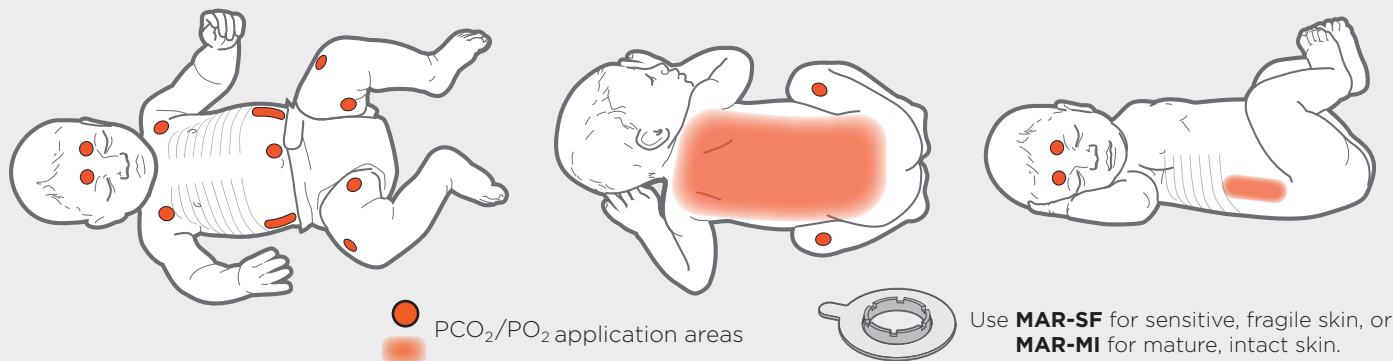# senTec

SenTec Digital Monitoring System
Quick Reference Guide
Software version
SMB SW-V08.03

Neonatal mode
`Neonatal´ if younger than
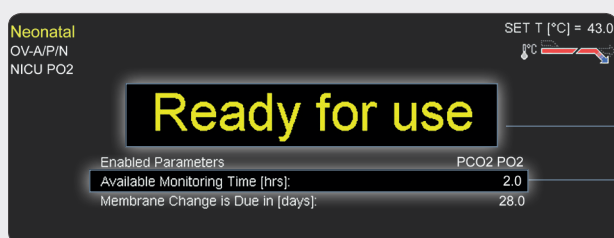term birth + 12 months

Selection of Measurement Site and Sensor Attachment Accessory

○ PCO_2/PO_2 application areas

Use **MAR-SF** for sensitive, fragile skin, or **MAR-MI** for mature, intact skin.

⚠ **WARNING:** Refer to the Instruction Manual for the SDMS, Technical Manual for the SDM or the respective Directions for Use of the sensor and/or disposables for warnings, cautions and additional information such as instructions, routine checks, or maintenance recommendations. SDMS related tutorials are available for online viewing at www.sentec.ch/tv

Check SDM Settings, System Readiness and Sensor Condition before Use

Neonatal
OV-A/P/N
NICU PO2
SET T [°C] = 43.0

Ready for use

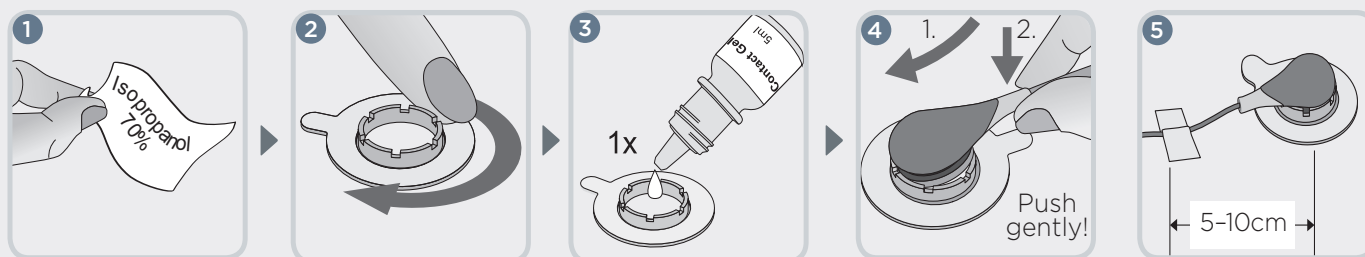| Enabled Parameters | PCO2 PO2 |
| Available Monitoring Time [hrs]: | 2.0 |
| Membrane Change is Due in [days]: | 28.0 |

