The image shows an Invivo Expression MRI patient monitoring system. It is a white, upright stand with a large monitor at the top. The monitor displays a heart rate of 60, oxygen saturation of 99, and blood pressure of 120/80. The system is positioned next to an MRI patient bed. The background is a blue wall.

# INVIVO EXPRESSION

MRI PATIENT MONITORING SYSTEMS

SAFER. SMARTER. SIMPLER.



Invivo MRI patient monitoring systems are completely upgradeable, so you never have to worry about obsolescence. You can add agents, temperature or any other option at any time. Expression exclusively features Advanced Gradient Removal software, which can be upgraded and adapted as MRI manufacturers develop new gradient sequences and procedures.

## THE ONLY THING EASIER THAN USING EXPRESSION IS CHOOSING ONE.

Nothing is more important than the quality of care you provide for your patients. When you are conducting MRI studies with critically ill patients, children or patients who require sedation, errors or delays are not an option.

You need a monitoring system you can absolutely depend on, which is why the Invivo Expression MRI patient monitoring system is your clear choice.

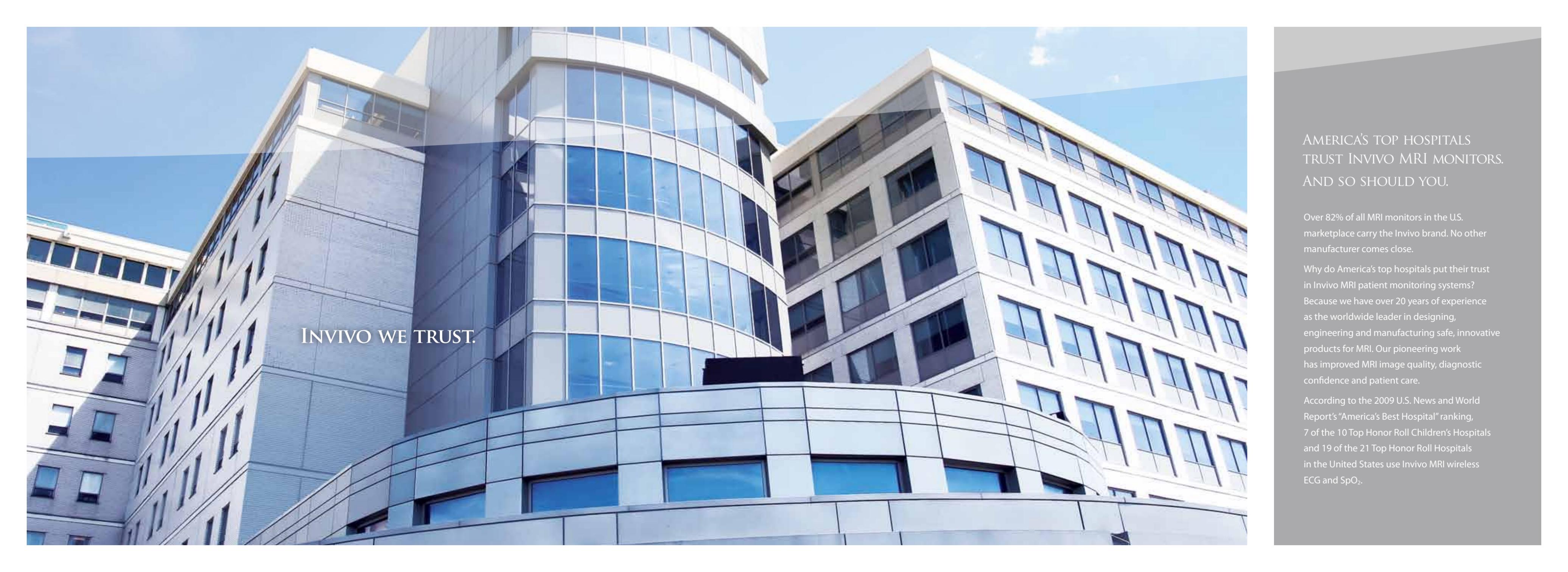
Specifically designed to withstand demanding environments with strong magnetic fields, Expression delivers the highest quality results, increased patient comfort and safety, and improved productivity with a lifetime of reliability.

Smart features help you make more informed, confident decisions about a patient's condition. Expression is simple to use, too, with a host of productivity-boosting innovations.

And as your needs change, so will your Expression monitor, the only device on the market that evolves with your practice. Plus, Invivo Express Service keeps you up and running with unrivaled uptime.

Everything about Expression makes it as easy to choose as it is to use.





