





PRODUCT GUIDE





### For Today's Business of Sleep.™

BRAEBON has evolved into a single-source provider of PSG sensors, accessories, Home Sleep Testing (HST) systems and software solutions for sleep medicine.

Our mission is to be the company to provide valued alternatives in sleep diagnostics.

We have developed a unique combination of products at the forefront of technology, for today's busy environment of sleep medicine.

These products include:



A premium family of PSG sensors and cannulae developed for dependability and reliability.



A level 4 HST 6-channel screener upgradable to level 3.



A miniature 12-channel HST diagnostic recorder that can record up to 24 hours on a single battery.



A multi-site, comprehensive business workflow process software solution that can work with most PSG systems.

Our commitment includes unparalleled after sales support with industry-leading warranties, our Rapid Replacement Program, and support that never sleeps.

BRAEBON is aware of the many options available when purchasing HST equipment and accessories; our goal is to provide quality alternatives that are easy to use, more reliable and with better support.







### Airflow Sensor Technology.



#### Airflow Temperature Sensor Models 0510, 0510SE, 0510Ped

- Most comfortable design available
- No prongs to go up the nose
- Connects directly to the headbox
- Longest warranty in the industry
- Warranty: 7 Months



#### Patented cTherm Cannula Thermister Airflow Temperature Sensor Models: 0514,0514A5, 0514Ped, 0514A5Ped

- Works well with any cannula
- No prongs to go up the nose
- Connects directly to the headbox
- Designed to comply with new guidelines
- Warranty: 6 Months

By reducing our manufacturing costs through innovative sensor and cannula design, BRAEBON passes the savings on to the customer.





#### Airflow Sensor Model 5512

- Thermocouple technology battery free
- Measures both Oral and Nasal Airflow
- Two 1.5 mm safety connectors
- Cable length 84 inches (210 cm)
- Warranty: 6 Months



#### Airflow Temperature Sensor Model B1221

- Ideal for use during CPAP titration
- No prongs to go up the nose
- Connects directly to the headbox
- Longest warranty in the industry
- Warranty: 6 Months





### High Output Connectivity.

Piezo Effort Belts



#### Respiratory Effort Sensor Model 0528

- High output up to five times stronger than others
- Designed to reduce false paradoxical effort
- Connects directly to the head box
- Available for most PSG systems in pediatric and adult sizes
- Warranty: 1 Year

#### Piezo Belt Models:

- 0520: 1.5 mm safety pins with loops 6.5' cable (includes 0523-3, 0523-5)
- 0522: 1.5 mm safety pins with buckles 6.5' cable (includes 0526-3, 0526-5)
- 0528: High Output with buckles & 1.5 mm safety pins (Alice\* 5 Compatible) (shown)
- 0528A: Alice\* 3 compatible with buckles
- 0528A4: Alice\* 4 compatible with buckles
- 0529: High Output with loops & 1.5 mm safety pins (includes 0523-2, 0523-4)



Connect them directly to your AC headbox - no batteries required!



#### Piezo Assessories:

- Model 0523-2: 2-feet Velstretch Loop Belt (orange)
  Model 0523-3: 3-feet Velstretch Loop Belt (black)
  Model 0523-4: 4-feet Velstretch Loop Belt (green)
  Model 0523-5: 5-feet Velstretch Loop Belt (red)
  Model 0526-2: 2-feet Velstretch Buckle Belt (orange)
  Model 0526-3: 3-feet Velstretch Buckle Belt (black)
- Model 0526-4: 4-feet Velstretch Buckle Belt (green)
  Model 0526-5: 5-feet Velstretch Buckle Belt (red)



#### Effortless Effort Measurement.

#### **RIP Belts**

New guidelines require the use of inductive plethysmography for effort measurement and BRAEBON's new Q-RIP™ effort system is the better solution! Our one-size-fits-most belt uses the correct X-Y axis for inductance measurement. Our interface unit always includes the sum output and the unit is smart enough to turn itself off after 10 hours. This premium high quality product is durable and backed by a one-year warranty on belts and interface.



