

### **Specifications Environmental Performance**

Storage Temperature	- 25°C to + 70°C (- 13°F to 158°F)
Operating Temperature	+ 15 $^\circ\!\!\!\mathrm{C}$ to + 40 $^\circ\!\!\!\mathrm{C}$ (59 $\mathbb F$ to 104 $\mathbb F$ )
Operating Atmospheric Pressure	10% to 90% non-condensing
Operating Atmospheric Pressure	425 to 850 Torr

#### **Mechanical Specifications**

Pressure Range	- 30 to 300 mmHg
Overpressure Withstand	- 400 mmHg to + 4000 mmHg
Mounting	Any axis
Safety Features	
Risk Current	Less than 5 uA
Defibrillation Withstand	5 discharges in 5 minutes @ 360J

#### **Electrical Performance**

Transducer Excitation Voltage	4 to 8 volts RMS		
Transducer Supply Frequency	DC to 5000 Hz		
Phase Shift	< <b>5°</b>		
Transducer Excitation Impedance	300 to 400 ohms		
Transducer Signal Impedance	250 to 350 ohms		
Transducer Symmetry	+/- 5%		
Accurancy	Meets AAMI / ANSI BP22 (1994) Standard		
Sensitivity	5 uV/V/mmHg		
Zero Drift After 5 min Warm-up	< 2 mmHg in 4 hrs		
Zero Shift due to Temperature	+/- 10 mmHg maximum*		
Light** Sensitivity <mark>@ 0 mmHg</mark>	< 1 mmHg		
Mechanical Shock Withstands	Withstand 3 falls from 1 meter		
*from 15°C to 40°C (59°F to 104°F) using 25°C			

\*fr \*\*3,000 foot-candles generated by 3,400K Tungsten source

#### Contents

All kits include a sterile BIOTRANS™ disposable Twist-On Dome with integral 3- or 30cc/hr flush device with Fast Flush and pressure relief functions. The table below identifies additional components included in sterile, packaged single-use Pressure Monitoring Kits by catalog number. All Luers are supplied protected with vented caps. All required non-vented caps are supplied in a separate pouch within each kit package.

Product Code	Description	Integral Flush Device*	Extension Tubing	Stopcock	Distal Tubing
BTR	Standalone DPT Without Flush Device	None	None	None	None
BTR-30**	Standalone DPT With Flush Device (Infant/Neonatal)	30 cc/hr	None	None	None
BTR-3	Standalone DPT With Flush Device (Adult)	3 cc/hr	None	None	None
BTR 4812-3	Single Monitoring Kit System (Adult)	3 cc/hr	48" (122cm)	3-way	12" (30cm)
BTR2 4812-3	Bifurcated Monitoring Kit System (Adult)	3 cc/hr	48" (122cm)	3-way	12" (30cm)
BTR3 4812-3	Trifurcated Monitoring Kit System (Adult)	3 cc/hr	48" (122cm)	3-way	12" (30cm)
BTR 6012-3	Single Monitoring Kit System with 60" extension tubing (Adult)	3 cc/hr	60" (152cm)	3-way	12" (30cm)

\*Flush rates indicated are nominal and were obtained with 300mmHg pressure.

Past Flush rates vary with the type of administration set and length and lumen diameter of the monitoring tubing catheter. \*\*Kits supplied with 30cc/hr (yellow banded) flush devices are intended for infant and neonatal applications. Note: Please contract our Bioptimal Sales Representative for custom kits to meet your special requirements.

#### **Reusable BIOTRANS<sup>™</sup> Accessories**

Product Code	Description	
HM650-150	Vertical Mounting Clamp for IV Poles up to 4cm diameter	
HM650-150-H	Horizontal Mounting Clamp for IV Poles up to 4cm diameter	
HM650-150-R	Rotatable Mounting Clamp for IV Poles up to 4cm diameter in both vertical and horizontal application	
BT-201	BIOTRANS II Sensor Base(reusable) with integrated 25cm sensor cable is designed for patient or pole mount applications	
PMA-1	PMA-1 Replacement Docking Bracket that holds 1 transducer at one time	
3-in-1 Backplate	Transducer Holder that holds up to 3 transducers at one time	
MAC-XX***	3.05m(10Ft ) Monitor Adapter Interface Cable for specific brands of monitors	

\*\*\*Please contact your Bioptimal representative for assistance.

## **BIOPTIMAL INTERNATIONAL PTE. LTD.**

36 Jalan Tukang Singapore 619266 Tel: +65 6213 5777 Fax: +65 6213 5737 Email: sales@bioptimalg.com



www.bioptimalg.com

# **BIOTRANS**<sup>TM</sup>

# **Blood Pressure Transducer**

BIOTRAN bo







# **BIOTRANS**<sup>TM</sup>

The Disposable / Reusable Blood Pressure Transducer System

# Performance in a cost-effective package.

# Delivering greater convenience and cost savings in your environment

BIOTRANS<sup>™</sup> provides superior performance in many hospital environments—including the accounting departments. That's because BIOTRANS<sup>™</sup> is the blood pressure transducer that combines the performance, quality and ease-of-use of a fully disposable blood pressure transducer with cost savings of a reusable system.

BIOTRANS<sup>™</sup> also incorporates a number of intelligent and exclusive features for saving care-givers valuable time. TOUCH CHECK<sup>™</sup>, for example, lets you quickly check the operating status of your BIOTRANS<sup>™</sup> re-usable, its pressure display after one use, after multiple uses, or at the time of the monitoring procedure. You simply won't find anything like **TOUCH CHECK<sup>™</sup>** on conventional disposable transducers.

**BIOTRANS<sup>™</sup>** was also engineered to help save the environment. Unlike fully disposable transducers, BIOTRANS<sup>™</sup> disposable pressure monitoring kits contain no heavy metal wastes.

# BIOTRANS" base DSCARD NARD

locking-dome design



BIOTRANS<sup>™</sup> sensors are designed for years of rugged use in your hospital environment while minimizing biological waste. Standard and custom kits are available to meet your specific monitoring needs.

Every BIOPTIMAL product is backed by our comprehensive warranty – plus expert service and support that continue long after your purchase.

To discover how we can transform your environment, please contact us at the location shown overleaf.

# **Flexibility** is the driving force behind our modular, "twist on"



most challenging monitoring environments including OR/Anesthesia, ICU, ER, and Cath Lab. For greater versatility, the BIOTRANS<sup>™</sup> transducer with its unique twist on dome and reusable sensor can be pole-mounted in single or multiple sets. Alternatively, BIOTRANS<sup>™</sup> is a re-usable sensor that is small enough to fit comfortably on a patient's arm.

BIOTRANS<sup>™</sup> was designed to work in the

BIOTRANS<sup>™</sup> is easily transported from one environment to another, with two conventional methods to choose from. First, you can unlock the pressure monitoring dome with its integral sterile isolating membrane. Second, you may choose to move the entire transducer and cable, as it is typically done with a disposable transducer. This flexibility can save substantial nursing time and related set-up costs.