INVIVO WE TRUST.

AMERICA'S TOP HOSPITALS  
TRUST INVIVO MRI MONITORS.  
AND SO SHOULD YOU.

Over 82% of all MRI monitors in the U.S. marketplace carry the Invivo brand. No other manufacturer comes close.

Why do America's top hospitals put their trust in Invivo MRI patient monitoring systems? Because we have over 20 years of experience as the worldwide leader in designing, engineering and manufacturing safe, innovative products for MRI. Our pioneering work has improved MRI image quality, diagnostic confidence and patient care.

According to the 2009 U.S. News and World Report's "America's Best Hospital" ranking, 7 of the 10 Top Honor Roll Children's Hospitals and 19 of the 21 Top Honor Roll Hospitals in the United States use Invivo MRI wireless ECG and SpO<sub>2</sub>.

OTHER COMPANIES SELL MRI PATIENT MONITORS AS AN AFTERTHOUGHT.



INVIVO EXPRESSION SYSTEMS ARE BUILT SPECIFICALLY FOR MRI.

Invivo systems are built from the ground up to withstand the rigorous demands of the MRI suite. Designed specifically for ultra-high magnetic field environments, the Expression MRI patient monitor operates at the 5,000 Gauss field line and 4 W/Kg SAR regardless of configuration, without compromising patient safety. This exceptional level of performance and reliability simply can't be achieved by monitors that have been adapted from other, less-demanding applications.

Expression MRI patient monitoring systems are designed specifically to not interfere with your images, regardless of operation or configuration. With its unusually low magnetic signature, Expression can be used with all major MRI scanners, including 3.0T systems.

Designed for MRI down to the smallest detail, Expression improves safety by eliminating flat surfaces and the potential for inadvertent placement of metallic objects. Accessories are safely stored in a specially designed basket.



## AN MRI EXAM SHOULDN'T BE A HIGH-WIRE ACT.

WIRELESS TECHNOLOGY SPEEDS WORKFLOW AND REDUCES DOWNTIME, WHILE MAXIMIZING PATIENT COMFORT AND SAFETY.

Invivo's industry-exclusive wireless technology makes it easy to move the patient from room to room, expediting patient management and workflow in the MRI suite. Sensor setup is fast and simple in the induction area. Wireless ECG, SpO<sub>2</sub> and respiration mean fewer lines in the exam room. And remote monitoring allows you to continue to track vital signs in the recovery room without the need for extensive – and expensive – wireless router networks.

Wireless technology helps increase patient comfort and safety too. Shorter cables reduce the risk of cable heating. And with their unique one-piece design and large wet-gel contact area, Quadtrode<sup>®</sup> electrodes also dissipate heat to help eliminate burning. Plus Expression is the only monitor to offer complete infection control, with disposable options for every parameter: MRI internal body temperature sensors, MRI SpO<sub>2</sub> grips, Quadtrode electrodes, blood pressure cuffs and end tidal CO<sub>2</sub> sample lines and cannulas.



