

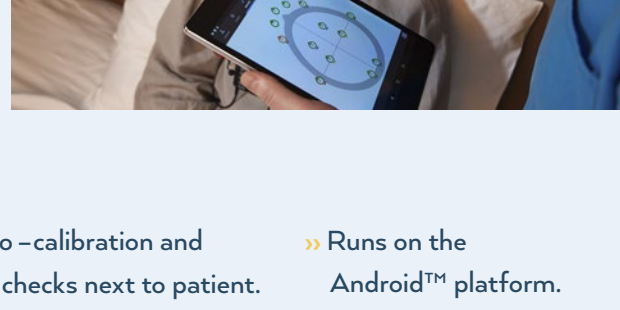
# nox A1s™

Hospital-to-Home PSG System



## Nox A1s - A true Hospital-to-Home PSG

The Nox A1s is a device based on the foundation of the innovative Nox A1 which redefined how PSG studies are performed in a clinical setting. The Nox A1s PSG system is a true Hospital-to-Home sleep diagnostic system with wireless design and revolutionary versatility. The new Nox A1s system is a more evolved solution, able to perform level I, level II, and level III sleep studies to test and diagnose more diverse patient populations.



### The Noxturnal App

Bedside control for increased efficiency during patient hookup and calibrations with the Noxturnal Android™ App

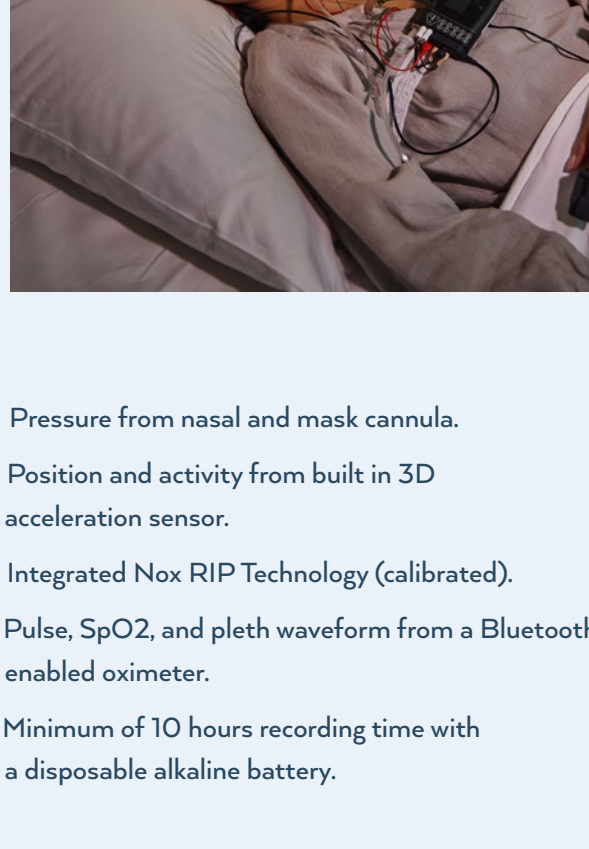
- » Perform bio-calibration and impedance checks next to patient.
- » Review signal quality of sensors.
- » View live traces.
- » Runs on the Android™ platform.
- » Wireless connection to the Android app is encrypted.

### Flexible PSG System with High Quality Signals

- » Dual purpose capability to perform in-lab and at-home sleep testing.
- » Small and lightweight PSG recorder designed with patient comfort in mind.
- » High quality signals both in Type I in-lab setting, and Type II home unattended setting.
- » Complete PSG system with integrated RIP and PTAF that fits in the palm of your hand.
- » Built-in redundancy and advancements in technology integration for low failure rates.
- » Nox A1s can be used for patients greater than 2 years of age.

## Complete PSG system - Meeting AASM standards for in-lab studies

With the Nox A1s the clinician has all the necessary channels satisfying the AASM criteria for in-lab PSG studies. The Nox A1s together with the Nox C1 can be used to monitor and score sleep recordings in real time within a clinical setting. With the Nox A1s the cables are minimized and customizable so the patient is not tethered to the bed.

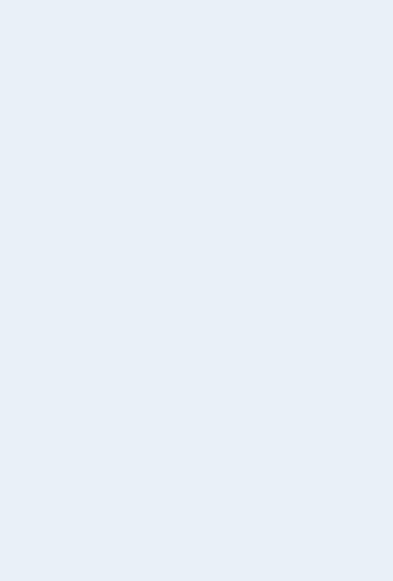


### Advanced Technology

- » High quality signals for Type I in-lab setting.
- » 10 unipolar inputs for EOG and EEG.
- » 3 unipolar EMG sub-mental inputs.
- » 4 configurable bipolar inputs (Thermistor, ECG, EMG).
- » Built in Bluetooth® BLE 5.0 technology.
- » Sound from built-in microphone.
- » Pressure from nasal and mask cannula.
- » Position and activity from built in 3D acceleration sensor.
- » Integrated Nox RIP Technology (calibrated).
- » Pulse, SpO2, and pleth waveform from a Bluetooth® enabled oximeter.
- » Minimum of 10 hours recording time with a disposable alkaline battery.