#### Q-RIP Respiratory Inductive Plethysmography Kit - 0570

- Superior quality RIP system
- Senses changes in respiratory effort
- Features 10 hour auto-off
- Detect Chest & Abdominal Effort and SUM
- Kit includes the belts and all needed cables
- Warranty: 1 Year







These compact battery

operated pressure transducers use stateof-the-art-miniaturized

technology to detect

waveforms associated

and reproduce

with respiratory airflow and snoring.

Developed by an

experienced team of

industry leaders, our

transducers ensure superior quality and provide all you need

to perform high

recordings.

quality and reliable

### Selection, Quality and Innovation.

#### Differential Pressure Transducers

#### Models 0580, 0580L, 0580D, 0580Pes

- Superior quality differential pressure transducers
- Senses subtle pressure changes in airflow and snoring
- Features 10 hour auto-off
- Detect Nasal and Oral breathing
- Warranty: 1 Year



#### PTLite - Model 0580L

#### Low Gain Differential Pressure Transducer Starter Kit

- Includes 2 x 0589 & 3 x 0582S cannulae
- Ultima Pressure Sensor Interface model 0586L included
- Ultima Pressure Sensor model 0581L
- Up to three outputs: raw airflow, filtered airflow and snoring



#### PT1 - Model 0580

#### Low Gain/Hi Gain Differential Pressure Transducer Starter Kit

- Includes 2 x 0589 & 3 x 0582S cannulae
- Ultima Pressure Sensor model 0581
- Compatible with most PSG systems. Various connectors available
- Up to three outputs: raw airflow, filtered airflow and snoring



#### PT2 - Model 0580D

#### Dual Airflow Differential Pressure Transducer

- Includes 2 x 0582S & 2 x 0589
- Compatible with most PSG systems. Various connectors available
- Up to six outputs: raw airflow, filtered airflow and snoring



#### Pes Kit - Model 0580Pes Esophageal Pressure Sensor

- Includes 2 x 0582S, 2 x 0589, 2 x 0591, and 2 x 0303
- Ideal for measuring endoesophageal pressure when using recommended catheter
- Warranty: 1 Year



## CPAP Titration Kit Model 0550 For Titrating FPH CPAPs

- Detect CPAP Flow, leak, pressure and snoring
- Interfaces to your PSG system
- User replaceable AA batteries
- Warranty: 1 Year

6



This family of sensors

and cannulae established BRAEBON as a quality manufacturer of sleep

sensors and accessories.

BRAEBON was the first

company to sell oronasal

sensing during sleep. We

with unique designs

continue to lead the market

optimized to capture flow.

cannulae for airflow pressure

### Industry Leading Cannulae.

#### Oronasal Cannulae



#### Model 0597 - New PureFlow™ Oronasal Cannula & Filter

- Awarded best in class
- Single lumen, single-patient use, adult oronasal cannula & filter for any pressure sensor
- Combines nasal and oral flow into one channel no internal turbulence
- Also available for HST in shorter version.



#### Model 0589 - Nasal & Oral Luer Lock Cannula & Safety Filter

- Single lumen, single-patient use, adult oronasal cannula & filter for any pressure sensor
- Combines nasal and oral flow into one channel



#### Model 0587 - Large Bore Nasal & Oral Cannula & Filter

- Single lumen, single-patient use, adult oronasal cannula & filter for any pressure sensor
- Combines nasal and oral flow into one channel



#### Model 0599 - Adjustable Nasal & Oral Luer Lock Cannula & Safety Filter

- Single lumen, single-patient use, adult oronasal cannula & filter for any pressure sensor
- Combines nasal and oral flow into one channel



#### Nasal Cannulae



#### Model 5582 - ValueFlow Nasal Cannula with male luer lock and filter

- Adult micro nasal cannula
- Available with or without filter
- Works with any pressure sensor



#### Model 0582 - Large Bore Nasal Cannula & Safety Filter

- Adult nasal cannula
- Works with any pressure sensor



#### Model 0582MCO<sub>2</sub>

- Simultaneus CO<sub>2</sub> and pressure monitoring
- Male Luer



#### Model 0582CO2 - Adult CO2 Divided Cannula

- Simultaneous CO2 and pressure monitoring
- Female Luer





### Snore Sensor Technology.



#### Snore Microphone Model 0540

- Electret condenser microphone
- Designed to detect higher frequencies of snoring
- Connects to headbox and senses snoring sounds
- Smaller than a dime allowing comfortable placement
- Eliminates movement artifact
- Warranty: 6 Months



