

Custom Oral Appliances Comparison Guide

View the original at <https://sleepreviewmag.com/sleep-treatments/therapy-devices/oral-appliances/oral-appliances-comparison-guide>

AIO Breathe

Company:	AIOMEGA Biotechnologies
Website:	aiomd.com
Warranty (days):	1095
Indications:	Mild-Moderate OSA, Snoring
Materials:	Biocompatible polymer, Metal-Free (ISO 10993 certified for perpetual use in oral cavity)
PDAC Verified:	Pending
How Does the Oral Appliance Work?:	Pan-airway enlargement. Individually customizable flange/plateau/thickness technology (Connected-Arc-of-Motion) guides mandible up or down, front or back to enlarge the entire airway. Breath-to-breath airflow modulation adjusts airflow to the user's real-time oxygen demand (Revive On-Demand Airflow). Design minimizes anterior advancement requirements, reducing TMJ stress.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	Anterior: 15, Vertical: 36/ 5/ 0.06
Upper-Lower Connection:	Connected
Custom Accessories Available:	AIOMEGA APP (available on Apple and Google stores) for personalized and physician/dentist for tracking sleep/fitness/nutrition/hydration/weight management. Portable carrying case.
Supporting Study:	Ghuge R, Ghuge A. 0796 AIO BREATHE for OSA: Matching Airflow to Oxygen Demand with CONNECTED-ARC-OF-MOTION, AI-PREDICTIVE Oral Device Geometry and ON-DEMAND-AIRFLOW Delivery. Sleep. 2025 May;48 (suppl_1):A344–5.
Features:	Patented AI tool (AIO-P-AI) needs only two inputs (AHI/LSAT) pre-therapy to achieve desired therapy improvement (AHI/LSAT) in OSA.

flexTAP

Company:	Airway Management Inc
Website:	tapintosleep.com
Warranty (days):	1095
Indications:	Mild-Moderate OSA, Snoring
Materials:	Thermal Acrylic, Laminate, no metal parts
PDAC Verified:	Yes
How Does the Oral Appliance Work?:	FlexTAP advances the lower jaw with a single point midline advancement. Self-titratable adjustments in 1/3 mm increments aid in easier, faster, and better treatment outcomes.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	17/ 2/ 0.333
Upper-Lower Connection:	Connected
Custom Accessories Available:	Mouth Shield nasal breathing trainer, AM Aligner morning repositioner.
Supporting Study:	tapintosleep.com/peer-reviewed-studies
Features:	60-day satisfaction guarantee. Precision-fit ThermAcryl trays allow for minor chairside adjustments using warm water. Every appliance is shipped with a Mouth Shield nasal breathing trainer and AM Aligner.

EMA Serena Nylon

Company:	Apex Dental Sleep Lab
Website:	apexsleep.com
Warranty (days):	730
Indications:	Mild-Moderate OSA, Snoring
Materials:	Nylon
PDAC Verified:	No
How Does the Oral Appliance Work?:	Uses Frantz Design Patent Elastic Mandibular Advancement straps that have been used to treat mild to moderate sleep apnea for over 25 years to position the jaw forward while managing comfort and durability with biocompatible nylon.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	9/ 0/ 1
Upper-Lower Connection:	Connected
Custom Accessories Available:	[info not provided]
Supporting Study:	[info not provided]
Features:	Made of durable, thin biocompatible nylon.

O2 OASYS Oral / Nasal Airway System (Optional Nasal Dilators & Tongue Repositioning Buttons)

Company:	Dream Systems Dental Sleep Lab
Website:	dreamsystemsdentallab.com
Warranty (days):	730
Indications:	Mild-Moderate OSA, Snoring
Materials:	Biocompatible Polymer, Cobalt-Chromium Alloys, Stainless Steel, Hard Acrylic, Laminate, Thermal Acrylic
PDAC Verified:	Yes
How Does the Oral Appliance Work?:	The Oasys Simplicity provides mandibular advancement. The standard Oasys with Nasal Dilators improves nasal breathing and adding Tongue Lifters improves forward tongue positioning.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	15/ 5/ 1
Upper-Lower Connection:	Not connected
Custom Accessories Available:	Retention clasps, hooks & elastics, in combination with Invisalign.
Supporting Study:	Shrivastava D, Bixby JK, Livornese DS, et al. Efficacy of oral appliance therapy in the treatment of severe OSA in CPAP-resistant cases. Sleep Vigilance. 2018.
Features:	Unique applications with upper denture, minimal dentition upper or lower, nasal obstruction or resistance, in combination with Invisalign.

