

A NEW, INNOVATIVE TOOL TO IMPROVE INSOMNIA DIAGNOSTICS

 **SOMNO**
medics

HOMESLEEPTEST

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

Convenient sleep recording in your home



DOCTOR

The patient is given the HomeSleepTest (HST) for one or multiple nights to pre-screen for any potential underlying sleep disorder, especially insomnia.



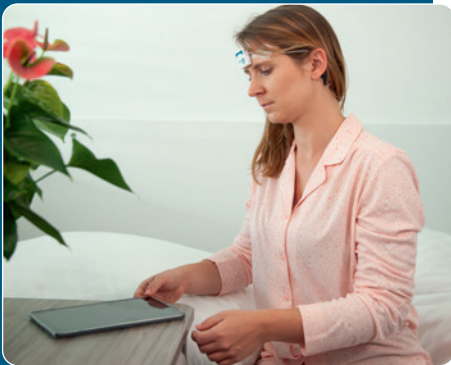
PATIENT

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.



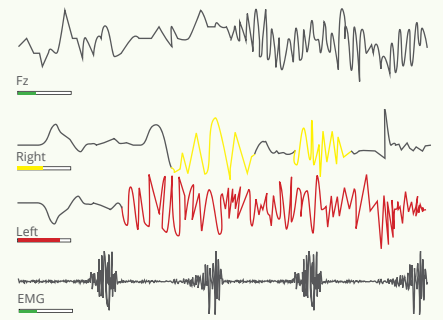
11 signals



3 × EEG* signals
Frontopolar application Fp1:M1

2 × EOG
Left/right eye movement

EMG
Muscle tone

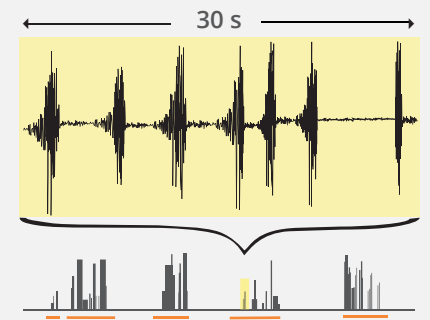


IMPEDANCE
To determine signal quality during the duration of the recording



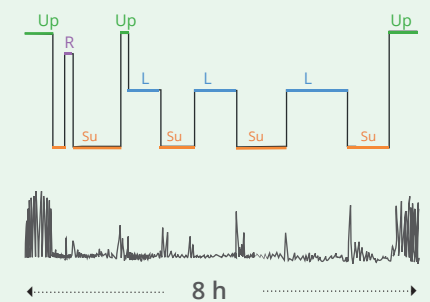
SOUND
Detection of snore and snore rhythm

■ Sound (magnified)
— Supine position

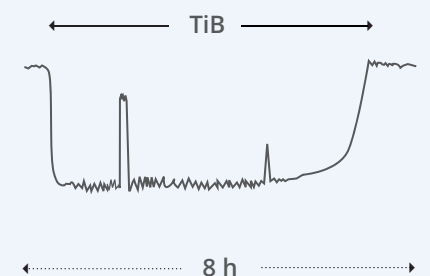


POSITION
Detection of head position
Up = upright
R = right
L = left
P = prone
Su = supine

