

MR Patient Care

Elevating your monitoring capability

with Philips Expression Model MR400 MRI Patient Monitoring System and Philips MR Patient Care Portal 5000

Introducing MR Patient Care Software Release 2.0

In the challenging environment of MR patient monitoring, it is vital to ensure that patient data is easily and consistently available for caregivers across acuities, while ensuring the security and integrity of this information.

Philips addresses these challenges with the MR Patient Care suite of solutions, which include the Expression MR400 patient monitor and the MR Patient Care Portal 5000, which adds remote monitoring capabilities. Software Release 2.0 delivers enhancements that strengthen the capabilities and security of these solutions within your healthcare infrastructure.

A wealth of IT and security features, such as AES-256-GCM and HL7 encryption, plus encrypted wireless communication between the MR400 and the MR Patient Care Portal 5000, help safeguard patient data. The devices also support connectivity with your existing EMR systems and with third-party central monitoring stations, helping ensure smooth clinical workflows and a seamless transfer of MRI data for clinical decision-making.





Philips Expression Model MR400 MRI Patient Monitoring System

Patients and their families are taking more time to invest in their care choices, including their choices for the MR environment.

Let the MR400 patient monitor put you in touch with the new clinical and economic opportunities of value-based MR care. Create a comfortable working environment by reducing restrictions that normally accompany monitor placement relative to the patient and magnet.

One monitor enables continuous monitoring of patient types across MR procedures – from neonate and pediatric to adult and those requiring sedation or anesthesia.



MR400 patient monitor provides you with:

- Auto identification of anesthetic agents, monitoring of body and surface temperatures, MAC values, trends, and perfusion index.
- Bedside-quality parameters with timesaving snap-and-go connections come to MR monitoring of SpO₂, IBP, NIBP, and CO₂.
- A unique multi-priority system for technical and clinical alarming, including bedside-type audible and visual warnings for desaturation, apnea, extreme brady/tachycardia, and low O₂.
- One-touch calculation lets you tailor alarms by individual patient or patient group.
- Philips-designed 15.6" LED widescreen combines vital signs at high resolution with the familiarity of a bedside interface.
- An exclusive combination of ECG advances like ECG filtering to ECG waveform(s) put you further ahead in providing care in the MR suite.
- Improve patient care and workflow, the flexibility to monitor patients even when optimizing MRI settings (up to 4W/kg SAR and 7.2µT B1rms).
- Highly secure by design, it employs FIPS 140-2 level 1 standard algorithms¹ plus AES 256 CBC encryption² for all files, the software update device and user profile backups.
- Encryption standard AES-256-GCM protecting patient privacy, preventing unauthorized access, maintaining data Integrity. [Encryption only available for devices updated with new software].
- New gas standard 80601-2-55 update: on-screen CO2 calibration notification and auto zeroing.

1 Federal Information Processing Standards (FIPS) are US standards in regards to implementing not just encryption, but also crypto algorithms, data handling, and operating systems that must protect valuable data.

2 Advanced Encryption Standard (AES) 256-bit encryption CBC (Cipher Blocker Chaining) is an advanced form of block cipher encryption





Portal 5000 provides you with:

- ECG filtering that can be tailored for different sequences and locations, with specific operation modes for adults, pediatrics, and neonates.
- Secure employment of FIPS 140-2 level 1 standard algorithms¹ plus AES-256-GCM, AES-256-CBC and TLS 1.2 encryption protocols² for wireless communication between MR400 to Portal 5000, HL7, PIC iX certifications and secure communication over hospital networks.
- Wireless communication with MR patient monitoring systems.
- Case management for clinical ease of use and efficiency.
- Integrate across different care settings with Philips Patient Information Center iX (PIC iX) or Philips Capsule Surveillance via serial date (RS232), HL7, or direct connection.
- New gas standard 80601-2-55 update: on-screen CO2 calibration notification and auto zeroing.
- Federal Information Processing Standards (FIPS) are US standards in regards to implementing not just encryption, but also crypto algorithms, data handling, and operating systems that must protect valuable data.
- 2 Advanced Encryption Standard (AES) 256-bit encryption CBC (Cipher Blocker Chaining) is an advanced form of block cipher encryption



Allows for remote telemetry or eICU workflows for MRI patients

Philips MR Patient Care Portal 5000

Address patient care challenges in the MR suite with the Portal 5000. Our latest MR information portal allows you to connect to a central patient monitoring station, providing access to real-time vital sign numerics, waveforms, and alarms.

Paired with the MR400 patient monitor, the Philips MR Patient Care Portal 5000 works with you across different care settings to provide your MR suite with remote monitoring, patient management, IT security and EMR/HIS connectivity.

Direct connectivity to Philips Patient Information Center (PIC iX) enables continuity of data thanks to continuous documentation for MR patient waveforms, alarms and vital sign data.



A powerful pairing

Explore the powerful combination of MR400 patient monitor, Portal 5000, and Philips Patient Information Center (PIC iX), working together to help boost your patient monitoring capability and increase connectivity across your Health System, now including MRI.

New hardware and software platforms are designed to keep you at the forefront, enabling clinical workflow across multiple acuities.

Philips Portal 5000 paired with Philips Patient Information Center (PIC iX) enables you to stay connected to your patient from MR-level to bedside. Connected to hospital information systems, you now have access to real-time display of vital signs, numerics and alarms for enhanced monitoring and case management.

With the Philips MR Patient Monitoring System, you can elevate your MR environment with the MR400 patient monitor, Portal 5000 and PIC iX, and can send ECG, SpO₂, CO₂, and invasive pressure waveforms to your EMR.



MR400 patient monito



Portal 5000







© 2024 Koninklijke Philips N.V. All rights reserved.

Philips reserves the right to make changes in specifications and/ or to discontinue any product at any time without notice or obligation and hereby disclaims any liability resulting from the use of this publication.

How to reach us Please visit www.philips.com healthcare@philips.com AUG 2024