FOR ANESTHESIA
THAT’S
JUST RIGHT

OEM reference guide for Bispectral Index™ (BIS™) brain monitoring system
Each patient is different. And so is each procedure. That’s why the BIS™ brain function monitoring system lets you personalize anesthetic dosing each and every time. Helping you determine the right amount of anesthetic — not too much, not too little.

Our innovative BIS™ module fits easily into all industry-leading monitors. It’s the most widely available integrated patient monitoring solution. You can integrate the BIS™ module into a new monitor or your existing system. Either way gives you enhanced patient insights in a cost-effective, comprehensive monitoring solution.

The BIS™ module provides a proven, objective measure of your patient’s level of consciousness. Peer-reviewed, published articles have demonstrated that BIS™ system monitoring can help with:

- **Reducing primary anesthetic delivery by as much as 50%**
  - Module continuously collects EEG data on the patient’s depth of anesthesia.
  - You can adjust dosing to maintain BIS™ system monitoring values within the recommended range of 40–60.
- **Faster emergence, recovery, and discharge**
  - Optimized anesthetic dosing may help expedite patient recovery and discharge from the PACU.
  - Minimizing complications increases patient safety and satisfaction levels.
  - Gain greater efficiencies in surgery and patient care costs.
- **Lowering the risk of postoperative delirium in certain patients**
  - 37–46% of all surgical patients are affected by postoperative delirium,
  - with risk increasing up to 87% depending on age and type of surgery
  - $8,373: Perioperative delirium costs per year per patient
  - 2–4 times: The odds of dying during their hospital stay for patients with postoperative delirium

Talk to your Medtronic representative about how integrating a BIS™ module in your monitoring system can enhance patients’ health. And add value to your hospital.

If you have questions and/or require further information, please contact your local Dräger representative.

**Dräger**

Real-time data. Improved patient care.

The Infinity™ “SmartPod™” module with BIS™ technology helps you dynamically respond to any changes in your patient’s state during anesthesia. By delivering continuous, real-time sedation measurements.

<table>
<thead>
<tr>
<th>Compatible monitors</th>
<th>Infinity™ Delta, Delta XL, or Kappa monitors with VF5 software or higher</th>
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<td>Displayed information</td>
<td>BIS™ Index (BIS™) system, Signal Quality Indicator, Burst Suppression Ratio, EMG, Total Power, Spectral Edge Frequency, Burst Count</td>
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<tr>
<td>Ordering information</td>
<td>Infinity™ SmartPod™ module with BIS™ technology MS14756</td>
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<td>BIS™ quatro sensor kit, 25 pieces, MP00005</td>
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<td>BIS™ pediatric sensor kit, 25 pieces, MP00003</td>
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*Talk to your Medtronic representative about how integrating a BIS™ module in your monitoring system can enhance patients’ health. And add value to your hospital.*

*Available in non-RoHS countries.
**Dräger**

All vital data in one place. Easier decision-making.

When connected to the BIS™ complete monitor, the Infinity™ Acute Care System (IACS) and anesthesia workstation solutions in the OR can enhance clinical decision making. They display consolidated BIS™ complete monitor data, vital signs, and anesthesia data. IACS can broadcast BIS™ complete monitor data to the:

- Infinity™ Network for electronic documentation
- Infinity Central Station for display

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<th>IACS interface solution for BIS™ complete monitor</th>
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<td><strong>Displayed information: Trends</strong></td>
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</table>
| **Ordering information** | - Dräger patient monitoring solution: Infinity™ M540 mobile monitor with Medical Cockpit™ C500 (17 in./43.18 cm) or C700 (20 in./50.8 cm)  
- Dräger connectivity kit MS34115  
- BIS™ complete monitor, 2-channel or 4-channel (with BIS™ 4-channel, only 2-channel BIS™ parameter data displayed) |

If you have questions and/or require further information, please contact your local Dräger representative.

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**GE Healthcare**

Integrated monitoring. Smoother recovery.

The BIS™ module, E-BIS module, and accessories — when integrated with modular multiparameter monitors — aid in monitoring the effects of certain anesthetic agents. Helping improve patients’ recovery.

