



Relax,  
you're in safe hands

## EMBLETTA MPR

Good health begins with a good night's sleep. So the faster and more accurately the causes of sleep disturbances are diagnosed, the quicker your patients can start getting back to actively enjoying their lives.



The Embletta MPR heralds a new standard in sleep diagnostics. The only fully modular, Level IV to Level I sleep monitoring device on the market, Embletta MPR can be configured exactly to your diagnostic needs and upgraded as your clinical requirements change.

Whether for the simplest parameter home sleep test, or continuous and simultaneous PSG monitoring in a sleep-lab setting, the sleek exterior of the Embletta MPR hides state-of-the-art engineering and cutting-edge signal and wireless technology. Designed for portability and ease of use, your patient gets a better night's sleep and you get faster and more accurate results.

The Embletta MPR is made by the world's no. 1 manufacturer of PSG and HST technology. So relax, you're in safe hands.

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## Unique modular design

### Diagnostic equipment that expands as you do

Your clinical equipment not only has to cover your diagnostic needs, it must also make financial sense.

The only fully upgradable Level IV to Level I sleep monitoring device system on the market, should read from Screener to AASM compatible PSG system. For HST and home use, the Embletta MPR is the ideal solution for optimizing your equipment investment.

From Level IV to I, simply choose the configuration that meets your current diagnostic needs. Upgrade your Embletta MPR at any time, as your clinical requirements change. With the Embletta MPR you can apply your resources efficiently and boost your bottom line.



| Level | Device Configuration                              | Requirement                                                                                                                                                                                                                                                                                                                                                                                               |
|-------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I     | Embletta MPR<br>PG + ST+ proxy plus<br>+ TX proxy | <b>In-lab sleep laboratory and HST</b><br>Continuous and simultaneous monitoring and recording of various physiological and pathophysiological sleep parameters with physician review, interpretation and report. Facility-based (sleep lab) and must include sleep-staging: 1-4 lead EEG, EOG, EMG ECG, also airflow, respiratory effort, oxygen saturation (oximetry), whole night or split-night study |
| II    | Embletta MPR<br>PSG ST+ proxy                     | <b>Comprehensive portable polysomnography (HST)</b><br>Minimum of 7 channels: EEG, EOG, EMG, ECG/heart rate, airflow, respiratory movement/effort, oxygen saturation                                                                                                                                                                                                                                      |
| III   | Embletta MPR<br>PG                                | <b>Modified portable sleep apnea testing</b><br>Minimum of 4 channels: respiratory movement/effort, airflow, ECG/heart rate and oxygen saturation                                                                                                                                                                                                                                                         |
| IV    | Embletta MPR                                      | <b>Continuous single or dual bioparameters</b><br>Minimum of 4 channels sufficient for calculation of AHI or RDI by measuring airflow or thoraco-abdominal movement.                                                                                                                                                                                                                                      |



## Wireless signal transmission

Turning clinical labs into relaxing bedroom environments



Cables are a thing of the past with the Embletta MPR's wireless signal transmission, both to the TX proxy and to the control room. Patients find the diagnostic experience less alarming and are freed from the dangers of tripping during nighttime visits to the washroom.

With up to 5 devices able to operate concurrently in a single room, the wireless Embletta MPR brings that yearned-for simplicity to the diagnostic environment.

|                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------|
| Bluetooth wireless interface between MPR PG unit and TX Proxy allows up to 7m (20 ft) stable signal transmission |
| Design based on future Windows 8 technology                                                                      |
| Signal transmission of all signals between TX Proxy and PG unit                                                  |
| Data from TX Proxy are stored on the Embletta MPR PG memory                                                      |
| Ethernet connection to WLAN access point allows further wireless transmission                                    |

The Embletta MPR – truly mobile.

## Record signal quality

### Clearer recordings, more accurate results

The Embletta MPR has the best signal quality of all PG/PSG systems on the market.

With 24 bit signal processing and 8000Hz sound recording, stored in a dynamically adjusted bandwidth and resolution, the Embletta MPR makes study control easy. The signal quality level ensures fewer disruptions in recording. Sound is recorded close to mouth not under the blanket so that study quality levels rise, making diagnosis smoother and more efficient.

