

Transcutaneous Gas $\text{tcpO}_2/\text{tcpCO}_2$

measurement for neonatal intensive care

Philips Transcutaneous Gas Module is designed for use in neonatal intensive care environments. Skin surface $\text{tcpO}_2/\text{tcpCO}_2$ measurements correlate with changes in arterial partial pressure of oxygen and carbon dioxide, offering a non-invasive means of continuous monitoring. Individual and trend data provided by transcutaneous gas monitoring are a significant complement to arterial blood gas measurements in monitoring neonates on ventilators.

Designed for ease of use and comfort

To protect neonates' delicate skin, two independent temperature control circuits guard against transducer overheating, and configurable site alarms alert caregivers when the monitoring site should be changed. The Philips transducer's fixation ring is designed for quick and easy attachment by simply peeling off the protective film and pressing the ring onto clean, dry skin.

Continuous measurements for the most fragile patients

The continuous real-time data provided by transcutaneous monitoring is a valuable supplement to arterial blood gas testing. It allows tighter controls over oxygenation and helps reduce the risks associated with neurologic damage or retinopathy of prematurity (ROP).

Transcutaneous gas monitoring is used for ventilation management in neonates that are hemodynamically stable.



Transcutaneous measurement of pO_2 and pCO_2 .

COMPATIBILITY

Transcutaneous gas measurements are fully integrated with other key parameters on these Philips patient monitors:

- IntelliVue
- CMS 2002
- V24/V26

Please ask your sales representative for details on compatibility.

Monitoring tcpO₂ and tcpCO₂

- This measurement is useful in cases requiring monitoring to assess the adequacy of continuous oxygenation and/or ventilation.
- Transcutaneous blood gas monitoring is appropriate for continuous and prolonged monitoring during ventilation.
- Transcutaneous monitoring can be used to detect episodes of hypoxia, hyperoxia, hypercapnia, and hypocapnia, as well as the ability to supply the tissues with oxygen.

Transducers, accessories, and calibration supplies

Philips offers all necessary supplies:

- Calibration unit and gases
- Combined pO₂ and pCO₂ transducer
- 12x tc Accessory Kit (O-ring, remover, absorbent paper, electrolyte solution, replacement membrane)
- tc Application Kit (4x25 disposable fixation rings, 4x20ml contact fluid)

Philips Commitment to Measurement Technologies

Philips is committed to providing best-in-class standard clinical measurements as well as innovative measurements to support clinicians' decisions at the patient's side.

Philips continues to build on its proven measurement expertise by:

- Maintaining and advancing the performance of existing, widely used standard-of-care measurements
- Investing heavily in research, development, and clinical validation of new, innovative parameters and algorithms
- Working with strategic partners to integrate next-generation measurements and technologies
- Providing interfaces to more than 100 third-party specialty measurement devices through the Philips VueLink module

References

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tcpO₂/tcpCO₂ is one of many Philips technologies for neonatal intensive care.

M1018A Transcutaneous Gas module



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