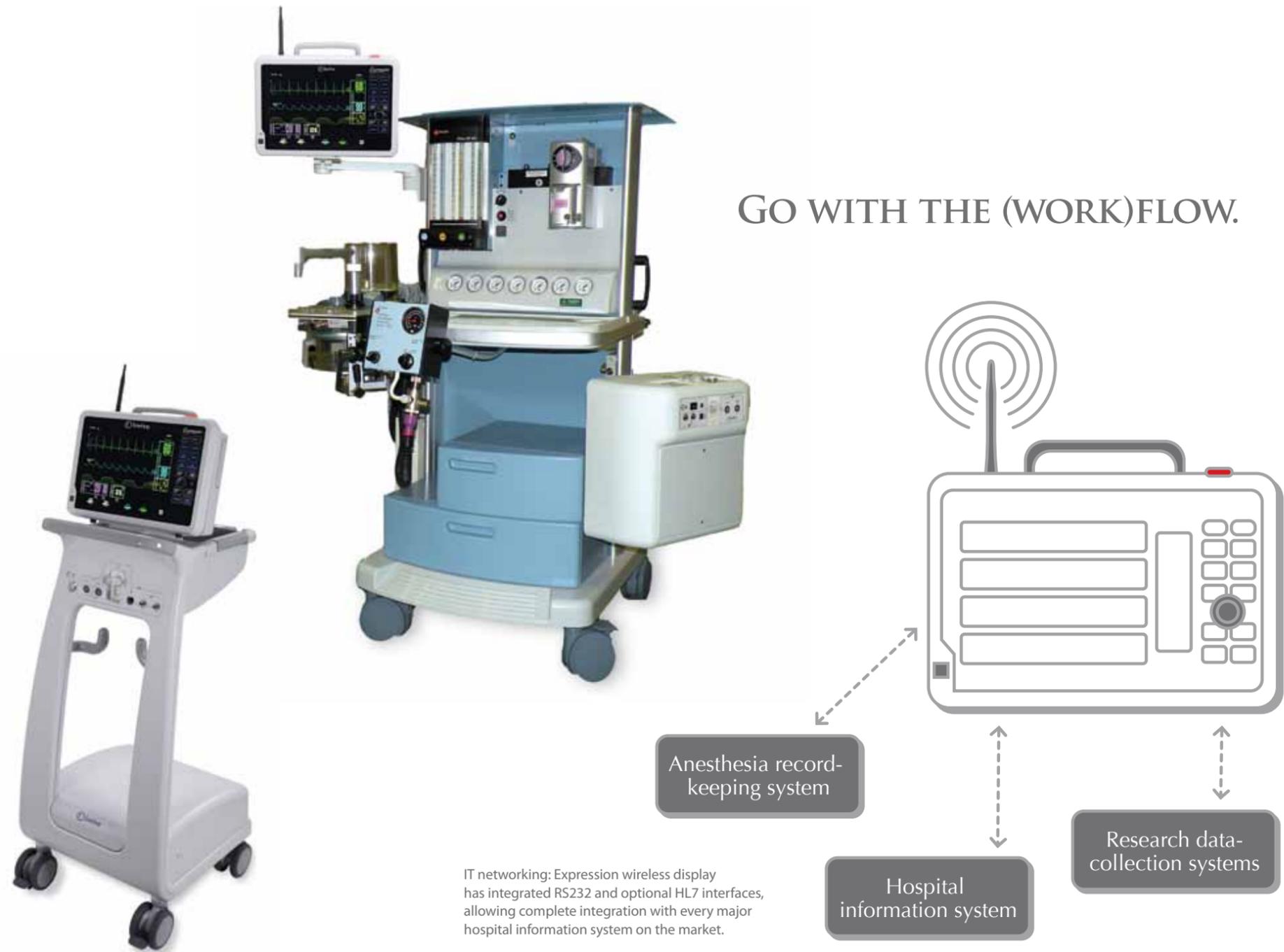
Invivo wireless ECG and Quadtrode electrodes are the only MRI monitor solutions available without any reported FDA burning reports.

Direct wireless communication allows simultaneous monitoring of vital signs from the MRI exam room and control room.

Only Expression works hand in hand with MRI systems to improve workflow. Expression picks up the wireless ECG and SpO<sub>2</sub> signals to monitor the patient, which many MRI systems use to trigger the scan.



## GO WITH THE (WORK)FLOW.



## PATIENT MANAGEMENT MADE EASIER.

Patient management is easy and convenient with Expression. Designed to replicate common OR workflow processes, Expression always gives you the right information at the right time – whether the patient is in induction, transportation, the exam room or recovery. So mount it on an anesthesia cart, patient table or freestanding pedestal and get on a roll toward more efficient, uninterrupted patient workflow.

Faster patient induction – Quadrode ECG electrodes allow quick placement on the patient, while ensuring maximum ECG performance. Wireless ECG, SpO<sub>2</sub> and respiratory connections eliminate the need for long cables that can become damaged or tangled, getting between you and your patient. Hospitals that replace their fragile, expensive cables with wireless vital signs can increase uptime while reducing operating costs.

Safe and efficient patient transport – Shorter cables increase throughput by requiring fewer hands. Keeping

cables on the patient table and in their holder reduces stress and damage to cables, increasing their useful life. This prevents expensive, accidental damage, which is common with other systems.

Uninterrupted monitoring during patient exams – Data continuity between monitors makes it easy to switch patients from one monitor to another without interruption.

Remote monitoring during recovery – Patients can continue to be remotely monitored.



Faster patient induction.



Safe and efficient patient transport.



Uninterrupted monitoring during patient exams.



Remote monitoring during recovery.



Electrode Fail Indicator immediately notifies you if an electrode loses connection with the patient, so you can quickly identify the source of a lead failure during a scan.



Exclusive SpO<sub>2</sub> Perfusion Index provides instant feedback on the overall quality of your SpO<sub>2</sub> signal, for more confident patient assessment and faster setup time.



Trend Arrows instantly provide a visual representation of vital signs trends so you can assess the patient's history while also monitoring live readings. This adds a level of safety and security that other MRI monitors can't match.