Silent Nite 3D Sleep Appliance

Company:	Glidewell
Website:	glidewell.com/3d-silent-nite
Warranty (days):	1095
Indications:	Mild-Moderate OSA, Snoring
Materials:	Biocompatible Polymer, Metal-Free
PDAC Verified:	Yes
How Does the Oral Appliance Work?:	3D-printed mandibular advancement device. Connectors on right and left buccal side will pull the mandible in protrusion to open up the airway. Adjustable, up to 10 mm of advancement.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	10/ 0.5/ 0.5
Upper-Lower Connection:	Connected
Custom Accessories Available:	Shipped with extra connectors, complimentary AM Aligner.
Supporting Study:	Not provided.
Features:	Silent Nite has a 90-day "stops snoring or your money back" guarantee.

Silent Nite Sleep Appliance

Company:	Glidewell
Website:	glidewell.com/silent-nite
Warranty (days):	1095
Indications:	Mild-Moderate OSA, Snoring
Materials:	Biocompatible Polymer, Ethylene-vinyl Acetate, Thermal Acrylic, Metal-Free
PDAC Verified:	Yes
How Does the Oral Appliance Work?:	Thermoformed mandibular advancement device. Connectors on right and left buccal side will pull the mandible in protrusion to open up the airway. 6 adjustable settings.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	6/ 1/ 1
Upper-Lower Connection:	Connected
Custom Accessories Available:	Shipped with extra connectors, complimentary AM Aligner.
Supporting Study:	Borrie F, Keightley A, Blacker S, Serrant P. Mandibular advancement appliances for treating sleep apnoea/hypopnoea syndrome. Evid Based Dent. 2013 Mar;14(1):27-8.
Features:	Silent Nite has a 90-day "stops snoring or your money back" guarantee.

Nylon Sleep Herbst

Company:	Great Lakes Dental Technologies
Website:	gldt.com
Warranty (days):	730
Indications:	Mild-Moderate OSA, Snoring
Materials:	Nylon
PDAC Verified:	Yes
How Does the Oral Appliance Work?:	Mandibular position is set to open the airway and hold this position while sleeping.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	4/ 1 /<0.25
Upper-Lower Connection:	Connected
Custom Accessories Available:	Advancement shims, 'C' cut shims, elastics, telescopic hardware.
Supporting Study:	Not provided.
Features:	Allows lateral and vertical movement without disengaging the appliance. Made less than 1 mm thick, retains durability and retention while maintaining appropriate flexibility.

The Slide

Company:	LeBlanc Dental Products
Website:	slide2sleep.com
Warranty (days):	1095
Indications:	Mild-Moderate OSA, Snoring
Materials:	Acrylic or Nylon
PDAC Verified:	Yes
How Does the Oral Appliance Work?:	It slides the lower jaw forward and holds it there.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	8/ 4/ 1
Upper-Lower Connection:	Connected
Custom Accessories Available:	AM aligner included.
Supporting Study:	In progress.
Features:	The Slide places all adjustable components over the biting surfaces of the teeth, away from all the oral tissue.

O2Vent Optima

Company:	Open Airway Dental Solutions Ltd
Website:	openairway.com
Warranty (days):	1095
Indications:	Mild-Moderate OSA, Snoring
Materials:	Nylon, 3D printed
PDAC Verified:	Yes
How Does the Oral Appliance Work?:	O2Vent Optima has two mechanisms of action that add stability to the airway. 1. A mechanism of advancing the jaw forward encouraging a more open airway. 2. Incorporates an airway channel that further stabilizes the airway.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	6/ 2/ 1
Upper-Lower Connection:	Connected
Custom Accessories Available:	Connector bands, biteforks.
Supporting Study:	openairway.com/pages/clinical-resources
Features:	The O2Vent Optima products are OADS' latest offering in the O2Vent oral appliance range. The lower jaw can be moved forward to a comfortable range while also allowing the integrated airway channel to bypass nasal congestion and other areas of airway collapse, such as from the tongue, soft palate, and lateral walls.

