



The Avalon Cordless Transducer System (CTS) helps transform labor and delivery, offering mothers and care teams the flexibility they seek by allowing comfortable, continuous fetal and maternal monitoring with exceptional mobility. Avalon CTS helps provide a constant and clear picture of patient status for confident decision-making.

Features

- Cordless toco transducer: externally measures uterine activity
- Cordless ultrasound transducer: measures fetal movement and heart rate
- Bed identifier: matches transducers and base stations for each bed
- Base station receives transducer signals: and recharges plugged-in transducers
- Transducer plug and play with automatic screen layout, in combination with Philips fetal monitors, allows focus on patient care, not the system
- Transducer status indicators: shows how clearly system is working at all times
- Slot position indicator: helps ensure each transducer is returned to its proper home position
- Cordless ECG transducer: measures direct fetal ECG or maternal ECG
- Battery charge indicator: shows status of charge (Batteries operate at least 16 hours)



Specifications

Dimensions

Height: 3 in (75 mm)
Width: 13.8 in (350 mm)
Depth: 9.5 in (240 mm)
Weight: 5.5lbs (2.5 kg) without transducer

Transducer Dimensions

Size (diameter) < 10 cm/3.94 in
Weight < 140 g/4.8 oz

Power

Supply Voltages 100 VAC to 240 VAC \pm 10%
Supply Frequency Range 50 Hz to 60 Hz
Consumption 15 VA

Base Station

Type of Protection Against Electrical Shock: Class I equipment
Input Sensitivity Input Sensitivity -110 dBm @ 30dB Signal-to-Noise Ratio
Image Rejection Image Rejection > 80dB
Ranges
Receiving Range (line of sight) approximately 100m/300 ft
Antenna Input Impedance 50 Ω
Water Ingress Protection Code IP X1 (protection only against vertically falling water drops)

Monitor Interface

Toco Output
Accuracy \pm 0,5% per 100 mmHg (not including transmitter)
Offset \pm 5 Units (not including transmitter)
Range 0 to 4V
Voltage Range
US Voltage range 4mVpp to 4Vpp
ECG Voltage range 0.1Vpp to 4Vpp

Battery

Type Lithium Ion
Capacity > 16 hours (> 700mAh)
Life > 500 charge/discharge cycles (with new battery, at 25°C/77°F)
Transducer Storage Time
 \geq 1 year at 25°C/77°F (battery full)
 \geq 1 month at 25°C/77°F (battery empty)
Recharging Time
100% charged < 3h
66% charged \leq 1h
Forced discharge current approx. 45mA
Discharge leakage current in shutdown @ Vbat = 3V, 25°C 20 μ A (typical), 70 μ A (max)

RF Unit

Nominal RF Output Power -12 dBm \pm 6 dB ERP
Carrier Frequency Range See Frequency Bands
Minimum Frequency Band Span Per Option 10 MHz
Channel spacing 25kHz or 12.5kHz