














## CATEGORY SPONSORED BY GENERAL SLEEP CORPORATION




General Sleep Corporation ([www.generalsleep.com](http://www.generalsleep.com)) is dedicated to providing clinicians and researchers with products and services that allow them to achieve maximum effectiveness in the diagnosis and study of sleep disorders. Our highly affordable Zmachine Synergy is a 9-channel, Type II, home sleep test that combines our FDA-cleared EEG-based sleep staging technology with a full complement of respiratory sensors and tri-axis body position. Compact, easy-to-use, and multi-night capable, the Zmachine Synergy delivers everything you'd expect in a next generation home sleep testing system. We didn't invent the home sleep test, we just made it better!®







Company		General Sleep Corporation	Acurable	Advanced Brain Monitoring	Belun Technology	BRAEBON Medical Corporation
HST		 Zmachine Synergy	 AcuPebble Ox100	 Sleep Profiler & PSG2	 Belun Ring BLR-100X	 MediByte Jr
Website		<a href="http://www.generalsleep.com">www.generalsleep.com</a>	<a href="http://www.acurable.com">www.acurable.com</a>	<a href="http://advancedbrainmonitoring.com">advancedbrainmonitoring.com</a>	<a href="http://beluntech.com/us">beluntech.com/us</a>	<a href="http://www2.braebon.com">www2.braebon.com</a>
Starting Purchase Price		Contact company	Contact company	Contact company	Contact company	\$2,750
Rental/Leasing Option		Yes	Yes	Yes	No	Yes
Starting Price for Consumables/Study		Contact company; configuration dependent	Contact company	\$17.50	Contact company	\$7
Type	Type II	Yes	No	Yes	No	No
	Type III	Yes	Yes	No	Yes	Yes
	Type IV	Yes	No	No	No	No
Maximum Channels		9: EEG sleep staging, air-flow (cannula or Bi/CPAP interface), Bi/CPAP pressure, respiratory effort (RIP), snore, SpO <sub>2</sub> , pulse rate, plethysmography, tri-axis body position	8: SpO <sub>2</sub> , PPG, pulse rate, activity (movement), heart sounds, respiration inhalation and exhalation patterns, airflow, snoring	13: EEG, LEOG, REOG, EMG or ECG, forehead pulse, snoring (dB), head movement, head position; PSG2 adds wireless finger SpO <sub>2</sub> , pulse, nasal pressure airflow, optional thorax and abdomen piezo or RIP belts	5: Plethysmogram, pulse rate, heart rate variability, oximetry, actigraphy	8: airflow, snore, SpO <sub>2</sub> , pulse rate, chest effort, body position, CPAP pressure, PPG
Power Options	Disposable	No	No	No	No	Yes
	Rechargeable	Yes	Yes	Yes	Yes	Yes
Chain-of-Custody Assurance		Yes	Yes	No	No	Yes
Warranty (years)		2	multiple options	2	1	1
Dimensions (cm)		10.2 x 6.1 x 2.4	2.95 x 1.6 (neck sensor); 3.8 x 3.0 x 3.8 (finger sensor)	7 x 4.5 x 1.75	4.4 x 6 x 1.8 (ring); 3.2 x 10 x 5.9 (cradle)	6 x 6 x 2
Weight (grams)		86	7 (neck); 15 (finger)	76	14 (ring); 97 (cradle)	90 (including battery)
Memory (MB)		8,000	N/A	8,000	8 (ring); 128 (cradle)	256
Recording Time (hours)		> 300	23	30	10 (ring); 120 (cradle)	18