#### Unparalleled signal quality:

Up to 8000 Hz sampling rate

Up to 500 Hz storage rate  
(bandwidth 0Hz to 120Hz)

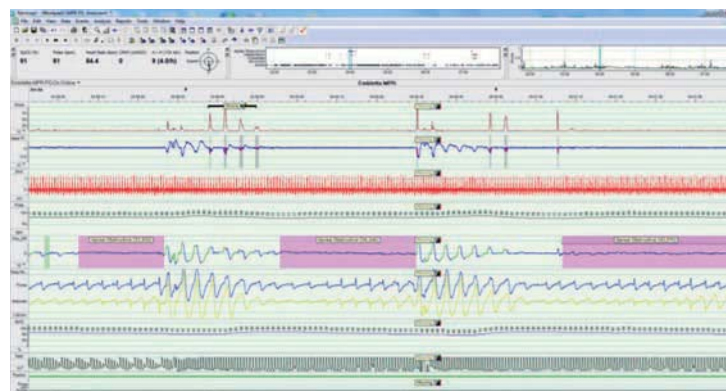
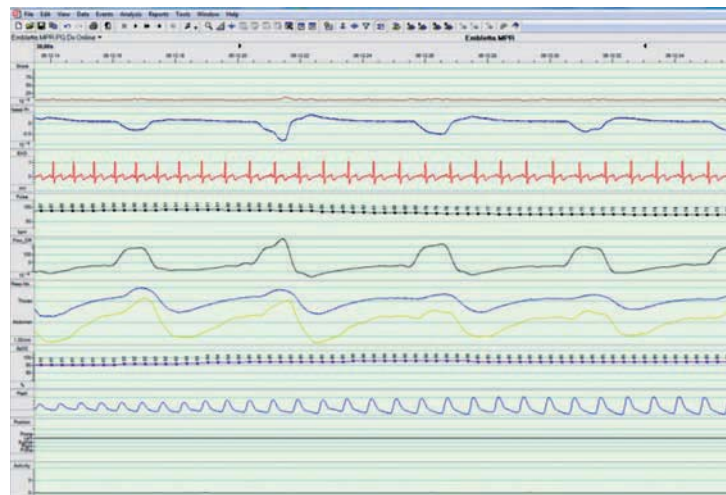
24 bit signal processing

8000 Hz sound recording

High end pressure transducers

Redesigned electronics

Ability to calibrate loudness



The Embletta MPR – improving study quality.

## State-of-the-art engineering

### Setting the standard in sleep-disorder diagnostic technology

Out of sight, but not out of mind... under its smooth surface the Embletta MPR is the only system incorporating all state-of-the-art functionalities of modern PG/PSG devices, offering a price-to-performance ratio which is second to none.

| Key engineering features....                                 |
|--------------------------------------------------------------|
| high speed USB download                                      |
| wireless interface for signal check and online recordings    |
| download to EDF                                              |
| download to FTP or network locations                         |
| online recording via TX proxy module                         |
| online viewer in license-free software version               |
| automated technologies to ensure correct diagnostic settings |
| industry leading and AASM compliant software                 |

The Embletta MPR – always a step ahead.

# EMBLETTA MPR

## Clever design Patient-friendly design

Compact, smooth and with rounded edges, the Embletta MPR was designed with patient comfort in mind. Because a better night's sleep means longer and less disrupted recordings - and ultimately clearer results.

Small, robust and portable, and with optimized cable lengths, its ergonomic and attractive design is timeless – the Embletta MPR will remain a popular part of the clinical equipment park, even after extensive use and multiple upgrades.

## The Embletta MPR – a big solution in a small package



## User-friendly

### Designed with clinician and patient in mind

Designed around common tasks and natural workflow, the Embletta MPR means less time spent setting up and more time with your patient.

Simple and intuitive to use, the Embletta MPR minimizes patient instruction times. Clinicians can increase the number of ambulatory PG and PSG studies, helping to freeing up lab capacity. With optimized cable lengths and logical connections, the Embletta MPR leaves patients to relax and slumber, maximizing study quality levels.

|                                                                                  |
|----------------------------------------------------------------------------------|
| <b>Simply sensible features:</b>                                                 |
| multi-night recording                                                            |
| automatic impedance check and calibration signals at the start of each recording |
| Intelligent Auto Start functionality                                             |
| high resolution display with signal check features                               |
| the use of symbols makes the unit language-independent                           |
| display of numerical and graphical data                                          |
| patient name on display                                                          |
| intuitive use with clear symbols - language independent                          |



The Embletta MPR – good to have, easy to use.



