



# Pump-3700

# **Intra-aortic Balloon Pump**



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

# **Analytical Technologies Limited**

An ISO 9001 Certified Company

www.analyticalgroup.net



# >> Proprietary algorithms drive accuracy and precision

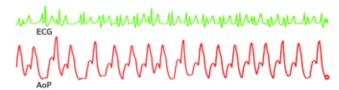
The remarkable performance of IABP is based upon AutoPilot Mode, which uses a trio of proprietary algorithms. Individually, they help address key challenges; together, they help improve the clinical efficacy of IABP therapy and simplicity with which it's delivered.

- WAVE Inflation Timing
- Deflation timing management
- Best signal analysis

#### Accurate inflation timing results in optimal IABP performance

With its proprietary WAVE Algorithm, IABP sets the inflation point in real time, within the beat – even during severe arrhythmias. The WAVE Algorithm has been shown to deliver 98% timing accuracy¹ – in the illustration below, inflation was timed properly for 16 out of 16 beats. 3,6 The combination of WAVE Technology and FiberOptix Sensor Technology eliminates delays associated with fluid-filled systems for fast reactions and accurate timing during early, unexpected beats.

#### **WAVE Inflation Timing on arrhythmic patient**



<sup>\*</sup>Representative of study. Individual results may vary.

#### **Accurate deflation timing**

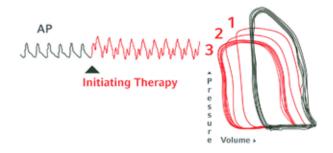
Among the most real-time, comprehensive, and accurate timing methods available today. Automated deflation timing management ensures accurate and safe deflation timing.

### Effective IABP therapy improves left ventricular performance

Once the IABP is turned on, the PV loop indicates lower pressure and increased stroke volume. The IABP acutely improves LV performance, primarily by afterload reduction and subsequent reduction in preload. 4,6 Simply turning the pump on increases stroke volume by as much as 18%–22% within just 4 beats which subsequently improves cardiac output. 4,6 This direct patient benefit is evident in the PV loop shown below.



#### **Initiating Therapy**

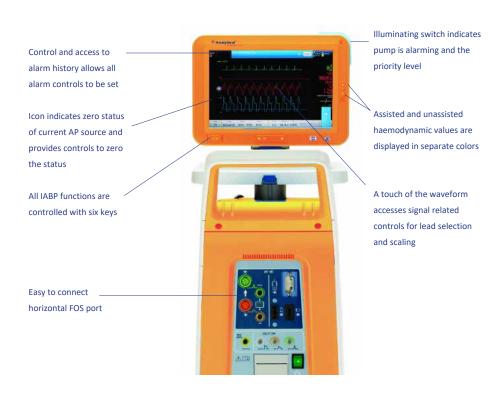


#### Up to 200 bpm

Provides precise and accurate support for patients with the most severe arrhythmias and heart rates as high as 200 bpm.<sup>1</sup>

## >> Unmatched simplicity, right from the start

Intra-Aortic Balloon Pump is up and running with the push of a button. Set up is fast and easy, guided by visual prompts on the large high-definition touchscreen — including confirmation that therapy can be initiated. In AutoPilot Mode, IABP automatically adjusts timing and triggering parameters, freeing clinicians to focus on the patient rather than the pump. A simple touch of the waveform provides access to controls, including the option to adjust volume.





# >> More than advanced, approachable

With a highly-advanced software platform and proprietary suite of algorithms, Intra-Aortic Balloon Pump delivers outstanding haemodynamic support across a wide range of patient co ditions. A user-friendly design, intuitive interface, and state-of-the-art AutoPilot Mode makes it incredibly simple to use. With this powerful combination, Teleflex has elevated counterpulsation therapy while making it more accessible than ever.

#### Alarm history and trends feedback

Allows quick review of past alarms and ability to assess repeated alarms

#### Touchscreen

Allows for fast and easy interaction. Action bar combines assessment and action in a single location

#### Waveform

New touchscreen access to waveform controls

#### Graphics

Simple green, yellow, and red graphics allow for clear communication of parameter status

#### Routine tasks

Startup checklist provides simple and quick confirmation that setup is complete. The therapy status report provides a fast, single page summary of patient and pump settings for simple a nd accurate charting

# >> Key actions and assessments made easy and accessible:



#### **Dynamic Startup Checklist**

An interactive review of the three step startup and confirmation when the pump is ready to start.



#### **Therapy Report**

One-button summary of patient haemodynamics (response to IABP therapy) and therapy settings. Allows for one key stroke charting, with ability to print reports.



# >> Third-generation AutoPilot Mode - dynamic and adaptive for intra-beat adjustments

Patient conditions can be ever-changing — maintaining optimal therapy requires continuous monitoring and adjustment. The third-generation AutoPilot Mode of the IABP makes it easy to track, sense, and adapt to changing conditions without any clinician intervention. Our exclusive Best Signal Analysis identifies the best signal for triggering and timing and implements adjustments with speed and precision beyond that of a manual operator. AutoPilot Mode is automatically activated when therapy is initiated, providing full support from the first beat. It begins with full-assist and full volume at startup, and immediately begins monitoring and managing signals.

As innovators in intra-aortic balloon pumping technology, we continue to advance the performance and reliability of automated therapy.

# >> Advanced alarms for enhanced safety and confidence

Understanding and managing alarms is crucial to patient safety and clinician productivity. IABP offers an advanced configuration to deliver on both counts.

- 360º visibility of alarm severity
- Expanded alarm history review
- New corner switch to identify IABP alarming and alarm priority
- Alarms are active at all pump speeds offering faster response in AutoPilot Mode than user in Operator mode.

# **Enhancing outcomes, optimising value**

Beyond its obvious clinical value, IABP offers low cost of ownership. As budget pressures continue to grow, the cost-effective features like these become increasingly appealing:

- Pneumatic drive system with no scheduled replacement parts
- Low component replacement costs
- Minimal service required



# **HPLC Servicing, Validation, Trainings and Preventive Maintenance:**

HPLC Servicing: HPLC Servicing: We have team of service engineers who can attend to any make of HPLC promptly @the most

affordable cost.

**Trainings** :We also take up preventive Maintenace to reduce downtime of HPLC's Trainings.

AMC's/CMC :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-

shooting.

**Validations** :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

Instruments: We offer instruments/Renting Services Modules like pumps, detector etc. on Rent.





# **About Analytical Technologies**

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufaturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

# **Our Products & Technologies**



UV/VIS Spectro 2080+ Double Beam



Infra FTIR



Optima Gas Chromatograph 3007



Optima Gas Chromatograph 2979 Plus



Flash Chromatograph



Atomic Absorption Spectrophotometer



Liquid Partical Counter



Optical Emission Spectrophotometer



DSC/TGA



Semi Auto Bio Chemistry Analyzer



HEMA 2062 Hematology Analyzer



Micro Plate Reader/Washer



URINOVA 2800 Urine Analyzer



Total Organic Carbon 3800



Fully Automated CLIA



NOVA-2100 Chemistry Analyzer



PCR/Gradient PCR/ RTPCR



TOC Analyzer



Laser Particle Size Analyzer



Ion Chromatograph



Water purification system

### Regulatory compliances



# **Corporate Social Responsibility**

Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



- 1.Research & Innovation Scientist's awards/QC Professional Award: Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personallities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at Info@analyticalfoundation.org
- 2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.
- 3. ANALYTICAL FOUNDATION aims to DETOXIFY human minds, souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

# Reach us @





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