen saturation (SpO₂), pulse rate monitoring and SPI**, to help clinicians in their daily patient care decisions.

GE Healthcare



Spio₂ Faith in Pleth

** Surgical Pleth Index is to be used for unconscious and fully anesthetized adult (>18 years old) patients during general anesthesia. SPI monitoring can be performed with CARESCAPE* modular monitors and GE SpO₂ technology. SPI measurement site should always be the finger.

References

- . Sadhasivam S et al. Pharmacogenomics of opioids and perioperative pain management. Pharmacogenomics. 2012 Nov;13(15):1719-40. doi: 10.2217/pgs.12.152. Ahonen J. et al. Surgical Stress Index During Gynaecological Laparoscopy. British Journal of Angesth. 98, 456-461 (2007).
- Struys, MMR F. et al. Changes in a surgical stress index in response to standardized pain stimuli during propofol-remifentanil infusion. British Journal of Anaesth 99(3), 359-367 (2007). Huiku M., et al. Assessment of surgical stress during general anaesthesia. British Journal of Anaesth 98, 447-455 (2007).
- Wennervirta J. et al. Surgical Stress Index as a Measure of Nociception/Antinociception Balance During General Anesthesia. Acta Anaesthesiol Scand 52, 1038-1045 (2008).
 Gruenewald M. et al. Influence of different remifentanil concentrations on the performance of the surgical stress index to detect a standardized painful stimulus during sevoflurane anesthesia. Br. J. Anaesth. 103(4), 586-93 (2009).

- Chen X *et al.* Comparison of Surgical Stress Index-guided Analgesia with Standard Clinical Practice during Routine General Anesthesia. A Pilot Study. Anesthesiology; 112:1175–83 2010.
 Chen X. *et al.* Correlation of Surgical Pleth Index with Stress Hormones During Propofol-Remifentanil Anaesthesia. The ScientificWorld Journal Volume 2012, Article ID 879158, 8 pages.
 Bergmann I. *et al.* Surgical pleth index-guided remifentanil administration reduces remifentanil and propofol consumption and shortens recovery times in outpatient anaesthesia. BJA Advance Access published December 5, 2012.
- J. Kelleher, "Pulse Oximetry", J. Clin. Monit. 5, 37-62 (1989).
 R. Tobin, J. Pologe, P. Batchelder, "A Characterization of Motion Affecting Pulse Oximetry in 350 Patients", Anesth Analg 94, S54-S61 (2002).
- The Accuracy of TruSignal SpO₂ Technology During Challenging Patient Conditions. GEHC White Paper January 2012, Ref. DOC1085930 rev2.
 SpO₂ performance in clinical motion conditions Comparison study. GEHC White Paper 2012, Ref DOC1212731.

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Vital Signs, Inc., a General Electric company, doing business as GE Healthcare

GE Healthcare P.O. Box 900, FIN-00031 GE, Finland GE Direct United Kingdom: +44 (0)800 0329201

www.gehealthcare.com



GE imagination at work

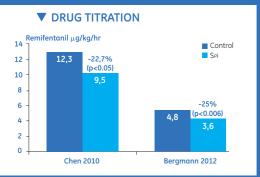
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SPI

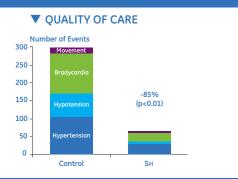
Nociception Antinociception Balance

SPI (Surgical Pleth Index) reflects the patient's hemodynamic responses to both opioid delivery and surgical stimuli during general anesthesia^{2-6, 8}.

Clinical Evidence



Combined Hypnosis & SPI monitoring has shown to reduce Remifentanil consumption by **22.7% to 25%**.^{7,9}



Combined Hypnosis & SPI monitoring has proven to reduce the incidence of unwanted perioperative events by **85%**.⁷

One Sensor, Multiple Parameters

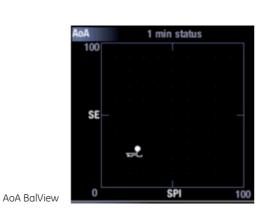
Spio₂

oulse por

During general anesthesia, the use of excessive or insufficient analgesic medication may lead to peri- and post-operative adverse events ¹.

SP

30 100 30 min



Bollview

Trend



pleth Curve

Did You Know?

SPI index is part of the **Adequacy of Anesthesia** (AoA) concept which may help clinicians to assess patient's responses to anesthetic agents, opioids and NMBAs during general anesthesia.

Surgical Pleth Index has shown :

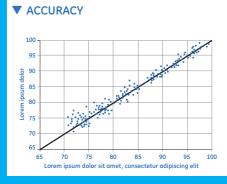
- Significant correlation with surgical stress level ^{2, 6, 8}.
- Significant correlation with remifentanil amount ^{4, 6}.
- Better sensitivity to surgical stimuli than HR, BP, or RE⁵.
- Better correlation to opioid amount thanHR, PPGA, RE, or SE³.
- No sensitivity to the variation of hypnotic drug amount³.
- GE algorithms apply specific calibration curves based on each sensor's optical characteristics.
- Each GE TruSignal sensor is individually tested and calibrated.
- GE SpO₂ Systems are compliant with the Medical Devices Directive (CE Mark Directive 93/42, Article 12).

Assessing a patient's oxygenation level is one of the key elements in helping clinicians develop the best course of treatment for their patients^{10,11}.

SpO

GE SpO₂ has history of innovation for more than 20 years through the legacy of Datex-Ohmeda, and provides Advanced Plethysmographic Technologies.

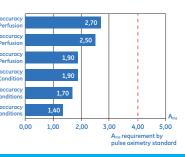
Accuracy, Reliability, and Performance, even in challenging situations.



▼ PERFORMANCE

One of the highest performances for SpO₂ and Pulse Rate ¹³.

▼ RELIABILITY



The accuracy of GE Healthcare TruSignal SpO₂ technology exceeds the ISO 9919 standards of four digits, proven in 3 studies ¹².

02

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