#### Snore Sensor Model 0542

- Piezo technology
- Small and light
- Two 1.5 mm safety connectors
- Cable length 84 inches (210 cm)
- Warranty: 9 Months



#### Q-Snor Kit - Model 0546

- Snoring Sound Meter
- Senses actual snoring volume in dB
- Two 1.5 mm safety connectors
- Cable length 84 inches (210 cm)
- Warranty: 1 Year Interface

Snoring is an unwanted sound produced during sleep. BRAEBON's advanced technology enables you to record snoring volume.



#### MediByte® - Model 8541

- Electret Condenser Microphone
- Compact and light weight
- Two 1.5 mm safety connectors
- Cable length 84 inches (210 cm)
- Warranty: 1 Year



### Optimum Results.



#### Body Position Sensors:

- Model 0530 male RCA
- Model 0530M female phone
- Model 0532 two 1.5 mm touchproof
- Model 0533 two 1.5 mm touchproof with resistance
   Alice\* 5 & Stellate\*
- Accelerometer-based 5-position sensor
- Easily attaches to effort belt
- Two year batterly life
- Available for most PSG systems
- Warranty: 1 Year



#### Piezo Pressure Sensor - Model 5581

- Piezo technology
- Both Airflow and Snoring output signals
- Two sets of 1.5 mm safety connectors
- Plugs directly into the headbox
- Warranty: 6 Months

BRAEBON DC Sensors are smaller, smarter, and easier to use than ever before!

Accelerometer-based algorithms ensures signal accuracy.



<sup>\*</sup>Alice is a trademark of Philips/Respironics. \*Stellate is a trademark of Alpine Medical.





### Powerful. Simple.

#### MediByte® Junior Type 4 Recorder. Upgradeable to Type 3.

Using patent pending technology, this next generation MediByte Jr Home Sleep Testing (HST) device provides simple, cost effective and reliable screening for sleep apnea. Constructed of smooth nylon/plastic with an extra-strength LEMO™ connector, the MediByte® was designed for durability. Weighing less than three ounces, it is ideal for both adult and pediatric studies. Side wings attach the unit to the chest effort belt so that a holding vest or pouch is not required.

On-board oximetry, and internal pressure sensor eliminates external transducers. An oversized, tactile pushbutton allows the patient to indicate specific events during a recording. Studies are stored on the internal memory and downloaded via a USB computer connection.

This recorder is the next generation of screening devices. CPAP compatible. The MediByte® Jr may be used during titration studies or for 12-week follow-up evaluations.

#### MediByte® Junior Software

The MediByte® Software is an exclusive application that simplifies every step of a study, from setup to analysis to reporting. It is extremely easy to use, yet provides accurate assisted scoring and quality reports. Patient preparation uses a quick setup wizard to eliminate user error. You can program the unit to remain dormant for up to seven days and then start and stop recording at any time, for one or two nights on the same patient.

#### Everything you need.

Oximetry finger probe Oral + Nasal Cannula

Patient Kits Model 8115 - Oronasal cannula, battery, finger probe wrap Model 8120 - Oronasal cannula, battery, finger probe wrap, tape

MediByte Software Setup & Download Wizard

Full disclosure

Assisted scoring and manual scoring

Event editing **HST** Report

software is easy to use, vet flexible enough to analyze a number of user selected signals.

The Medibyte® Jr.

Miniature 6-channel

Home Sleep Tester

to Type 3.

that records up to two

nights on a single battery.