## Clinically flexible

### At home wherever you are

Whether for diagnosis or therapy control, simple screening or full PSG plus external devices, the Embletta MPR is designed to meet every sleep-medicine challenge. Our philosophy of making diagnosis simpler and more accurate translates into faster workflow and greater throughput, whatever your environment.



|                   |
|-------------------|
| <b>Ideal for:</b> |
| Hospital          |
| Sleep lab         |
| IMCU              |
| Home              |

Small and adaptable, easy to use and wireless, the Embletta MPR is the tool of choice for every monitoring environment, whether home, hospital or sleep clinic.

|                                                 |
|-------------------------------------------------|
| <b>Diagnosis &amp; monitoring applications:</b> |
| Respiratory                                     |
| Neurological                                    |
| Pediatric                                       |
| Dental                                          |
| Cardiology                                      |
| Gynaecology                                     |



## Eco-friendly

### Big on performance, low on energy

The energy-efficient Embletta MPR is an eco-friendly addition to your equipment portfolio.

Its low power concept is achieved using Bluetooth 4.0 BLE and low power ADC. The 2 standard AA batteries last longer, for up to three 8 hour recordings within a week. And our unique battery hot swap feature with internal power buffer prevents any loss of recording setup info.

Small and durable, the Embletta MPR is designed to be at your side for many years to come.

## The Embletta MPR – equipped for the long-term.



## Accessories

|                                                                                  |
|----------------------------------------------------------------------------------|
| Adjusted cable lengths – Sensors and electrode leads come in an optimized length |
| Optional microphone                                                              |
| Battery door opener tool                                                         |
| Pouch to fix device on the patient                                               |
| Carrying bag with optimized sensor fit                                           |

## Technical Specifications

|                                | Embletta MPR                                                                                                                              | Embletta MPR PG                                                                                                                                   | TX Proxy Unit                                                                 |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Sampling Rate (Hz)             | 8000                                                                                                                                      | 8000                                                                                                                                              | 500                                                                           |
| Storage Rate (Hz)              | up to 500                                                                                                                                 | up to 500                                                                                                                                         | up to 50                                                                      |
| Resolution (bit)               | 24                                                                                                                                        | 24                                                                                                                                                | 16                                                                            |
| Recorded Channels              | 7; Pressure, Sound, Gravity (X/Y/Z), Battery, Event Button                                                                                | 12; Pressure, Sound, Gravity (X/Y/Z), bipolar ExG, Thermistor, Thoracic Effort (RIP), Abdominal Effort (RIP), DC (0 – 1 V), Battery, Event Button | 8; Differential Pressure, 6 x DC (-5/+5V), Ambient Light                      |
| Recorded Channels Pulsoximeter | 7; SpO2, SpO2 B-B, SpO2 Quality, Pulse Rate, Plethysmogram, RD Quality, PPG                                                               | 7; SpO2, SpO2 B-B, SpO2 Quality, Pulse Rate, Plethysmogram, RD Quality, PPG                                                                       | n/a                                                                           |
| Derived Signals                | 7; Nasal Flow, Mask Pressure, Snore, Sound Amplitude, Body Position, Activity, Elevation (Multiple additional traces derived by software) | 7; Nasal Flow, Mask Pressure, Snore, Sound Amplitude, Body Position, Activity, Elevation (multiple additional traces derived by software)         | Ability to record Flow/Pressure/Leak Data from various ResMed Therapy devices |
| Internal Memory                | 2GB                                                                                                                                       | 2GB                                                                                                                                               | 2GB                                                                           |
| Power Supply Properties        | 2 x AA batteries, standard alkaline or rechargeable                                                                                       | 2 x AA batteries, standard alkaline or rechargeable                                                                                               | Friwo FW7660M/05                                                              |
| Recording Time                 | 24 hours (typically)                                                                                                                      | 24 hours (typically)                                                                                                                              | n/a                                                                           |
| Size (length x width x height) | 107mm x 67mm x 19mm (3.9" x 2.4" x 0.4")                                                                                                  | 107mm x 79mm x 19mm (3.9" x 2.8" x 0.4")                                                                                                          | 115mm x 110mm x 26mm (4.5" x 4.5" x 1")                                       |
| Weight                         | 141g (5.0oz) including batteries                                                                                                          | 153g (5.4oz) including batteries                                                                                                                  | 160g (5.5 oz.)                                                                |
| Typical Operating Temperature  |                                                                                                                                           | 16°C to 37°C (60°F to 100°F)                                                                                                                      |                                                                               |
| Storage / Transfer Temperature |                                                                                                                                           | 0°C to 50°C (30°F to 120°F)                                                                                                                       |                                                                               |
| Wireless Link                  | n/a                                                                                                                                       | Bluetooth Low-Energy                                                                                                                              | Bluetooth Low-Energy                                                          |
| Device Classification MDD      |                                                                                                                                           | Class 2a, Rule 10 Safety Approvals IEC 60601-1                                                                                                    |                                                                               |

ST/ST+ proxies will be available soon.

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