



PHILIPS

Avalon CL

A moving birth experience

For mom, for baby, for you

Now you can give pregnant moms the freedom to stand, sit, walk around, change clothes, and take a relaxing shower or bath during labor – while continuously monitoring mothers and babies during routine and high-risk deliveries.

The Avalon CL cableless fetal monitoring system not only eliminates the discomfort of cables, it allows moms to move freely during labor and offers them more flexible birthing options. Its Smart Pulse technology reduces the chance of confusing maternal and fetal heart rates, even for twins and triplets.

Discover how this innovative wireless solution can deliver a rewarding experience for everyone – mom, baby, and you.

“There is evidence to show that mothers who are able to move around during labor have shorter labor lengths. Moreover, this mobility alleviates the work of the medical staff during birth and the handling of labor pains. Excellent monitoring is now possible without interfering cables.”

Christina Schneider

Senior Midwife

Heidelberg University Hospital

Mother's heartbeat or baby's? Now you know.

“Erroneous recording of maternal heart rate as fetal during the second stage of labor may lead to perinatal morbidity and mortality due to non-recognition of intrapartum hypoxic insult to the fetus.”¹

Catch the change in tempo when it counts

Helping reduce the confusion between fetal and maternal heartbeats is critical to making informed clinical decisions during labor and delivery.

Avalon CL's patented Smart Pulse technology provides peace of mind by continuously monitoring maternal and fetal heart rates – even for twins and triplets. It can detect heart rate coincidence by automatically comparing the maternal pulse and multiple fetal

heart rates to make sure separation is maintained. This helps to reduce the possibility of mistaking one heartbeat for another, plus it provides information to support timely recognition and early intervention.

Since Smart Pulse is built into the Toco+ MP transducer, there's no extra set up required and no impact on clinical workflow.



“Our main aim is to deliver more choice for women in labor. We want to ensure that mothers-to-be and their babies benefit from the advantages of being mobile and upright in labor, while also providing the best possible birth experience.”

Dawn Morrall

Assistant Divisional Director of Midwifery
Gloucestershire Royal Hospital

Keep track of moms on the move

The Avalon CL helps transform labor and delivery by feeding continuous vital information, while giving expectant moms the freedom to roam – not tethered to the monitor. It measures and transmits fetal movement and heart rate, uterine activity, and fetal or maternal ECG, so you know how mother and baby are doing when they're on the move.

As an integral part of our obstetrical and fetal monitoring and information management portfolio, Avalon CL is designed to work with Philips Avalon monitors. Its three cableless transducers transmit fetal and maternal vital signs information to a monitor via the base station. From there, patient information can be transferred to our IntelliSpace Perinatal information management system.

Why keep expectant moms up and moving?

Multiple research studies show that ambulation may significantly shorten labor,^{2,4} reduce the need for pain relief and labor induction drugs,³ decrease the number of episiotomies,⁴ and slightly lower the need for assisted deliveries.⁴ Research also reveals less frequent abnormal heart rate patterns for women in the upright position, as well as less pain and backache.⁵



Up to four Avalon CL transducers can be active at the same time. For example, you can simultaneously measure three fetuses, uterine activity, and maternal pulse. The SpO₂ and NBP pods can also be used.



- **Ultrasound transducer** measures fetal heart rate and fetal movement
- **Toco+ MP transducer** measures uterine activity, maternal pulse, and either maternal ECG, fetal ECG, or intrauterine pressure (IUP)
- **ECG/IUP transducer** measures either maternal ECG, fetal ECG, or intrauterine pressure (IUP)



Deliver more birthing options

Avalon CL also increases mobility and flexibility during every stage of labor. By eliminating the need for cables, it allows women to find their most comfortable position to best manage contractions.

Thanks to its smooth, soft, waterproof transducers, you can even count on it to provide accurate monitoring under water. So moms can use birthing pools to their full effect, secure in the fact that their babies are being watched over by your OB staff.

Learn more

To learn how Avalon CL can help you enhance the birthing experience and give you the added confidence of Smart Pulse technology, visit www.philips.com/avalonCL.

1. Nurani R, et al. "Misidentification of maternal heart rate as fetal on cardiotocography during the second stage of labor: the role of the fetal electrocardiograph." *Acta Obstet Gynecol Scand.* (2012): 91.
2. A. Lawrence, L. Lewis, GJ Hofmeyr, T. Dowswell, C. Styles, "Maternal positions and mobility during first stage labour." *Cochrane Database of Systematic Reviews* (2009): Issue 2. Art. No. CD003934, doi: 10.1002/14651858, CD003934. pub2.
3. Flynn et al., "Ambulating in labour," *Br Med J.* (1978) Aug 26, 2 (6137):591-3.
4. Gupta JK, Nikodem VC., "Woman's position during second stage." *Cochrane Library.*
5. World Health Organization, "Care in Normal Birth," (1996): 60 pages.