Upgradeable from Type 4



Includes MediByte® Recorder,

### The Evolution of HST.

#### Recorder

1) Oximetry

2) Heart rate

3) Pressure/flow

4) Snore – derived from pressure

Available Channels (6 Total) 5) RIP Chest effort 6) Event marker

7) Internal body position sensor

8) CPAP Flow 9) CPAP Pressure

Event Marker Oversized sealed tactile push-button marks events on recording

24 bit ADC with fixed sample rates for each channel Signal Quality

Bi-color LED with color coded legend Status Indicator

Single <sup>1/</sup>2 AA lithium battery Power Source Up to 24 hours of continuous data Recording Time

Dormant Mode Programmable to remain in a dormant state for up to 7 days

Internal Memory 128 MB internal memory

Computer Interface Communication cable for data downloads

Physical Size 3 x 2.75 x .75 inches, 2.85 ounces with battery (81.3 grams)

#### Software

Extremely easy to use sequential patient setup screens with user defined options Auto Setup

Auto Start Set the recorder to automatically start and stop at a specified date and time

Assisted Scoring Computer assisted scoring marks all desaturations, respiratory and snoring events

Adjust, delete, rename, or add events Event Editing

Full Disclosure Print any part of the recording with a user-selected epoch size

EDF Format Download recordings in EDF for research applications

Microsoft Word® templates specific to dental and cardiology sleep medicine Report Templates





### Home Sleep Testing Advancement.

#### MediByte® Type 3 HST Recorder

Using patent-pending technology and designed to exceed new guidelines, this next generation screener overcomes the many limitations of current devices. Constructed of smooth nylon/plastic with extra-strength LEMO™ connectors, the MediByte® was designed for durability. Weighing less than three ounces, it is ideal for both adult and pediatric studies. Side wings attach the unit to the chest effort belt so that a holding vest is not required. On-board oximetry, pressure and body position sensors eliminate external transducers.

An auxiliary (AUX) port provides a high sample rate channel for a variety of applications, including sound, EKG and EMG. Use the sensitive snore microphone for high frequency snoring analysis and a derived quantitative dB sound level. Use EKG electrodes for 24-hour holter monitoring or EMG electrodes to record bruxism or other myoclonic events.

An oversized, tactile pushbutton allows the patient to indicate specific events during a recording. Studies are stored on the internal memory and downloaded via a USB computer connection.

This recorder represents a new generation screening device that can be used for a number of different applications.

#### MediByte® Software

The MediByte® Software is an exclusive application that simplifies every step of a study, from setup to analysis to reporting. It is extremely easy to use, yet provides accurate assisted scoring and quality reports. Patient preparation uses a quick setup wizard to eliminate user error. You can program the unit to remain dormant for up to seven days and then start and stop recording at any time, for one or two nights on the same patient.

Everything you need.

#### MediByte® Kit

- 1) Oximetry finger probe
- 2) Snore microphone
- 3) Two RIP Respiratory effort belts
- 4) Six Oronasal cannulae
- 5) EKG/EMG lead yoke adapter
- 6) Prep. accessories
- 7) PLM adapter
- 8) Airflow Thermistor



Complete with sensors and software, the MediByte® package includes everything you

need to provide reliable

of configurations.

patient testing in a variety

This miniature device

of PSG data up to 2

nights or 24 hours on

a single battery.

can record 12-channels

### HST Evolved.

#### Recorder

- 1) Oximetry
- 2) Heart rate
- 3) Pressure Flow
- 4) Snore derived from pressure
- 5) Thermal Flow
- 6) RIP Chest effort
- 7) RIP Abdomen effort

Available Channels (12 Total)

- 8) Event marker
- 9) Internal body position sensor
- 10) EKG, EMG or Snoring Audio
- 11) Sound level
- 12) CPAP Flow
- 13) CPAP Pressure



AUX Channel Quantitative snoring sampled at 2000 Hz or EKG/EMG at 250 Hz Event Marker Oversized sealed tactile pushbutton marks events on recording 24 bit ADC with fixed sample rates for each channel

Signal Quality

Bi-color LED with color coded legend Status Indicator

Single <sup>1/2</sup> AA lithium battery Power Source Recording Time Up to 24 hours of continuous data

Dormant Mode Programmable to remain in a dormant state for up to 7 days

Internal Memory 128 MB internal memory

Computer Interface Communication cable for data downloads

Physical Size 3 x 2.75 x .75 inches, 2.85 ounces with battery (83 grams)

Sampling Rates Exceeds new guidelines

#### Software

Auto Setup Auto Start Assisted Scoring Event Editing Full Disclosure EDF Format

Report Templates

Extremely easy to use sequential patient setup screens with user defined options

Set the recorder to automatically start and stop at a specified date and time

Computer assisted scoring marks all desaturations, respiratory, PLM, and snoring events