Features		A chest worn device that combines single-channel EEG sleep staging technology with traditional respiratory channels to report an AHI based on EEG-derived sleep time and body position (not just recording time). With one-touch controls, multi-night recordings, and a full-color LED interface, the Synergy is now PAP compatible and backed by a HIPAA-compliant cloud portal.	AcuPebble SA100 is a small and noninvasive medical device offering a clinically validated home sleep test equivalent to the ambulatory gold-standard (cardiorespiratory polygraphy followed by manual specialist interpretation). The AcuPebble system accurately extracts multi-channel information from 2 wireless devices (a neck and a finger sensor) to provide a complete sleep study report. It has received the CE mark in Europe and FDA 510K clearance in the US.	Scientifically-validated and editable autoscored full disclosure signals with forehead-based self-application. For multnight evaluation of sleep architecture and sleep continuity in home or hospital, with auto-detection of sleep biomarkers associated with neurodegeneration. PSG2 upgrade enables auto-detection of apneas, hypopneas and RERAs, and REM-related SDB severity.	No need for phone pairing or WiFi. The FDA 510(k) cleared ring & artificial intelligence system measures AHI, sleep stages, and autonomic nervous system response. The cradle allows multiple-night testing (~14 nights) & acts as a digital sleep diary. 7 sizes of changeable ring arms. The web portal allows manual scoring and event editing. Optional smartphone application empowers remote data upload to check if a good study is recorded.	Local PC software or the BridgeBuilder Cloud Portal. SDB analysis including RERA, flow limitation, breath statistics, SpO <sub>2</sub> perfusion. Carrying case, patient instructional video, USB cable. CPAP compatible, multiple nights, immediate report access, unlimited custom reports, locking connectors, stainless steel connector, LED study status indicator, all internal biosensors.

Visit [www.sleepreviewmag.com/tag/comparison-guides](http://www.sleepreviewmag.com/tag/comparison-guides) to download this guide as a PDF

Company		Cadwell Industries Inc	Cerebra	CleveMed	Compumedics USA	Natus Medical Inc	Neurovirtual USA Inc
HST		 <p>See our ad on the back cover</p> <p><b>ApneaTrak</b></p>	 <p>Cerebra Sleep System</p>	 <p>See our ad on page 25</p> <p><b>SleepView</b></p>	 <p>See our ad on page 12</p> <p><b>Somte</b></p>	 <p>Embletta MPR-PG</p>	 <p>BWMini HST Compass</p>
Website		<a href="http://www.cadwell.com/apneatrak">www.cadwell.com/apneatrak</a>	<a href="http://www.cerebra.health">www.cerebra.health</a>	<a href="http://www.clevemed.com">www.clevemed.com</a>	<a href="http://www.compumedics.com">www.compumedics.com</a>	<a href="http://neuro.natus.com/products-services/embletta-mpr-sleep-system">neuro.natus.com/products-services/embletta-mpr-sleep-system</a>	<a href="http://www.neurovirtual.com">www.neurovirtual.com</a>
Starting Purchase Price		\$3,250	Contact company	\$2,400	\$3,400	Contact company	Contact company
Rental/Leasing Option		Yes	Yes	Contact company	Contact company	No	No
Starting Price for Consumables/Study		<\$3; disposable kits: \$30	Contact company	\$20	<\$14	\$5-\$12	\$5
Type	Type II	Yes	Yes	No	No	Yes	No
	Type III	Yes	No	Yes	Yes	Yes	Yes
	Type IV	Yes	No	Yes	Yes	Yes	Yes