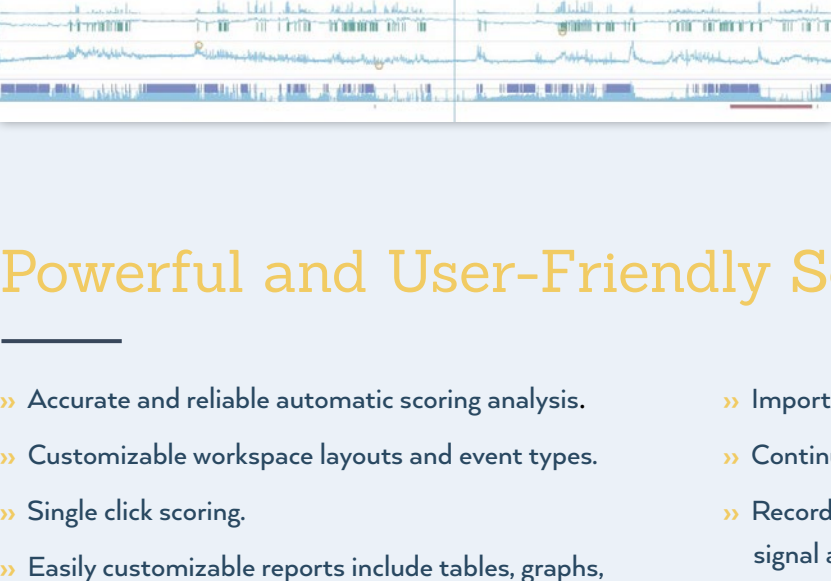
### Nox C1 Access Point

- » Allows recorded signals from the Nox A1s to transmit to the control room.
- » 12 DC inputs.
- » Built in Differential Pressure Sensor.
- » 2x USB Ports.
- » 2x RS-232 Serial Ports.
- » LAN port.
- » Ambient Light Sensor.



## Noxturnal Software

The Noxturnal software is a multi-function platform that unleashes the full potential of the Nox A1s along with the Nox T3s. Offering study configuration, automatic analysis, scoring, and advanced reporting tools, Noxturnal is a powerful tool in the hands of any clinician.