### GE E-BIS module, E-BIS (01)

| Compatible monitors | CARESCAPE™ modular monitors (B850, B650, B450)  
Installed base only: S/S modular monitors using software L-(C) ANE02(A), L-(C)ICU02(A) or later versions  
Note: GE E-BIS module 01 (BISx™ module) replaces GE E-BIS 00 (DSC-XP) module which is obsolete. GE BISx™ module is not backwards compatible to GE E-BIS 00; GE DSC-XP is not forward compatible to GE E-BIS 01. |
| Displayed information | BIS™ index (BIS™) system 0–100; Signal Quality Index (SQI) 0–100%; Suppression Ratio (SR) 0–100%; EMG 25–100 dB CARESCAPE™ monitors, 30–80 dB S/5 monitors; smoothing rate, user selectable 15 or 30 seconds; trending of BIS™ monitoring values, EMG, and SR up to 24 hours in anesthesia and 72 hours in critical care |

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**Ordering information**

GE E-BIS (01) module – GE PN - M1127542. Includes the E-BIS 01 module and the BISx™ (digital signal processing unit) module.
LiDCO

Comprehensive information display.
The LiDCOrapid™ monitor with Unity software and depth of anesthesia display can be connected with the BIS™ LOC 2-channel module. To co-display the depth of anesthesia parameter alongside fluid monitoring.

<table>
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<tr>
<th>Compatible monitors</th>
<th>LiDCOrapid™ monitor with Unity software</th>
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<tr>
<td>Displayed information</td>
<td>BIS™ Index (BIS™) system 0–100; Signal Quality Index (SQI) 0–100%; Suppression Ratio (SR) 0–100%; EMG 30–55 dB; Burst Count (BC) 0–30; Smoothing Rate (user selectable)</td>
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<tr>
<td>Ordering information</td>
<td>Please contact: Telephone: +44 0 20 7749 1500 Fax: +44 0 20 7749 1501 Email: <a href="mailto:orders@lidco.com">orders@lidco.com</a> LiDCO Ltd 16 Orsman Road London N1 5QJ United Kingdom</td>
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Mindray

Integrated monitoring technology. Increased patient safety.
Mindray was the first medical device company to integrate the bilateral BISx™ 4-channel module into their multiparameter BeneView™ series patient monitors. Access a full set of critical patient data. And tailor anesthetic dosing more confidently.

Note: (NA) Spectrum™ OR monitor with BIS™ integration installed base only; sales discontinued

| BISx™/BISx™ 4 module for use in Mindray-compatible monitors |
| Compatible monitors | BeneView™ T6/T8 (DPM 7 NA); BeneView™ T5 (DPM 6- NA) monitors |
| Displayed information | BIS™ Index (BIS™) system 0–100; Signal Quality Index (SQI) 0–100%; Suppression Ratio (SR) 0–100%; EMG 25–100 dB; smoothing rate, user selectable 10, 15, or 30 seconds; Total Power (PWR) 40–100 dB; Spectral Edge Frequency (SEF) 0.5–30Hz |
| Ordering information | 2-channel BISx™ module 4-channel BISx™ module (OUS) |

LiDCOrapid™ with Unity software: BIS™ parameter and trend screen

LiDCOrapid™ with Unity software: BIS™ displayed values

LiDCOrapid™ with Unity software

LiDCOrapid™ with Unity software

BISx™/BISx™ 4-channel module is not available in the U.S.

(NA) DPM 7 (Global) BeneView™ T1/T5/T6/T8
(NA) DPM series (Global) BeneView™ series

(NA) DPM 6 – (Global) BeneView™ N22/N19
with module rack and BIS™ module
(NA) DPM series (Global) BeneView™ series

Access a full set of critical patient data. And tailor anesthetic dosing more confidently. Protect your patient during and after anesthesia — to help prevent postoperative delirium and aid faster recovery.
NIHON KOHDEN

Innovative integration. Patient protection throughout surgery.
The BISx™ smart modular system with Smart Cable™ technology. Helping to monitor depth of consciousness and sedation in the OR, recovery room, and ICU.

Compatible monitors
Life Scope™ TR BSM-6000 series (BSM-6301, 6501, 6701); Life Scope™ VS BSM-3000 series (BSM-35x2, BSM-17x3); Life Scope™ PT BSM-1700 series (BSM-17x3); Life Scope™ G9 CSM-1901 series

Displayed information
BIS® Index (BIS®) system 0–100; Signal Quality Index (SQI) 0–100%; Suppression Ratio (SR) 0–100%; EMG 10–80 dB; Compressed Spectral Array (CSA) 0–30 Hz; Spectral Edge Frequency (SEF) 0.5–30 Hz; DSA (Density Spectral Array)

Ordering information
For TR600 series: BISx™ processor and smart modular cable NK-ASPECT BIS™
For TR9000 Series: JA-694PA DAU and AY-6xxPA input unit

Philips

Optimized dosage. Reduced postoperative complications.
Philips monitors incorporating BIS® technology provide depth of consciousness and sedation monitoring in the operating room, ICU, and other clinical settings.

