Medtronic

Bispectral Index™ (BIS™) monitoring system product guide

Anesthesia personalized.

Know you're tailoring each anesthetic dose just right.

The Bispectral Index™ (BIS™) monitoring system can give you meaningful information to help individualize and optimize anesthetic dosage – for the best possible outcome for each and every patient.

Insights to inform your decisions

Reliable data based on objective, quantified science is critical when you're monitoring the anesthetic effects on a patient's brain.

BIS™ system monitors use innovative technology to link patient-specific EEG information to an individual's level of consciousness.

Here's how it works:

1. Sensors collect the raw EEG data that indicates brain activity in real time.
2. The system uses its clinically validated algorithm to filter, analyze, and correlate the data.
3. Results are continually calculated and displayed as the BIS™ index value (a number between 0 and 100), indicating the patient's response to anesthetic agents.

By customizing individual dosing to keep the BIS™ monitor value within the target range during all phases of anesthesia,[1,5,8,9,20-23] you can minimize side effects and postoperative complications and drive faster recovery.

Using clinically-proven BIS™ index-guided anesthetic dosing:

Reduces

- Anesthesia use by as much as 38 percent[1-7]
- Awareness with recall by 64 percent[8,9]
- Incidence of post-operative complications[3,10,11]
- Costs[8,12-17]

Decreases

- Incidence of post-operative delirium in elderly and at-risk patients[3,6,7,10,11,15-17,19]

Improves

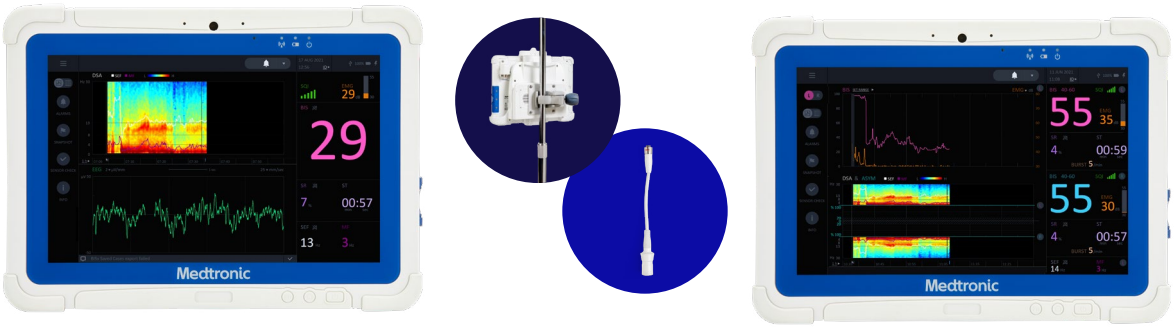
- Patient satisfaction[20]
- Patient outcomes[2,14,20]
- Patient quality of life[5,7]

Accelerates

- Wake ups[1,2]
- Recovery time[1,2,7,20]
- Discharges from PACU[5]

Visualize anesthesia in action

Our BIS™ monitors translate a patient's raw EEG data into the easy-to-read BIS™ index to help you reliably gauge and personalize their anesthetic medication.



BIS™ Advance monitor

- 10-inch high resolution display
- 1200 hours of data (50 cases)
- One-hour battery life
- Adjustable time window one, six, 12, or 24 hours
- Suppression ratio (SR) and suppression time (ST) are always displayed
- Adjustable EEG amplitude and sweep speed
- Ability to make density spectral array (DSA) a default configuration
- Horizontal DSA display

2-channel monitoring

The BIS™ monitoring system – a full-featured, anesthetic depth monitoring solution. Features:

- Density Spectral Array (DSA) with visual display of EEG bands
- Spectral Edge Frequency (SEF)
- Median Frequency (MF)
- Suppression Time (ST)
- Suppression Ratio (SR)

Part number: BISADV2CHAN

4-channel monitoring

The same proven BIS™ monitoring system and enhanced bihemispheric capabilities.

Combine it with our bilateral sensors to detect hemispheric differences in the brain. It has the same features as the 2-channel monitor, but also includes:

- Asymmetry indicator (ASYM)
- Ability to display from the left and right side of the brain
- Bilateral Density Spectral Array (DSA) with visual display of EEG bands

Part number: BISADV4CHAN

BIS™ LoC 2 channel with patient interface cable (PIC+)

Product ID: 186-0195-AMS

PIC+ only: 186-0107

BIS™ LoC 4 channel with patient interface cable (PIC-4)

Product ID: 186-0224-AMS

PIC-4 only: 186-1018-AMS-

Performance and patient comfort at the forefront

Our high quality sensors feature the Density Spectral Array with visual display of EEG bands and are easy to apply with positioning instructions printed right on them. They adhere well without damaging the skin. Limited to short-term use (maximum 24 hours).

BIS™ quatro 4-electrode sensor

Measures brain activity in adult patients undergoing general anesthesia or sedation.

Part number: 186-0106, box of 25

BIS™ pediatric sensor†

Measures brain activity in pediatric patients.

