



Medtronic

BIS™ VISTA Monitoring System

Delivering Insight with BIS™ monitoring

BIS QUATRO



BIS PEDIATRIC



CFN	Description	Qty	Category
186-1046	Vista BIS Monitor with Accessory	1	Device(Monitor)
186-0195-AMS	Aspect BIS X	1	Device(Accessory)
186-0107	Patient Interface Cable (PIC+)	1	Device(Accessory)
186-0106	BIS Quatro Sensor	25	Disposable
186-0200	BIS PAED Sensor	25	Disposable



Medtronic Korea Ltd.
 17F, Glass Tower, #534, Teheran-ro,
 Gangnam-gu, Seoul Korea
 Tel. +82-2-3404-3600

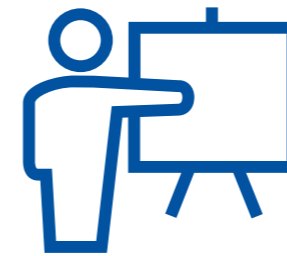
www.medtronic.co.kr
 07/2022

Medtronic



BIS™ technology backs you up with proven brain monitoring

Given the complexity of the decisions you face, it makes sense to incorporate the added security of BIS monitoring into your practice. Used in millions of procedures requiring anesthesia, BIS technology can provide insight into the direct and patient-specific effects of anesthesia on the brain.



Get more insight at EverybodyBIS.com or contact your Medtronic representative

BIS™ technology is quick to set up and easy to operate. A full range of EMR-compatible products – from standalone to fully-integrated systems – provide convenient flexibility and the right solutions for a diverse range of needs.

BIS™ monitoring helps you deliver a tailored, well-balanced anesthesia that protects patients during procedures and enables a smooth postoperative recovery.

How BIS™ works

- Raw EEG data are obtained through a sensor placed on the patient's forehead
- The BIS system processes the EEG information and calculates a number between 0 and 100 that provides a direct measure of the patient's level of consciousness
- A BIS value of 100 indicates the patient is fully awake
- A BIS value of 0 indicates the absence of brain activity

BIS™ Range and clinical state

100	Awake <ul style="list-style-type: none">• Responds to normal voice
80	Light / Moderate Sedation <ul style="list-style-type: none">• May respond to loud commands or mild prodding / shaking
60	General Anesthesia <ul style="list-style-type: none">• Low probability of explicit recall• Unresponsive to verbal stimulus
40	Deep Hypnotic State
20	<ul style="list-style-type: none">• Burst Suppression
0	Flat Line EEG

This chart reflects a general association between clinical state and BIS values. Ranges are based on results from a multi-center study of the BIS involving the administration of specific anesthetic agents. BIS values and ranges assume that the EEG is free of artifacts that can affect its performance. Titration of anesthetics to BIS range should be dependent upon the individual goals established for each patient. These goals and associated BIS ranges may vary over time and in the context of patient status and treatment plan.



Next-generation monitoring

Driven by a trusted algorithm

Improved workflow

with the INVOS™ 7100 system, you get:

- A redesigned user interface that saves time customizing the monitor
- Touchscreen functionality that makes reviewing – and marking – patient data faster
- Auto baseline that eliminates the need for manual setup – and ensures the baseline is set
- Sensor identification that enables quick identification and adjustment of sensors
- Sensor-off detection that lets you know if sensors have become detached
- Perforated sensor design keeps sensor in place

Easy to use across the care continuum

The INVOS™ 7100 system has:

- A reduced footprint – it's smaller and lighter than the INVOS™ 5100C system
- A portable, tablet-style monitor to keep an eye on patients – wherever they are
- The ability to save, append, and view historical patient data directly on the device

Compatibility with BIS™ sensors

The enhanced INVOS™ sensors have been:

- Reduced in size to fit alongside BIS™ monitoring sensors without overlapping
- Tested to ensure that patients can be monitored with both systems at the same time†

†Testing has shown that the (Medtronic) BIS™ level of consciousness monitoring system may be used in conjunction with the INVOS™ system provided that the optical windows on the INVOS™ sensors are not obstructed.