Ensure current SDM Settings/SDM Profile are appropriate for the patient, for the selected site and the skin condition/skin tissue perfusion at the selected site.

Verify system readiness (message **'Ready for use'**) and check the **'Available Monitoring Time'**.

When removing the sensor from the Docking Station check the condition of its membrane and its integrity before applying it to the patient. Change the membrane if necessary. Do not use the sensor if any problems are noted.

Sensor Application Using a Multi-Site Attachment Ring

1 Isopropanol 70%

2

3 1x

4 1. 2. Push gently!

5 5–10cm

1 Clean the site and let it dry. If necessary remove hair.

2 Attach the ring to the measurement site. Verify that the skin under the adhesive is not wrinkled.

3 Apply **one small** drop of contact liquid[(1)] to the skin area in the center of the ring. You may use a cotton swab to apply the contact liquid. Avoid wetting the adhesive tape!

[(1)] Contact liquid: SenTec's Contact Gel, clean tap water, sterile water, or sterile saline solution.

4 Holding the sensor at its neck, approach the MAR from the flap side and first insert the nose of the sensor into the ring. Click in the sensor by applying slight downward pressure on its neck. Rotate the sensor in the ring into the best position and press the sensor gently against the skin to spread the contact liquid(1). Verify that air gaps between the skin and the sensor are eliminated and that the sensor can easily be rotated.

5 Tape the cable to the skin and secure it with a Clothing Clip on the patient's clothing or bed linen. Ensure that the sensor cable is loose enough for not to be stretched during monitoring. Gently press on the sensor as a final application check.

Note: If more secure sensor attachment is required, e.g. in high humidity environments, for patients who perspire profusely and/or in challenging patient motion conditions, the **Staysite™ Adhesive** (model **SA-MAR**) can be used complementary with the Multi-Site Attachment Rings.
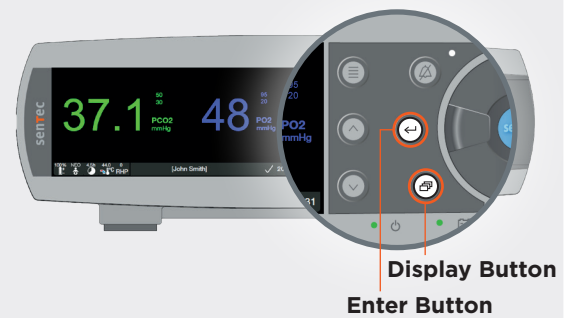
Patient Monitoring

After sensor application verify that the SDM detects **'Sensor-On-Patient'**, initiates monitoring and the enabled parameters stabilize. If necessary, readjust sensor application or reposition the sensor.

Note: PCO_2 is typically rising and PO_2 (if enabled) is falling to reach a stabilized value within 2 to 10 minutes.

Various preconfigured measurement screens are available.
Press the **Display Button**(⊞) to cycle between the available screens.
Press the **Enter Button**(↵) to open a 'Quick Access Menu' permitting to set a baseline, to set a RHP reference, to mark 'Operator Events' or to perform a 'PCO_2 In-Vivo Correction'.
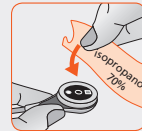
Display Button

Enter Button

Sensor Removal

When monitoring is completed or monitoring time has elapsed remove the sensor from patient and clean/inspect the skin. **Clean the sensor**. Inspect condition of membrane and integrity of sensor before inserting it into the Docking Station.