Philips IntelliVue™ monitors

<table>
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<tr>
<th>Compatible monitors</th>
<th>MP20/30/40/50/60/70/90 and MX500/550/600/700/800</th>
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<tr>
<td>Displayed information</td>
<td>EEG waveform; BIS® Index (BIS®) system 0–100; Signal Quality Index (SQI) 0–100%; Suppression Ratio (SR) 0–100%; EMG 0–100 dB; Total Power 0–100 dB; Spectral Edge Frequency (SEF) 0.5–30 Hz; Burst Count (BC) 0–30; Inteliscope monitors 3.1.0 or higher; Smoothing Rate 10, 15, or 30 seconds; Asymmetry (ASYM) -100 to 100 (relative to user selected hemisphere)</td>
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<tr>
<td>Ordering information</td>
<td>BIS® Power Link™ plus BIS®-Channel Interface Module: M1034B #B01</td>
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Philips IntelliBridge™ patient monitor interface solution for BIS® complete 2-channel and 4-channel monitors
With the Philips IntelliBridge™ EC10 module driver option #808 (Philips PN 865115 #808) and IntelliBridge™ EC5 BIS® ID module (Philips PN 865114 #808) with ethernet cable connection, BIS® Vista data display and transfer is provided for: BIS® values, EMG, SQI, SR, SLE; sensor types, alarms, and trends.

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'SDM1000 has been discontinued
Spacelabs Healthcare

Complete modular solution. Safer medication.

The Ultraview™ SL monitor with the BISx™ module is a fully integrated solution that notifies you when additional medication may be needed. So you no longer need standalone systems to help prevent patients' awareness during surgery.

**Ultraview™ monitors; XPREZZON™ monitor**

**Compatible monitors**
- Spacelabs Ultraview™ SL2400, SL2600, SL2700, SL2800 monitors;
- XPREZZON™ monitor; legacy Ultraview™ 1050, 1030, 1500, 1600, 1700 monitors;
- Universal Clinical Workstation™ (UWC) monitor

**Displayed information**
- EEG Waveform; BIS™ Index (BIS™ system 0–100; Signal Quality Index (SQI) 0–100%; Suppression Ratio (SR) 0–100%; Median Power Frequency (MF); Spectral Edge Frequency (SEF) 0.5–30 Hz; Smoothing Rate 10, 15, or 30 seconds. Trends for BIS™ module, EMG, and one user selectable waveform

**Ordering information**
- Spacelabs Ultraview™ SL BIS™ module 91482. Includes BISx™ kit (BISx™ pod, patient interface cable PIC, host monitor cable; order code 719-0006-20)

**BIS™-Ready Patient Monitors**


The BISx™ standard module is an off-the-shelf innovative module solution. Easy to incorporate within most major monitoring systems. And helping to minimize space requirements in the OR, ICU, and outpatient settings.

**Standard BISx™ modules: BIS™-ready monitors**

- **Fukuda Denshi**
  - BIS™-ready monitors
  - BIS™ module (HBX-900; BISx™ I/F) can be connected to the DYNASCOPE™ DS-8000 through DS-8007 and DS-8500 through HS-8127

- **Mennen Medical**
  - BISx™ module available in Eney™ modular monitor; VitaLogik™ 5000/5500 configured monitors, VitaLogik™ 4000 series configured monitors and VitaLogik™ 6000; Menntor X7 modular patient monitor

- **PETAS**
  - KM™-900 series multiparameter patient monitors with options, including one-channel BIS™ module

- **UTAS**
  - Patient monitor UM 300™ series including UM 300-15, UM 300-12, UM 300-10 with BIS™ module through the UniPort™ universal connector technology

- **MONITOR LTD**
  - Research-Production Company
  - Diagnostic patient monitor MITAR 01 RD

- **Edan**
  - Elite V8, elite V6 and elite V5 modular monitors with BIS™ module option

- **Biolight**
  - Biolight modular patient monitor AnyView™ A Series A8/A6/A5 with BIS™ module option

**BISx™ standard module**

- **BISx™ system**
  - 186-0195-SF

- **Patient interface cable (PIC+) 186-0107**

**BIS™-Ready Patient Monitors**

- **DYNASCOPE™ DS-8007**
  - Patient monitor

- **DYNASCOPE™ DS-8400**
  - Critical care monitor

- **DYNASCOPE™ DS-8500**
  - Patient monitor

- **Mennen Medical VitaLogik™ 4000 series monitors**

- **Mennen Medical VitaLogik™ 5000/5500 configured monitor**

- **Mennen Medical VitaLogik™ 6000 monitor**

- **PETAS KM™-900 Multi-parameter patient monitor**

- **UTAS patient monitor UM 300™ series monitors with BIS™ module (UniPort™ connector)**

- **MONITOR LTD patient monitor MITAR 01 RD**

- **Edan elite V8 modular monitor with BIS™ module option**

- **Biolight™ modular patient monitor AnyView™ A Series A8/A6/A5 with BIS™ module option**


Photo credit: iStock

IMPORTANT: Please refer to the package insert for complete instructions, contraindications, warnings and precautions.

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medtronic.com/covidien/en-gb/index.html