Part number: 186-0200, box of 25

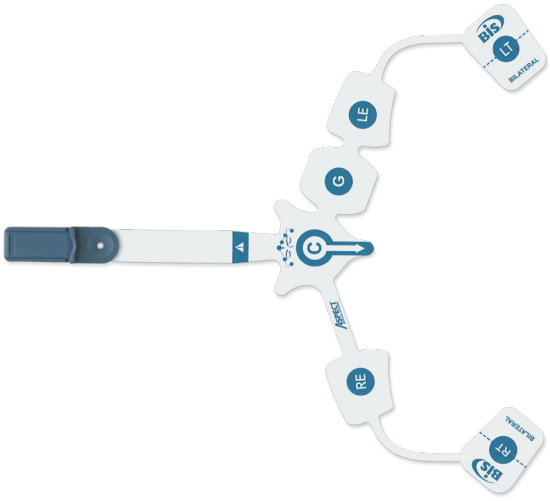
†Ages 4 and up recommended.

BIS™ bilateral sensor‡

Measures the hemispheric differences in the brain with the Assymetry Indicator (ASYM) display, which may be useful for advanced monitoring applications.

Part number: 186-0212, box of 10

‡Not compatible with BIS™ 2-channel systems. BIS™ LOC 4-channel cables required.



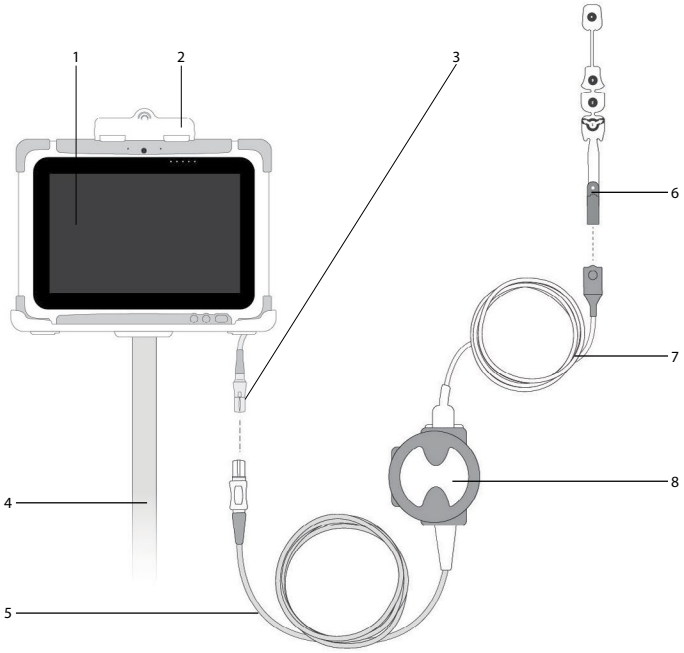
BIS™ extend sensor (extended use)

Measures brain activity and burst count in adult patients who require longer periods of monitoring, including those in the ICU.

Part number: 186-0160, box of 25

Talk to your Medtronic representative to order BIS™ monitors and sensors.

BIS™ Advance monitor system components



Number	Component	Skus
1	Monitor	PMB4000
2	Docking station	PMB4000DOC
3	Adapter cable	PMB4000ACBL
4	GCX mounting accessory (the selected accessory will depend on the use case)	PMB4000PMT
5	MIC	186-0201-AMS-
6	Sensor	186-0106, 186-0200, 186-0212* only with 4 channel, 186-0160
7	PIC	186-0107 (2 channel) or 186-1018-AMS- (4 channel)
8	BISX module/BISX4 module	186-0195-AMS (2 channel) or 186-0224-AMS (4 channel) **Note:** 186-0195-AMS and 186-0224-AMS include the MIC and PIC cable (#s 5 and 7)

Bundles

Product		Components		Quantity
BISADV2CHAN	**BIS™ Advance monitor system - 2 channel**	PMB4000	BIS™ Advance monitor (US 510k indications/IFU)	1
		PMB4000DOC	BIS™ Advance, docking station	1
		PMB4000ACBL	BIS™ Advance monitor, LOC adapter cable	1
		PMB4000PMT	BIS™ Advance monitor, IV pole mount	1
		PT00059589	Power cord, 10A, 10FT, black (NEMA 5-15P)	1
		186-0195-AMS	BIS™ LoC 2 channel with patient interface cable	1
BISADV4CHAN	**BIS™ Advance monitor system - 4 Channel**	PMB4000	BIS™ Advance monitor (US 510k indications/IFU)	1
		PMB4000DOC	BIS™ Advance, docking station	1
		PMB4000ACBL	BIS™ Advance monitor, LOC adapter cable	1
		PMB4000PMT	BIS™ Advance monitor, IV pole mount	1
		PT00059589	Power cord, 10A, 10FT, black (NEMA 5-15P)	1
		186-0224-AMS	BIS™ LoC 4 channel with patient interface cable (PIC-4)	1
BISADVUPG	**BIS™ Advance monitor system - upgrade kit**	PMB4000	BIS™ Advance monitor (US 510k indications/IFU)	1
		PMB4000DOC	BIS™ Advance, docking station	1
		PMB4000ACBL	BIS™ Advance monitor, LOC Adapter Cable	1
		PMB4000PMT	BIS™ Advance monitor, IV pole mount	1
		PT00059589	Power cord, 10A, 10FT, black (NEMA 5-15P)	1

The BIS™ monitoring system should not be used as the sole basis for diagnosis or therapy and is intended only as an adjunct in patient assessment. Reliance on the BIS™ monitoring system alone for intraoperative anesthetic management is not recommended.

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