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

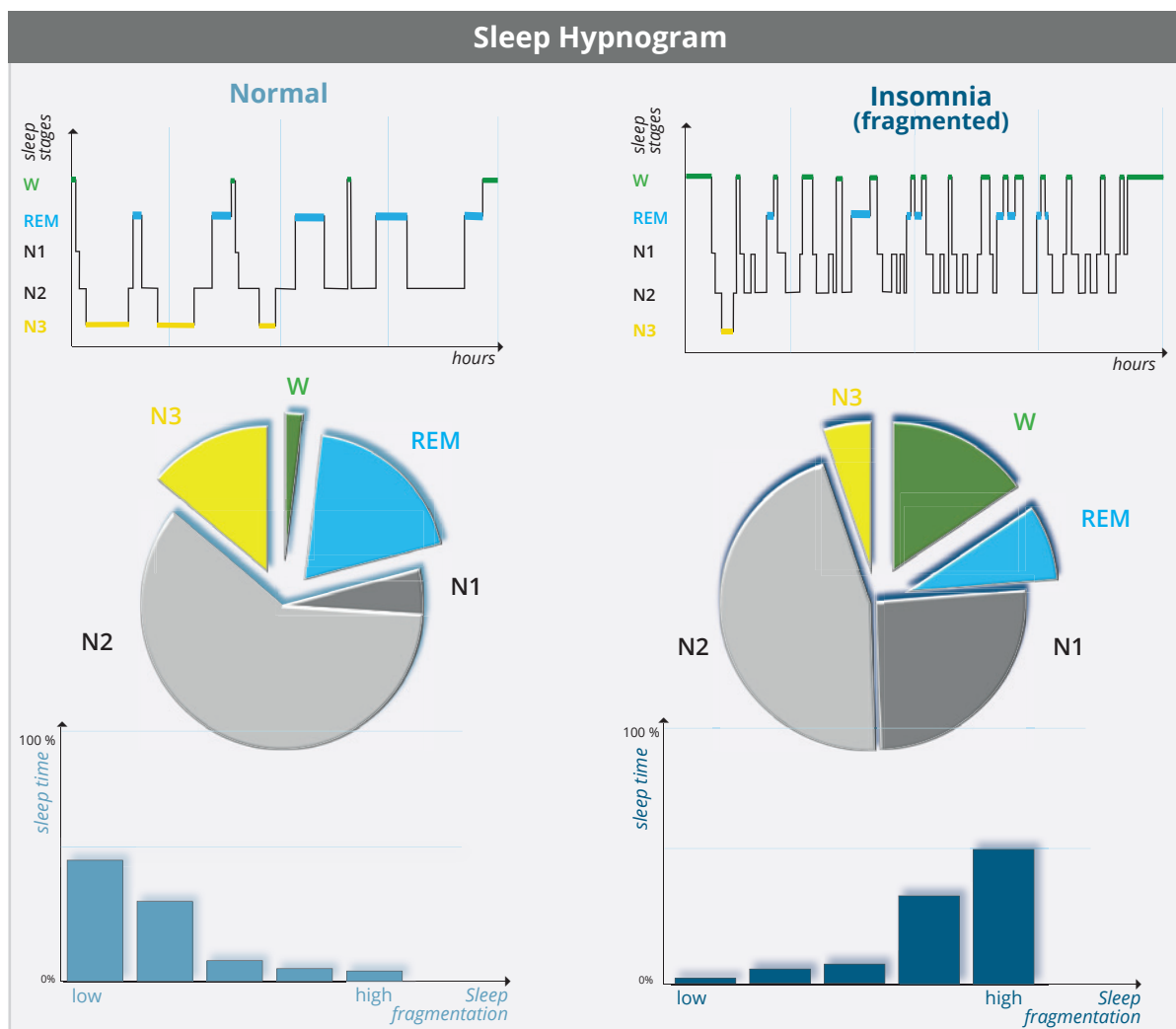
30% of the adult population suffer from insomnia – in comparison, only 3-5% of adults have obstructive sleep apnea syndrome (OSAS).

Insomnia can be diagnosed if a sleep disturbance occurs at least three times per week (over 3 months).

However, there has been to date no efficient screening procedure to collect objective data for insomnia – until now!

The HomeSleepTest (HST) is a cost-effective, easy-to-use home screener that allows objective sleep determination over several nights. It 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, 28 g
- Up to 36 hours recording duration
- 256 Hz sampling rate
- Fast charging duration
- Multiple measurements nights programmable
- Data transfer to cloud
- Continuous electrode impedance recording



Package includes:

- ✓ 1 HST sensor & charger
- ✓ 1 Tablet with HST app
- ✓ 1 SIM-card (optional)
- ✓ Cloud access (software key)
- ✓ Ag/AgCl electrodes for 5 measurements
- ✓ 5 measurements
- ✓ Skin preparation gel
- ✓ Cotton pads
- ✓ Head nets
- ✓ Bag