Maximum Channels		13: thoracic/abdominal effort, pressure, pressure-based snore, snore sensor, thermistor, SpO <sub>2</sub> , pulse rate, plethysmography, body position, 3 channels ExG	16: 2x frontal EEG, 2x EOG chin, EMG, nasal cannula, chest and abdomen effort (RIP belt), SpO <sub>2</sub> , 2-lead ECG (heart rate), pulse 2x, leg EMG, audio, body position	8: heart rate, pulse oximetry, respiratory airflow (CPAP compatible), RIP belt, snore, body position, auxiliary (second RIP, thermal airflow, or IDcheck), actigraphy	13: nasal pressure, snoring, CPAP mask pressure, thoracic and abdominal effort, body position, SpO <sub>2</sub> , pulse rate, plethysmography waveform, signal quality, limb movement (or optional nasal thermistor), 2xEXG (EEG, EOG, EMG, ECG, or off)	19: pressure, sound, gravity (x/y/z), bipolar ExG, thermistor, thoracic effort (RIP), abdominal effort (RIP), DC (0-1V) battery, event button, SpO <sub>2</sub> , SpO <sub>2</sub> -B-B, SpO <sub>2</sub> quality, pulse rate, plethysmography, RD quality, PPG; + multiple derived channels. Optional proxies add up to 8 EEG, 2 EOG, 3 chin EMG, 2 channels leg EMG and 1 ECG channel	13: 2x RIP, pressure transducer, SpO <sub>2</sub> , pulse, plethysmography, body position, 2x ExG; 3x DC channels, luminosity sensor
Power Options	Disposable	No	No	Yes	Yes	Yes	Yes
	Rechargeable	Yes	Yes	No	No	No	Yes
Chain-of-Custody Assurance		Yes	No	Yes	No	No	No
Warranty (years)		1	2	1	1	1	1
Dimensions (cm)		7.3 x 11.5 x 2.5	table top unit: 21 x 12 x 0.7; head-mounted unit: 63 x 38 x 28; chest-mounted unit: 140 x 36 x 24	7.62 x 6.60 x 1.78	11.43 x 6.35 x 3.05; sensor interface: 7.62 x 4.45 x 2.29	10.7 x 7.9 x 1.9	10.8 x 7.7 x 2.8
Weight (grams)		143.5	TTU: 280; HMU 56; CMU 81	57	200	153	90
Memory (MB)		128	32,000	1,000	N/A (compact flash card)	2,000	32,000
Recording Time (hours)		24	13	100	36	24	24
Features		Add Sleep Time to HSAT testing with ApneaTrak:TST or EnsoData integration. Three versions available: Core (Type III), Legacy (AASM-recommended parameters), TST (3xExG channels). Use the same sensors recommended for in-lab studies. Connection to the PC (zero-click) automatically downloads the recording, clears, recharges, and prepares ApneaTrak for the next patient.	Remote upload, autoscoring, Odds Ratio Product sleep depth algorithm.	Web-based software offers access to studies, scoring, and reports from anywhere facilitating collaboration between sleep labs and physician offices. Services are available for manual scoring and logistics for mail delivery to patient homes.	Carrying case included, will deliver results while patient is on CPAP, includes video instruction for patient, 24/7 technical support, and analysis, scoring, and reporting software. Designed for basic HST workflow with automated respiratory event analysis and customized reporting. Supports both nasal pressure and thermistor airflow signal.	Scalable multi-night recorder with auto or timed start options; high-resolution screen with signal display; signal test features (including impedance measurement), signal quality/status information; disposable and reusable sensors available. Compatible with Natus SleepWorks software.	A compact polysomnography type III and IV device powered by one AA battery, the HST Compass contains 2x AC bipolar channels, pressure transducer, integrated RIP interfaces, oximeter, integrated body position and DC channels—all embedded into a single module that will comfortably fit on the chest. Capability to see the traces and study information right on the screen.