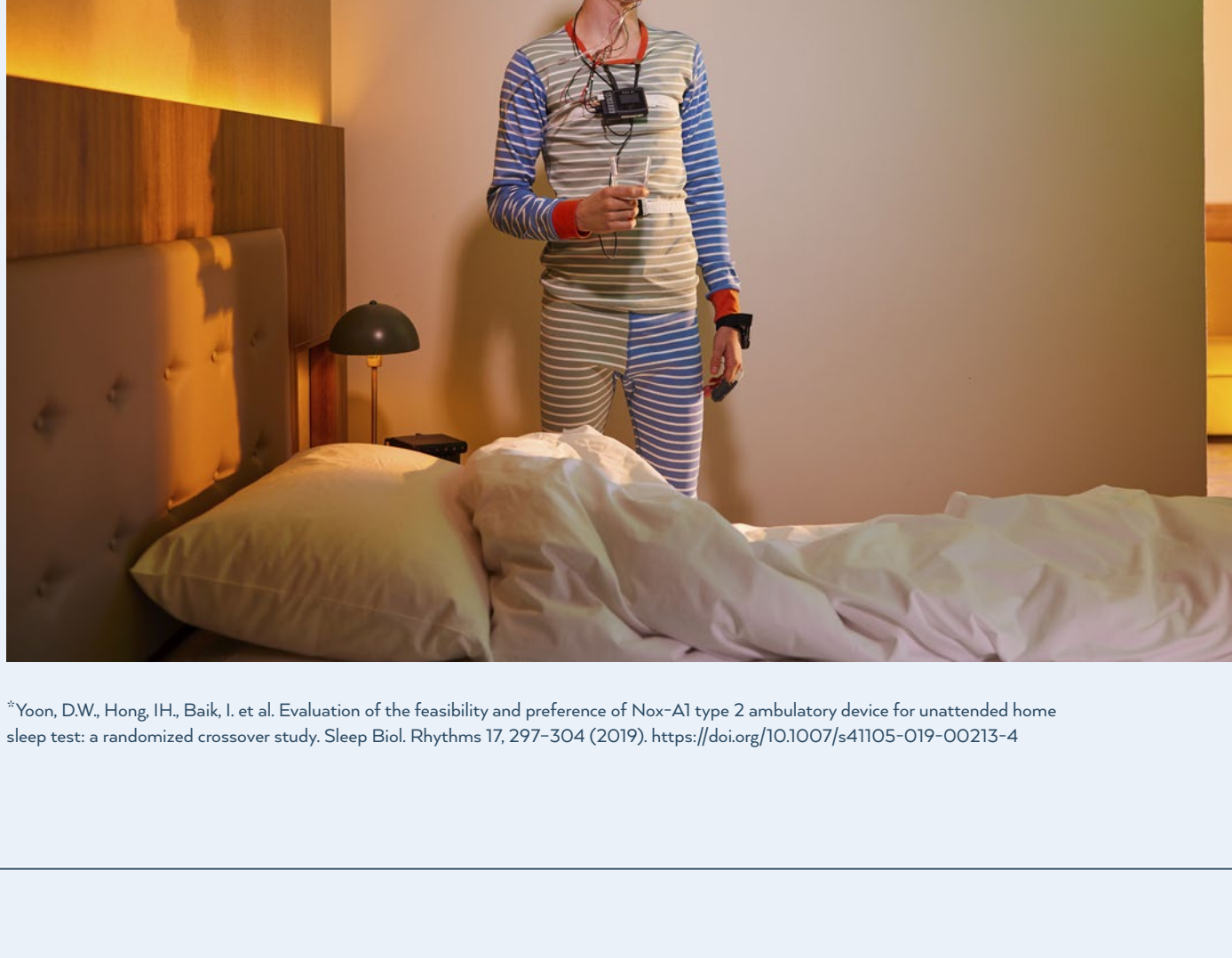


### Powerful and User-Friendly Software

- » Accurate and reliable automatic scoring analysis.
- » Customizable workspace layouts and event types.
- » Single click scoring.
- » Easily customizable reports include tables, graphs, and narrative interpretation.
- » Import or export EDF format.
- » Continuous impedance control.
- » Recording results window providing a quick glance signal and result overview.

## Accurate Results In-Lab and At Home Unmatched simplicity in PSG setup

The Nox A1s system has advanced ambulatory capabilities. As demonstrated in research published in the peer-reviewed journal Sleep and Biological Rhythms<sup>1</sup>, the system can be used effectively in patients' homes.



<sup>1</sup>Yoon, D.W., Hong, J.H., Baik, I. et al. Evaluation of the feasibility and preference of Nox-A1 type 2 ambulatory device for unattended home sleep test: a randomized crossover study. Sleep Biol. Rhythms 17, 297-304 (2019). <https://doi.org/10.1007/s41105-019-00213-4>

## Technical Specifications

### Nox A1s Technical Specifications

Signal Specifications:	
Available Signals	Thorax and Abdomen RIP, Nasal pressure/Mask pressure, Snore Signal, Audio and snoring channel, 13 unipolar channels, 2 bipolar channels, Position, Activity, SpO2, pulse, plethysmography, and more.
Unipolar Channels	13x Unipolar Channels - Touch proof connector DIN 42-802, ±3.2mV input range < 1 µVrms noise, 512 kHz sampling rate
Bipolar Channels	4x Bipolar Channels Keyhole connector, ±1024mV input range, < 3 µVrms noise, 512 kHz sampling rate, 24-bit ADC
Flow/Pressure Signal	2x RIP Channels Thorax and abdomen respiratory inductance plethysmography, 200 Hz Sampling, 1x Flow/Pressure Channel -5cmH2O to +50cmH2O input pressure range, DC-80 Hz, <1 mmH2O noise
Activity/Position Signals	Internal 3 axis, ±2 g
Sound Signals	1MHz sampling, internal 8 kHz bandwidth
Wireless Interface	Bluetooth® V5.0 BLE wireless interface for external devices
Ambient Light	1 Hz
Performance Specifications:	
Storage Capacity	4 GB
Recording Time	20-30 hours with new lithium battery
PC Communications	USB 2.0 hi-speed
Physical Specifications:	
Power Source	One 1.5VAA battery during recording; Host PC USB during data download
Battery Type	Nickel-metal hydride rechargeable (NiMH), lithium and alkaline
Battery Cover	Tamper proof and locked
Device Dimension	82 mm W x 62 mm H x 26 mm D (3.2 in W x 2.44 in H x 1.02 in D)
Weight	Weight 92 g (120g with battery)
Display	OLED-dimensions 19 x 35 mm (0.75 x 1.38 in), resolution 128 x 64 dots
USB Connection	USB Type C

### Software:

Minimum PC Requirements	
	Windows 8.1 and higher Processor: X64 based Intel or AMD, 1.7 GHz or faster 2GB RAM, 4 GB of free disk space Resolution: 1024 x 768 or higher