⚠ **CAUTION:** For site inspection and/or calibration the sensor attachment accessory can remain on the same site for up to 24 hours and may be reused for another sensor application. It is recommended to remove and to discard the attachment accessory after 24 hours and to keep the measurement site free of adhesive for 8 to 12 hours.
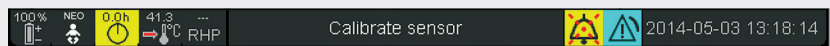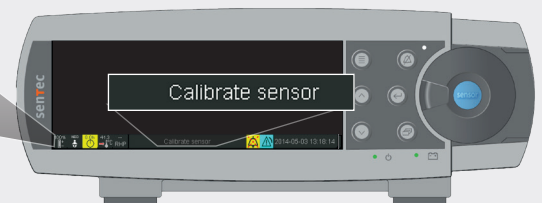
IMPORTANT:

- Clean sensor after use!
- Check condition of membrane and integrity of sensor prior/ after use!

- To maintain monitor readiness and minimize PCO_2 drift potential keep SDM switched on and store sensor in Docking Station in between monitoring!

Sensor Calibration

If a sensor calibration is **mandatory**, the message **'Calibrate sensor'** displays and PCO_2/PO_2 values are replaced by '---'.

Calibration Intervals for SenTec TC Sensors can last up to 12 hours. Once elapsed, calibration is **recommended** and monitoring possible for another 4 to 6 hours (PCO_2 **'questionable'**). Thereafter, sensor calibration is **mandatory.**
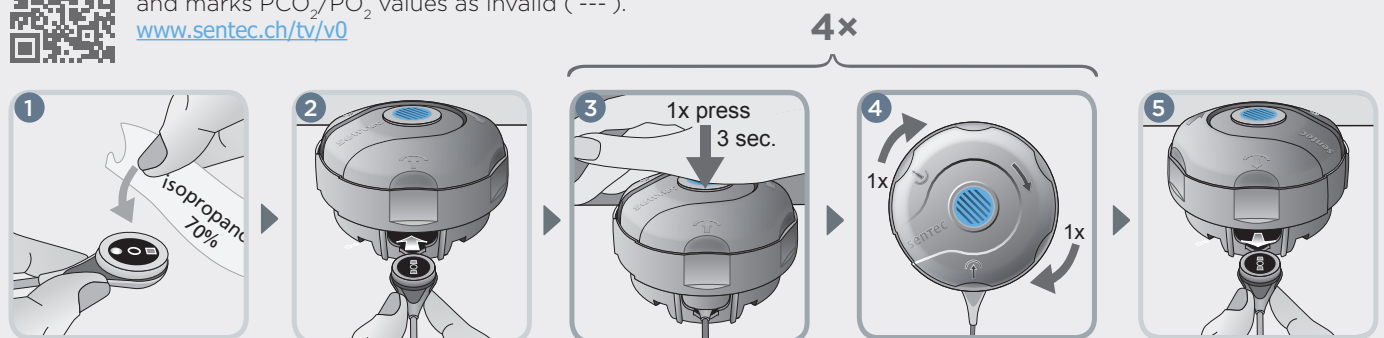
Changing Sensor Membrane

If the **'Membrane Change Interval'** has elapsed, the SDM displays the message **'Change sensor membrane'** and marks PCO_2/PO_2 values as invalid ('---').
www.sentec.ch/tv/v0

4×

① ② ③ 1x press 3 sec. ④ 1x 1x ⑤

Without being requested by the SDM, the sensor membrane must additionally be changed if it is damaged or missing, has a loose fit, or if there is trapped air or dry electrolyte under the membrane.

IMPORTANT: In default settings, the **'Membrane Change Interval'** is 28 days. It can be customized.

How to reload the Membrane Changer

To **reload the membrane changer** with a new insert, see tutorial on www.sentec.ch/tv/v1