Company		Nox Medical	Onera Health	ResMed	Sleepimage	Sleepimage
HST		 <p>See our ad on page 37</p> <p>Nox T3s</p>	 <p>Onera STS</p>	 <p>NightOwl</p>	 <p>Sleepimage Fingertip</p>	 <p>Sleepimage Ring</p> <p>See our ad on page 27</p>
Website		<a href="http://www.noxmedical.com">www.noxmedical.com</a>	<a href="http://www.onerahealth.com">www.onerahealth.com</a>	<a href="http://www.nightowl.care">www.nightowl.care</a>	<a href="http://www.sleepimage.com">www.sleepimage.com</a>	<a href="http://www.sleepimage.com">www.sleepimage.com</a>
Starting Purchase Price		Contact company	Contact company	Contact company	Contact sales@sleepimage.com	Contact sales@sleepimage.com
Rental/Leasing Option		No	Contact company	No	No	Yes
Starting Price for Consumables/Study		Contact company	Contact company	Contact company	N/A (no consumables)	N/A (no consumables)
Type	Type II	No	Yes	No	No	No
	Type III	Yes	No	No	Yes	Yes
	Type IV	Yes	No	Yes	No	No
Maximum Channels		24: (15 recorded channels, 9 derived channels) 2x bipolar channels: RIP, abdomen + thorax breathing effort, respiratory sound, audio volume, gravity, activity, position, flow, snore, PWA; pulse, SpO <sub>2</sub> ; 9 derived: heart rate; calibrated RIP flow, calibrated RIP sum, RIP flow, RIP sum, RIP phase, PTT, respiratory rate	15: EEG right, EEG left, EOG right, EOG left, EMG right, EMG left, SpO <sub>2</sub> , respiratory effort (via bioimpedance), respiratory flow (via bioimpedance), respiratory flow (via nasal cannula), ECG, activity, body position, sound pressure level, EMG leg	4: peripheral arterial tonometry, pulse rate, oximetry, actigraphy	6: plethysmogram, pulse rate, heart rate variability, respiration, oximetry, actigraphy	6: plethysmogram, pulse rate, heart rate variability, respiration, oximetry, actigraphy
Power Options	Disposable	Yes	No	Yes	No	No
	Rechargeable	Yes	Yes	No	Yes	Yes
Chain-of-Custody Assurance		Yes	No	No	No	No
Warranty (years)		2	N/A (fee-per-service)	N/A	1	1
Dimensions (cm)		6.8 x 6.2 x 2.6	8.2 x 6.3 x 2.1	2.4 x 1.7 x 0.7	3.8 x 3 x 3.8	3.8 x 3.0 x 3.8 (2.7 for pediatric ring)
Weight (grams)		65 +/- 5g without battery	54	3	28	15 (pediatric: 12)
Memory (MB)		4,000	4,000	N/A (smartphone memory)	N/A (smartphone memory)	N/A (smartphone memory)
Recording Time (hours)		24	16	112	~16	~16
Features		The Nox T3s has refined Nox RIP technology with 200 Hz sampling frequency, which can be used as a primary flow measurement; built-in sensors for snoring, EKG, EMG, and EEG, Bluetooth BLE 5.0 technology extending the battery life for multnight studies, analysis in Noxturnal Software with artificial intelligence. Indicated for use in patients >2 years old.	Onera's patch-based no-wire STS system records data from up to four contact points, maximizing patient comfort. With their intuitive design, these noninvasive devices are attached within minutes, are easy for patients to use, and save time during hook-up and removal. The user-centric technology offers new opportunities for sleep clinics to expand their programs and for hospitals that have limited or no access to a sleep clinic to implement sleep diagnostic testing within their institution.	A fully disposable device based on peripheral arterial tonometry that provides pAHI and TST estimate. Autoscored reports available in the free NightOwl Portal. Smartphone connected. Device in line with AASM guideline requirements. Reimbursable for qualified physicians. Good for up to 14 nights on 1 patient.	The FingerTip is a personalized, single patient use device that comes with three reports generated via the Sleepimage software as a medical device (SaMD) cloud based system. Report includes AHI 3% and 4% (OSA & CSA), RDI and ODI based on TST and sleep staging, as well as sleep efficiency, latency, onset, duration, fragmentation, periodicity, NREM and REM sleep, WASO and wake transition. FDA cleared for children and adults.	Sleepimage generates a report that is ready for interpretation in minutes after a sleep study. Report includes AHI 3% and 4% (OSA & CSA), RDI, and ODI based on TST and sleep staging, as well as sleep efficiency, latency, onset, duration, fragmentation, periodicity, NREM and REM sleep, WASO, and wake transitions. FDA-cleared for children and adults.

