

PHILIPS INVIVO EXPRESSION MRI



ABOUT

The Philips Invivo Expression MRI is an MRI-compatible patient monitoring system used during MRI scans to observe patient vital signs. It can be used with adult and pediatric patients in magnetic environments where conventional monitors are not suitable. The system allows patient monitoring during imaging without using ferromagnetic components, and the display can be positioned so the technologist can view patient data during the exam.

FEATURES

- **MRI Compatible:** Approved for MRI use, with the monitor, sensors, and cables constructed from non-ferromagnetic materials to reduce safety concerns and minimize image interference.
- **Parameter Monitoring:** Supports monitoring of 3-lead or 5-lead ECG, oxygen saturation (**SpO₂**), non-invasive blood pressure (**NIBP**), and respiratory rate during MRI procedures.
- **Touchscreen:** Equipped with a color touchscreen display that allows users to select which parameters, waveforms, and numeric values are shown.
- **MRI Integration:** Designed to function during MRI scanning, including exposure to magnetic fields, gradient activity, and RF energy, without affecting monitoring data or image quality.
- **ECG Filtering:** Uses ECG filtering intended for MRI environments to reduce scan-related interference caused by magnetic field effects and signal distortion.



SPECIFICATIONS



DCU DIMENSIONS

Height: 11.5 in (29.2 cm)

- with antenna: 15.5 in (39.4cm)

Width: 15.4 in (39.1cm)

Depth: 5.5 in (39.1 cm)

Weight: 17 lbs (7.7kg)

PMC DIMENSIONS

Height

- Vertically: 15.3 in (38.9 cm)
- Horizontally: 8.5 in (21.6 cm)

Depth

- Vertically: 8.3 in (21.1 cm)
- Horizontally: 15.1 in 38.4 cm)

Width: 15.7 in (39.9 cm)

Weight: 31 lbs (14.0kg)

CART DIMENSIONS

Height: 42.3 in (107.4 CM)

Width: 18.7 in (47.5 cm)

Depth: 19.5 in (49.5 cm)

Weight: 8lbs (36.3 kg)

DISPLAY CONTROL UNIT

Type: LCD, Color, 80 x 600 pixels

Screen size: 12 in (30.5 cm) diagonal

Sweep Speed: 25 or 50 mm/S gives 9.2 S or 4.6 S of the display, respectively. For respiration, a speed of 0.33, 1.56, 3.13, 6.25, 12.5, or 25 mm/S is used

Waveform Display Mode: fixed trace, moving to erase bar

Waveform Display Height: 19 mm

Full-screen Display Height: 75 mm

ENVIRONMENT

Operating Temperature: 15°C to 35°C (59°F to 95°F)

Batteries (REF 989803169491): 0°C to 40°C (32°F to 104°F)

Anesthetic Oxygen (O2) Sensor (REF 989803162051): -40°C to 35°C (-40°F to 95°F)

Cart, PMC, DCU, wireless modules, and accessories (except the Temperature sensor): -20°C to 60°C (-4°F to 140°F)

Temperature sensor: -25°C (-13°F) to 70°C (158°F)

Relative Humidity: 15% to 80%, non-condensing

TRANSPORT TEMPERATURE

Cart, PMC, DCU, wireless modules, and accessories (except Temperature): -20 to 60°C (-4 to 140°F)

Temperature sensor: -25°C (-13°F) to 70°C (158°F)

POWER REQUIREMENTS

Operating Voltage Range: 100 VAC to 240 VAC

Frequency: 50/60 Hz

Current: 1.5 A

Power Consumption, Maximum: <100 Watts

DC Output Voltage, Nominal: 18.3 VDC