

# A NEW, INNOVATIVE TOOL TO IMPROVE INSOMNIA DIAGNOSTICS

 **SOMNO**  
medics

HOME SLEEP TEST



**INSOMNIA – THE MOST PREVALENT & UNDIAGNOSED  
SLEEP DISORDER**



## Convenient sleep recording in your home



### DOCTOR

The patient is given the Home Sleep Test (HST) to pre-screen for any potential underlying sleep disorder, especially insomnia.



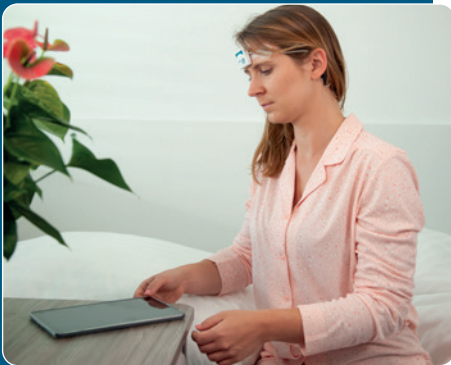
### PATIENT

The HST is so easy to use that the sensor can be applied by the patient in the comfort of their own home.



### TABLET

An app guides the patient from the simple application through to the start of the measurement in a few easy steps. The HST sends data to the tablet via Bluetooth.



### CLOUD

After the recording is complete the data is automatically uploaded to a secure cloud.



### REPORT

Upon completion, the measurement is analyzed and a report is made available in the cloud. The scoring can be verified by the doctor by viewing the raw data captured.



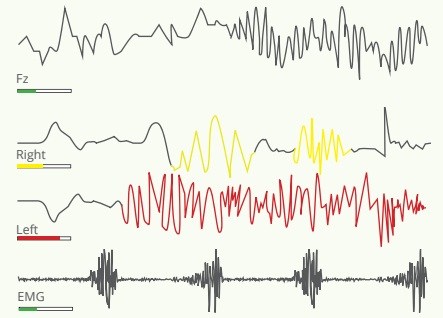
## 11 signals



**3 × EEG\* signals**  
Frontopolar application Fp1:M1

**2 × EOG**  
Left/right eye movement

**EMG**  
Muscle tone

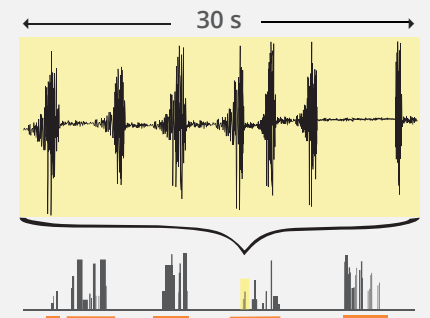


**IMPEDANCE**  
To determine signal quality during the duration of the recording



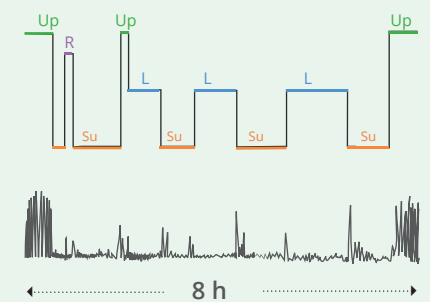
**SOUND**  
Detection of snore and snore rhythm