Company		Snap Diagnostics	SOMNOmedics America Inc	Sunrise	Wesper	ZOLL Itamar	ZOLL Itamar
HST					 See our ad on page 21	 See our ad on page 2	
		Snap Model 8	SOMNOtouch RESP	Sunrise	Wesper Lab	WatchPAT 300	WatchPAT ONE
Website		snapdiagnostics.com	www.somnomedics-diagnostics.com	us.hellosunrise.com	www.wesper.co	itamar-medical.com	itamar-medical.com
Starting Purchase Price		Contact company	Configuration-dependent	Contact company	Contact company	Contact company	Contact company
Rental/Leasing Option		Yes	Configuration-dependent	No	Yes	Yes	No
Starting Price for Consumables/Study		Included with some plans	\$2	Contact company	Contact company	Contact company	Contact company
Type	Type II	No	Yes	No	No	No	No
	Type III	Yes	Yes	Yes	Yes	Yes	Yes
	Type IV	No	Yes	No	Yes	No	No
Maximum Channels		5: airflow, oximetry, heart rate, chest effort, and respiratory sound (snoring)	11: respiratory airflow, snore, CPAP pressure, thoracic breathing effort, SpO <sub>2</sub> , pulse rate, finger plethysmogram, body position, movement, patient marker; optional: abdominal breathing effort	7: airflow, heart rate, oximetry, head position, actigraphy, two respiratory effort signals	18: position, airflow, pressure, staging, snoring, effort (abd, thx), SpO <sub>2</sub> , heart rate, HRV, PPG, temperature (abd, thx), temperature deviation (abd, thx), respiratory rate, movement, background noise	7: PAT signal, pulse rate, oximetry, actigraphy, snoring, body position, chest motion	7: PAT signal, pulse rate, oximetry, actigraphy, snoring, body position, chest motion
Power Options	Disposable	Yes	No	Yes	Yes	Yes	Yes
	Rechargeable	Yes	Yes	Yes	Yes	Yes	No
Chain-of-Custody Assurance		No	No	No	No	Yes	No
Warranty (years)		3	2	2	1	1	N/A
Dimensions (cm)		13.97 x 10.16 x 3.5	8.4 x 5.5 x 1.8	3.96 x 2.22 x 1.22	10 x 6	6.5 x 6 x 1.3	6 x 5.5 x 1.8
Weight (grams)		450	64	8	15	129.5	85
Memory (MB)		16,000	512	128	1,000 (internal)	128	16
Recording Time (hours)		97	18	3 x 10 hours	60	10	10
Features		Service includes auto + RPSGT manual scoring, with differentiation of obstructive and central events. Analyzed indices include count of apneas, hypopneas, AHI, RDI, REI, CI, ODI, acoustical snoring analysis. Raw data provided in an industry standard format. Resumable recording and rechargeable battery allow easy multi-night testing. Results based upon analyzed sleep time.	Plug and play with Intelligent Connect sensors for easy application by the patient at home—programmed or manual start. Extensive analysis and reporting software (1 license). Charging and data transfer simultaneously via USB. CPAP-compatible recordings. Auto detection of sleep/wake. Additional abdomen belt available. Also available: SOMNOtouch RESP eco, a Type III and IV home sleep test.	The device detects respiratory events such as obstructive and central apneas and hypopneas, respiratory event-related arousals and identifies sleep time, stages, micro-arousals, and position. The device generates sleep parameters, eg, apnea hypopnea index, respiratory disturbance index, oxygen desaturation index, REM and NREM sleep stages, total sleep time, arousal index, % of time spent increased respiratory effort and position.	With 18 channels (including 8 FDA-cleared channels), Wesper is a comprehensive sleep management system. Generate autoscored reports with full overscoring capabilities with access to raw data. With this cloud-based system, you can now reduce your cost per patient while giving better care.	WatchPAT 300 is simple, accurate, and reliable HSAT that has a smart design to streamline the workflow. It may also utilize screening, pre and post sleep questionnaires through a smartphone app, which helps clinics to streamline diagnostic processes. WatchPAT 300 provides a validated autoscored report and raw data for manual review and editing. The report differentiates obstructive and central events and provides AHI, AHlc, RDI, and ODI based upon TST, and sleep staging.	WatchPAT ONE is a fully disposable HSAT that also utilizes screening, pre and post sleep questionnaires through a smartphone app, which helps clinics to streamline diagnostic processes. As soon as the study is completed, sleep data is available for interpretation. It provides a validated autoscored report and raw data for manual review and editing. The report differentiates obstructive and central events and provides an AHI, AHlc, RDI, and ODI based upon TST, and sleep staging. ●