CFN	Description	Qty	Category
PM7100	INVOS PM7100 Monitor Tablet	1	Device(Monitor)
PMPAMP71	INVOS 7100 Preamplifier	1	Device(Accessory)
PMAC71DOC	INVOS 7100 Docking Station	1	Device(Accessory)
PMAC71STAND	INVOS 7100 Stand Mount	1	Device(Accessory)
PMAC71RSC	INVOS 7100 Sensor Cable Reusable	1	Device(Accessory)
PMAC71RIC	Adapter cable form Infant sensor to Preamp	1	Device(Accessory)
PMSENS71-A-10	INVOS Adult sensor	10	Disposable
PMSENS71-P-10	INVOS Pediatric sensor	10	Disposable
CNN/SNN	INVOS Neonatal Infant sensor	10	Disposable

1. Schoen J, Husemann L, Tiemeyer C, et al. Cognitive function after sevoflurane- vs propofol-based anaesthesia for on-pump cardiac surgery: a randomized controlled trial. *Br J Anaesth.* 2011;106(6): 840-850.
2. Deschamps A, Lambert J, Couture P, et al. Reversal of decreases in cerebral saturation in high-risk cardiac surgery. *J Cardiothorac Vasc Anesth.* Available online 18 June 2013, ISSN 1053-0770.
3. Colak Z, Borojevic M, Bogovic A, Ivancan V, Biocina B, Majeric-Kogler V. Influence of intraoperative cerebral oximetry monitoring on neurocognitive function after coronary artery bypass surgery: a randomized, prospective study. *Eur J Cardiothorac Surg.* 2015;47(3):447-454.
4. Murkin JM, Adams SJ, Novick RJ, et al. Monitoring brain oxygen saturation during coronary bypass

surgery: a randomized, prospective study. *Anesth Analg.* 2007;104:51-58.

5. Based on internal Medtronic white paper #11-PM-0232(1), Cerebral oximetry is frequently a "first alert" indicator of adverse outcomes. April 2016.
6. Goldman S, Sutter F, Ferdinand F, Trace C. Optimizing intraoperative cerebral oxygen delivery using noninvasive cerebral oximetry decreases the incidence of stroke for cardiac surgical patients. *Heart Surg Forum.* 2004;7(5):E376-E381.
7. Slater JP, Guarino T, Stack J, et al. Cerebral oxygen desaturation predicts cognitive decline and longer hospital stay after cardiac surgery. *Ann Thorac Surg.* 2009;87(1):36-44.

8. Casati A, Fanelli G, Pietropaoli P, et al. Continuous monitoring of cerebral oxygen saturation in elderly patients undergoing major abdominal surgery minimizes brain exposure to potential hypoxia. *Anesth Analg.* 2005;101(3):740-747.

9. Edmonds HL Jr, Ganzel BL, Austin EH 3rd. Cerebral oximetry for cardiac and vascular surgery. *Semin Cardiothorac Vasc Anesth.* 2004;8(2):147-166.

Know when to intervene

Because seconds matter.

The INVOS™ 7100 cerebral oximetry system is designed to respond quickly – so you can, too



The risks of cerebral desaturation are real.

We developed INVOS™ technology because cerebral desaturation can put your patients at risk



A reliable first alert.⁵
for confidence
in your response.

The more you know about your patients,
the more confidently you can care for them.

Cerebral oximetry can play an important role as a valuable “first alert.” Because it monitors for hemodynamic changes and deteriorating patient conditions. And a well-protected brain may act as an index organ of how well organs are perfused and oxygenated.⁵

INVOS™ technology meets those clinical demands. In fact, no other cerebral oximetry technology is backed by a comparable volume of published, peer-reviewed clinical research.



Introducing the INVOS™ 7100 system

Our clinically tested INVOS™ algorithm is at the heart of the INVOS™ 7100 system. And we’ve enhanced it with next-generation features that make it easier to monitor patients across the care continuum.

When the INVOS™ 7100 system is used in your OR and ICU, it can improve your ability to intervene when your patients need you most. Because seconds matter.

