

# Sleep Diagnostics

*A breath of fresh air*

**Acumen 7 from RESPiRE is a portable cardio-respiratory sleep diagnostic device, specifically designed to facilitate sleep tests in the comfort and privacy of the patient's own home.**

## Portable...

The compactness of Acumen 7 means it can be employed just as easily in the patient's home as in the sleep laboratory. The sensors plug directly into the recorder, giving patients more freedom, and therefore more accurate readings.

## Convenient...

For ultimate convenience, Acumen 7 can be linked to the RESPiRE Curasa CPAP machine for patient management solutions.

## Simple...

Acumen 7 provides extensive, detailed and accurate clinical data, simply downloadable by USB connection to your PC. However, simple as it is to use, the comprehensive on-screen scoring and diagnostic report software does not miss anything.

## Training...

Although Acumen 7 is very easy to use, we provide a full training programme for clinicians, to ensure absolute confidence before use.

## Data collection...

The device records up to 100 hours of relevant physiological data over eight channels, viewable via link to PC. The eight channels are as follows:

1. **Air flow**
2. **Snore**
3. **Chest effort**
4. **Abdomen effort**
5. **SPO2**
6. **Pulse**
7. **Body position**
8. **Battery voltage**



| ORDER CODE | SIZE   | DESCRIPTION                                 |
|------------|--------|---|
| R9000      | -      | Acumen 7 diagnostic device, complete system |
| R9010      | 50 cm  | Nasal cannula (no filter)                   |
| R9011      | 75 cm  | Nasal cannula (no filter)                   |
| R9012      | 100 cm | Nasal cannula (no filter)                   |
| R9013      | 50 cm  | Nasal cannula with filter                   |
| R9014      | 75 cm  | Nasal cannula with filter                   |
| R9015      | 100 cm | Nasal cannula with filter                   |

## Acumen 7 specifications:

|                                  |   |
|----------------------------------|---|
| Data resolution                  | A/D 10 bits                                 |
| Data sampling rate               | 50 to 200 Hz                                |
| Internal storage                 | 100 hours                                   |
| Dimensions                       | 125mm x 70mm x 24mm                         |
| Weight                           | 200g with batteries, without sensors        |
| Oxygen saturation rate           | (%SpO2) 70-100% / Accuracy $\pm$ 2%         |
| Pulse rate range                 | 20-255 pulses per min / Accuracy $\pm$ 3ppm |
| Body position                    | 5 positions: up, left, right, supine, front |
| Snore                            | Integrated microphone, sound in dB          |
| Communication ports              | USB / RS232                                 |
| Batteries                        | 2 x AA, 30 hours continuous recording time  |
| Protection against water ingress | Standard equipment, IPX0                    |
| Electromagnetic compatibility    | EN 60601-1-2                                |
| CE Certification                 | CE 0123                                     |
| Recorder housing                 | Recyclable material, ABS thermoplastic      |
| Nasal cannulas                   | 50cm without filter                         |