## INTELLIGENT DESIGN BY US.



## INFORMED DECISIONS BY YOU.

A lot of hard thought went into the design of the Expression system to make your work easier. So you can make more informed decisions about a patient's condition, safely and efficiently.

- Six-color waveform capability – two ECG, SpO<sub>2</sub>, EtCO<sub>2</sub> and two IBP – provides an easy-to-see overview of patient status.
- The cleanest and safest ECG information available, thanks to proprietary Advanced Gradient software, for any clinical magnet up to and including 3.0 Tesla.
- Wireless SpO<sub>2</sub> monitoring uses a digital signal to ensure precise values for saturation and fast acquisition, even on pediatrics.
- Precise EtCO<sub>2</sub> measurement with waveform fill helps you make more informed decisions when monitoring respiratory gas.
- Patient body temperature monitoring allows you to provide the same standard of care in the MRI suite that you offer in the OR by allowing rectal, esophageal or surface temperature measurements.
- The smart battery management system provides a full eight hours of life on a single charge for each wireless module. The monitor displays the remaining battery life for the base unit, display and each module. A remote battery charger charges up to four depleted batteries at one time.

- Large, tilting 12-inch color screen makes patient monitoring as effortless as possible with a complete picture of patient status – including ECG, SpO<sub>2</sub>, EtCO<sub>2</sub>, invasive pressures and Active Trend Arrows – that can easily be viewed from a distance.
- Expression's 360° Alarm Light is positioned on top of the monitor, so you can be alerted to check the patient's condition even when you can't hear the alarm or when you aren't in front of the screen.
- Numbers and graphs are color-coded and easy to read, enabling fast decision making. Open menus don't block all vitals so you can continuously monitor the patient.
- Using the innovative, quick-set mount, you can easily remove the display and place it in a more convenient location in seconds.
- Navigation is "dial-and-select" simple. Just turn the large control knob and click on the vital sign for more targeted menu options.





Our field technicians or your biomedes can fix nearly any problem in about an hour by simply swapping out a pre-assembled, pre-calibrated, pre-tested module. There's no longer a need for loaners or carrying spare part inventories common with other systems.



Invivo monitors are designed and built to deliver unsurpassed durability. But should you have a problem, simply give us a call and we will walk your biomed through the repair or dispatch a service technician to your facility within 24 hours.

## BUILT TO THE HILT.

### AND BACKED TO THE MAX.

With anesthesia MRI studies scheduled weeks or even months in advance, you simply can't afford to have your MRI patient monitoring system inoperable. That's why Invivo monitors are built with the latest quality standards and manufacturing processes to deliver long-lasting reliability from the start.

Invivo Express Service helps ensure unparalleled uptime. Should you ever need service, this exclusive feature gets your monitor back up and running in about an hour, instead of days as is common with other systems. So MRI appointments are merely delayed, not cancelled, resulting in happier patients and clinicians – and a better return on investment.

Invivo also offers 24/7 phone support and the only MRI-monitor-focused service professionals in the industry. If needed, we can dispatch one to your site within 24 hours.

To ensure continuous quality improvement, our service technicians work closely with our designers, engineers and manufacturing team. By tracking common service issues, we're able to continuously improve product reliability. And keep you up and running.

Expression is designed with biomedical technicians in mind. Express Service allows nearly any repair – including gas calibration and hardware failures – to be completed by a biomedical engineer in about an hour.





inspired by a better way

For more information about Invivo Expression MRI Patient Monitoring Systems or any of the Complete Solution products from Invivo, please call us at 1-800-331-3220, or visit our website at [www.invivocorp.com](http://www.invivocorp.com).

## INVIVO CORPORATION

ORLANDO, FL, USA

T: 800-331-3220

T: 407-275-3220

E: [INFO@INVIVOCORP.COM](mailto:INFO@INVIVOCORP.COM)

[WWW.INVIVOCORP.COM](http://WWW.INVIVOCORP.COM)

[WWW.INVIVOEXPRESSION.COM](http://WWW.INVIVOEXPRESSION.COM)

## EUROPE

T: +31 (0)499 378624

E: [CONTACT@INVIVOCORP.COM](mailto:CONTACT@INVIVOCORP.COM)

Products, services and technical specifications are subject to change without notice.

Certain images in this brochure courtesy of Florida Hospital, Orlando, Florida and NeuroSkeletal Imaging, Winterpark, Florida.

©2009 Invivo Corporation All Rights Reserved.

Part Number: 865214