Cerebral desaturation is common in cardiac surgery¹

 Patients will experience cerebral desaturation in

25–37%
of cardiac surgery cases¹

69–75%
of high-risk cardiac surgery cases²

73.7%
of patients who desaturate during high-risk cardiac surgery also desaturate in the ICU²

Prolonged desaturation can lead to serious complications^{3,4}



Coronary artery bypass patients who experience prolonged desaturation will also face

12X greater likelihood of having post-op cognitive decline³

26% higher rates of major organ morbidity and mortality (MOMM) than patients without cerebral desaturation⁴

The clinical reference standard

Several randomized controlled trials have shown that using the INVOS™ system can help reduce:

- Major organ morbidity or mortality⁴
- Renal failure⁴
- Stroke^{4,6}
- Post-op cognitive decline^{4,7,8}
- Respiratory failure/vent time⁶
- ICU length of stay⁴
- Hospital length of stay^{7,8}

The individualized care your patients deserve

INVOS™ technology is engineered to respond to each patient’s unique physiology because normal cerebral saturation levels can vary widely – from 58 to 82 percent.^{4,9}

INVOS™ technology uses the observed trend from the patient’s baseline. That’s significant because studies have shown that intervening based on a relative drop of cerebral oxygen saturation from baseline can improve patient outcomes.^{3,4}

INVOS™ technology gives clinicians the confidence to respond

주문정보

SKU No.	Description	Quantity
301-000-000	McGRATH™ MAC handle	1
350-072-000	McGRATH™ MAC blade size 1	50/box
350-017-000	McGRATH™ MAC blade size 2	50/box
350-005-000	McGRATH™ MAC blade size 3	50/box
350-013-000	McGRATH™ MAC blade size 4	50/box
X3-003-000	McGRATH™ MAC X blade size 3	10/box
340-000-000	Battery pack, 250-minute	1

기술규격

McGRATH™ MAC 핸들

크기	180 mm x 68 mm x 110 mm
무게	180 g
전원	3.6V lithium battery pack (c. 250 minutes)
광원	High-intensity LED
화면	2.5" LCD color display
카메라	CMOS
자재	Durable medical-grade thermoplastics composite with structural alloy core. The device and packaging are latex free.
보증기간	12 months

McGRATH™ MAC 일회용 블레이드

자재	Fog-free medical-grade optical polymer
포장	Packaged sterile for single use

시연 및 견적에 관한 사항은 대리점에 문의 바랍니다.
자세한 사항은 medtronic.com/mac-first에서 확인하세요.