■ Sound (magnified)  
— Supine position

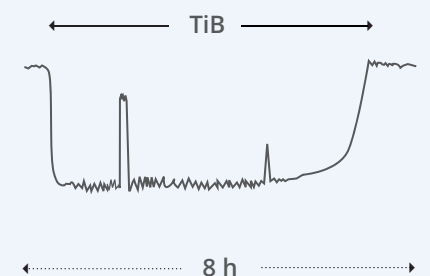


**POSITION**  
Detection of head position  
Up = upright  
R = right  
L = left  
P = prone  
Su = supine

**ACTIVITY**  
Head movement



**LIGHT**  
Ambient light: determines lights off/on for accurate time in bed (TiB)



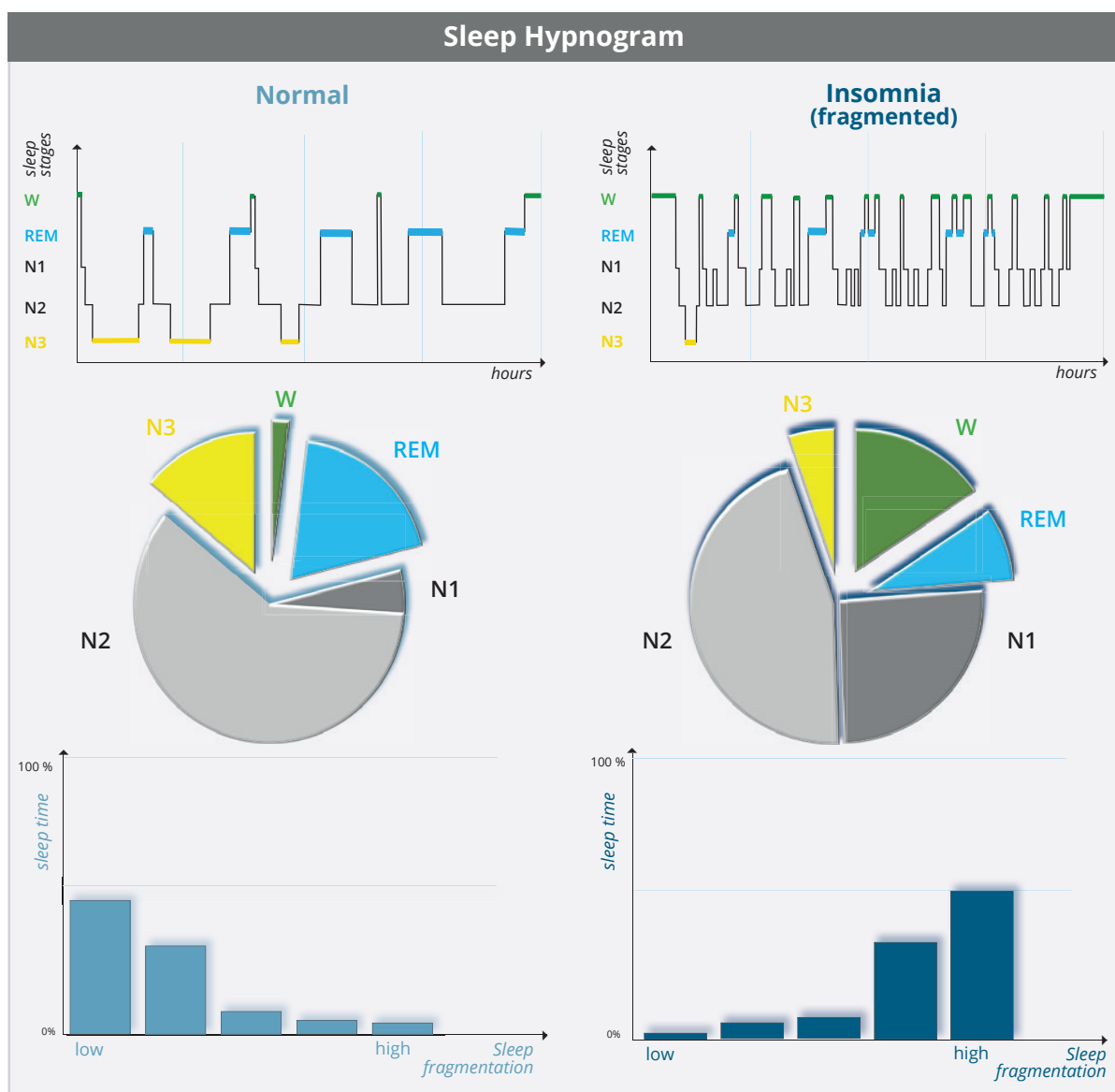
\*two more EEG signals are available to plot in the software

## Insomnia – a very common sleep disorder

**30% of the adult population suffer from insomnia – in comparison, only 3-5% of adults have obstructive sleep apnea syndrome (OSAS).**

There has been to date no efficient screening procedure to collect objective data for insomnia – until now! The HST is a cost effective, easy to use, home-based sleep screener, which can determine sleep stages and sleep fragmentation from cortical arousals. The HST provides information about the distribution of deep, light and REM sleep as well as the duration of the periods of wakefulness.

Because the HST continuously records electrode impedance, the signal quality can be determined and artefacts can be excluded from the analysis. Ambient light, body position and movement help determine Time In Bed (TIB) and other sleep related parameters. The tablet microphone records snoring and the snoring rhythm, through which an obstruction of the upper airways can be determined or ruled out.



### Specifications:

- 43 x 38 x 11mm, 30 g
- Up to 36 hours recording duration
- 256 Hz sampling rate
- 2 hours charge time after one night
- Data transfer to cloud
- Continuous electrode impedance recording



### Package includes:

- ✓ 1 HST sensor & charger
- ✓ 1 Tablet
- ✓ 1 SIM-card (optional)
- ✓ HST-App
- ✓ Cloud access (software-key)
- ✓ 5 disposable Ag/AgCl electrodes
- ✓ Electrode cream
- ✓ 1 Bag