Adjust, delete, rename, or add events

Print any part of the recording with a user-selected epoch size

Download recordings in EDF for research applications

Microsoft Word® templates specific to dental and cardiology sleep medicine

Includes MediByte® Recorder, sensor kit, software, and carrying case



### Solutions for Sleep Medicine.



PURSUIT Outcomes® assumes a vital role in all aspects of your sleep practice: from patient referral though the scheduling process, sleep study management, physician interpretation, Rx ordering, follow-up, patient outcomes and business

For over 12 years, Pursuit
Outcomes® has been
helping sleep professionals
manage their practices
more effectively and has
become the industry
standard that interfaces
with most PSG systems.

efficiency analysis.

Enter fax and phone referrals easily with the Quick Chart for rapid patient information intake. Book appointments using Quick Chart and schedule multiple appointments more efficiently or graphically display weekly appointments.

#### Patient Electronic Chart and Study Data

All patient information is displayed within an easy to use multi-tabbed window. Test results are further expanded displaying fields automatically populated by your PSG system.

#### Physician Interpretations and Remote Access

Physicians can generate interpretation letters using auto-populating templates (MS Word®), which can be digitally signed and made available to the sleep facility for distribution. Patient data can also be remotely accessed; allowing even the referring physician to view their patient's information from their offices.

#### SQL Query Generated Reports

Facility performance statistics, CPAP compliance, and patient outcomes from date and range specific sleep testing parameters are tracked and reported in a number of ways providing an excellent resource for obtaining and retaining medical insurance contracts and laboratory accreditation.

#### Additional Lists and Databases

User-maintained lists ensure data integrity and provide for fast data entry of repeated tasks without keyboard entry. Specialized databases are included for prescription drugs, procedures, MediCare codes, CPAP equipment and accessories and validation on CPT and ICD-9 diagnostic codes.

### The Industry Standard Solution.

#### Standard

Database Type: High performance HIPAA compliant AES encrypted SQL database.

Electronic Chart: Multi-tab window displays demographics, patient history, medications, procedures,

insurance, appointments, studies, images, diagnoses, prescriptions, questionnaires,

compliance, treatment options, site history, chart notes and more.

Test Results: Multi-tab windows displays all sleep parameters imported from PSG test results.

Patient Intake: Quick Charting, Staff and Patient Reminders, Waiting List Management.

Graphic Scheduler: Color coded multi-site scheduling for booking patients and allocating staff.

Reminders: Popup window reminds user of administrative tasks and patient specific items.

Electronic Questionnaires: Industry standard patient questionnaires with ability to add your own (Pre/Post Sleep,

Patient Satisfaction, Epworth, Berlin, Compliance).

Physician Login and Grouping: Access only to patients to which they have been assigned to view study data, complete

interpretation letters and order CPAP.

DME login: Allow providers to access only the patients to which they have been assigned to track and

update treatment information and compliance monitoring.

Query Engine: SQL and Microsoft EXCEL access to all patient and study data.

Reports: Numerous period-specific patient, physician, provider and management reports with the

option to add your own.

Letter Templates: Sample auto populated interpretation and administrative letters with auto text examples.

Security Levels: HIPAA compliant multisite multiuser password protected level access restrictions.

Supplies Inventory: Tracks devices and supplies inventory and assigned patient devices.

Equipment Interfaces: Accepts report parameters from many digital sleep systems and CPAP devices.

Internal Databases: Complaints, diagnostic and procedure codes, drugs, devices, zip codes, postal

codes and more.

Maintenance Contract: Stay current with the purchase of a low-cost annual maintenance contract for frequent

updates to the software and databases and toll-free telephone support.

#### **Options**

HL7 interface: Transfer patient and scheduling information and reports to and from many HL7

compliant hospital information systems.

Billing Interface: Transfer information to medical billing software and other HL7 compliant

billing systems.

WebINET Developer Kit: Create your own secure Web Portal to Outcomes for customized data collection,

management and reporting.

Training: Various options are available for either onsite or Internet-based installation and training.

# Innovation.



Home sleep testing science by an industry leader.