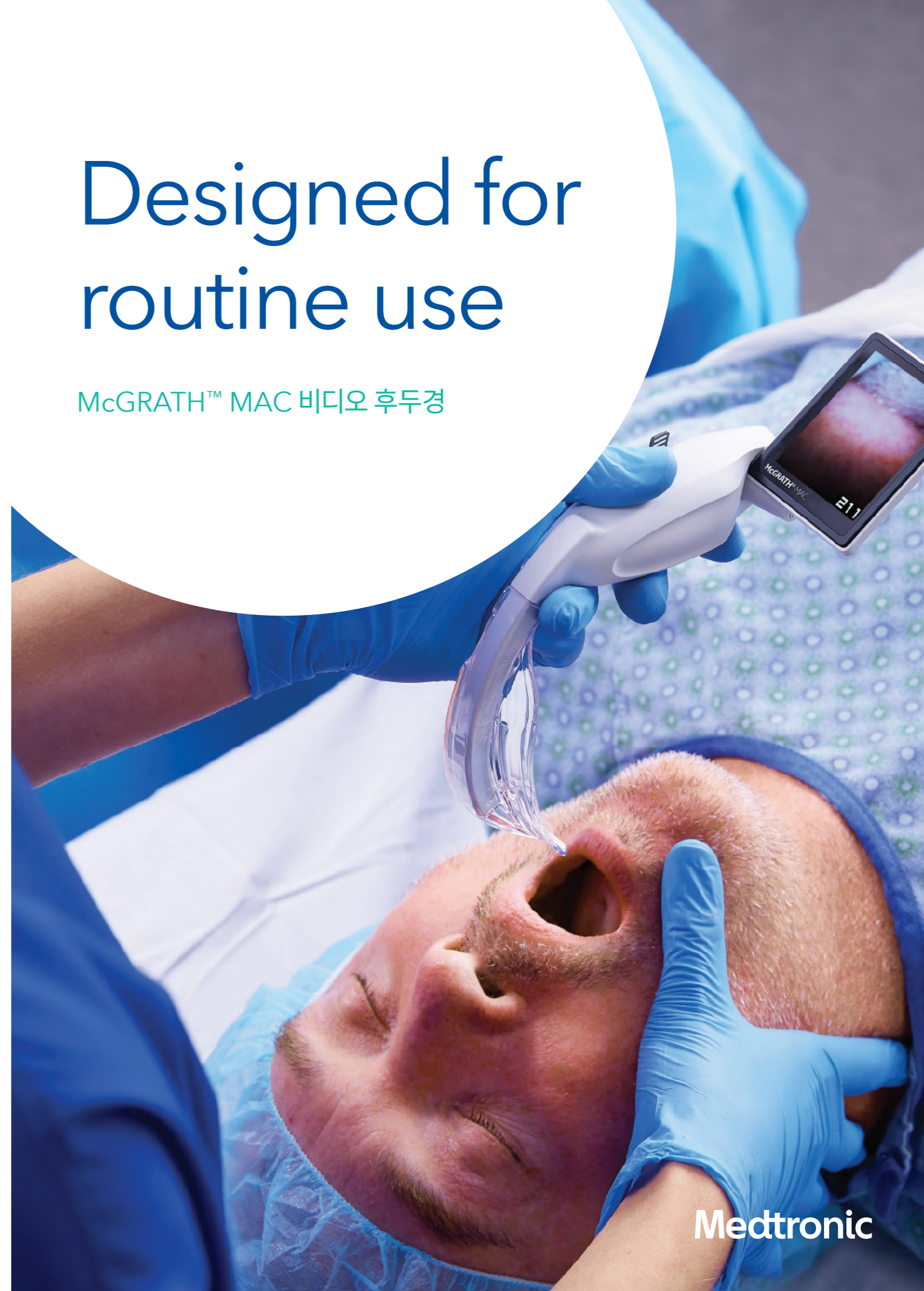


Medtronic

© 2019 메드트로닉. 저작권 소유. 메드트로닉, 메드트로닉 로고 및 Further, Together는 메드트로닉의 상표입니다. 다른 모든 브랜드는 Medtronic 사의 상표입니다. 20-J9-KOR-MAC-001

Designed for routine use

McGRATH™ MAC 비디오 후두경



Medtronic

See clearly. every time.

차세대 McGRATH™ MAC은
더 뛰어난 내구성과
밝고 선명한 영상을 제공합니다.*

더 넓은 화각
같은 크기의 화면에서
더 넓은 시야를 제공*

효율적인
배터리 관리
분단위로
배터리 잔량표시

Auto-Off 기능
3분간 움직임이 없으면
기기가 자동으로 꺼짐

3배 밝아진 LED
시각적으로 향상된 영상제공

세척 가능
IPX8 레벨의
방수 수준

진화는 계속됩니다

2배
광확산*

3배
밝기*

4배
해상도*



	향상된 디자인	기존 디자인
시각화		
LCD 렌즈	Glass	Acrylic
광색	4000 Kelvin	5500 Kelvin
밝기	3배 더 밝은 광원 ¹	표준 광원
화이트밸런스	자동 보정	고정
카메라 세부사항	향상된 해상도	표준 해상도
배터리 관리		
	Auto-Off 기능	수동 전원 on/off
맥그라스 무게		
배터리 포함 무게	200g	220g

* 이전 버전의 McGRATH™ MAC 비디오 후두경과의 비교 결과입니다.
1. 내부 시험 보고서 #RE001500188, V&V 계획에 기반한 결과입니다.