Panthera Classic

Company:	Panthera Dental
Website:	pantherasleep.com
Warranty (days):	1095
Indications:	Mild-Moderate OSA, Snoring
Materials:	Biocompatible Polymer, Nylon
PDAC Verified:	Yes
How Does the Oral Appliance Work?:	Uses traction-based titration to minimize joint strain while promoting lip seal. 3D printed from durable PA2200 nylon, designed for maximized tongue space and comfort.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	N/A/ N/A/ 0.5
Upper-Lower Connection:	Connected
Custom Accessories Available:	Pairs of interchangeable elongation-proof rods allow for a titration range from 16 mm to 34 mm in 0.5 mm increments.
Supporting Study:	Not provided.
Features:	Medicare E0486 reimbursable low profile and lightweight appliance. 8-day turnaround time. 3-year no-questions asked 360 warranty. Engineered using proprietary design software and manufactured using Smart Technologies combining robotics, AI, and automation. Finished using an exclusive polishing process.

Panthera X3

Company:	Panthera Dental
Website:	pantherasleep.com
Warranty (days):	1095
Indications:	Mild-Moderate OSA, Snoring
Materials:	Biocompatible Polymer, Nylon
PDAC Verified:	Yes
How Does the Oral Appliance Work?:	A single set of upper and lower splints are adjusted using an interchangeable clip system. 3D printed from durable PA2200 nylon, designed for maximized tongue space and comfort. Maximizes tongue space and avoids soft tissue contact.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	5/ -1/ 0.5
Upper-Lower Connection:	Not connected
Custom Accessories Available:	Titration clips (allow adjustment from -1 mm to +5 mm in 0.5 mm increments).
Supporting Study:	Not provided.
Features:	Low profile and lightweight dorsal fin appliance. 8-day turnaround time. 3-year no-questions asked 360 warranty. Engineered using proprietary design software and manufactured using Smart Technologies combining robotics, AI, and automation. Finished using an exclusive polishing process.

ProSomnus EVO Guided

Company:	ProSomnus Sleep Technologies
Website:	prosomnus.com
Warranty (days):	1095
Indications:	Mild-Moderate OSA, Snoring
Materials:	Biocompatible Polymer, Medical grade class VI
PDAC Verified:	Yes
How Does the Oral Appliance Work?:	ProSomnus EVO Guided uses a 95-degree lower guided post and upper posterior block to stabilize and hold the mandible forward. EVO Guided is engineered to dilate the velopharynx and the oropharynx.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	unlimited/ customizable/ 1
Upper-Lower Connection:	Not connected
Custom Accessories Available:	Monogram customization options.
Supporting Study:	Not provided.
Features:	EVO Guided is engineered to prevent airway collapse by repositioning the hyo-glossal complex by guiding and repositioning the mandible, guiding and encouraging an anterior tongue posture, guiding mouth closure. EVO Guided is 100% made from the patient's oral records, no prefabricated components and no modifications from the provider's prescription.

ProSomnus EVO SELECT

Company:	ProSomnus Sleep Technologies
Website:	prosomnus.com
Warranty (days):	1095
Indications:	Mild-Moderate OSA, Snoring
Materials:	Biocompatible Polymer, Medical grade class VI
PDAC Verified:	No
How Does the Oral Appliance Work?:	ProSomnus EVO SELECT uses vertically mated buccal posts to advance and hold the mandible forward to open the airway.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	unlimited/ customizable/ 1
Upper-Lower Connection:	Not connected
Custom Accessories Available:	Monogram customization options.
Supporting Study:	Not provided.
Features:	Engineered for performance, biocompatibility, and the greatest comfort. A signature variation of the ProSomnus EVO device, EVO SELECT is optimized for patients who may benefit from a more compact, effective, and easy to use precision OAT medical device using innovative materials.

ProSomnus EVO

Company:	ProSomnus Sleep Technologies
Website:	prosomnus.com
Warranty (days):	1095
Indications:	Mild-Moderate OSA, Snoring
Materials:	Biocompatible Polymer, Medical grade class VI
PDAC Verified:	Yes
How Does the Oral Appliance Work?:	ProSomnus EVO uses vertically mated buccal posts to advance and hold the mandible forward to open the airway.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	unlimited/ customizable/ 1
Upper-Lower Connection:	Not connected
Custom Accessories Available:	Monogram customization options.
Supporting Study:	Mosca E, Remmers J. Precision vs traditional oral appliance therapy: A comparison of therapeutic efficacy. JDSM 10.2. Abstract #006.
Features:	Incorporates advanced materials, manufacturing robotics, and AI to advance the treatment of OSA using a precision platform. In a controlled IRB study (2021), 100% of patients preferred EVO over previous devices and CPAP; 100% of providers would recommend EVO; and 100% of providers stated EVO was easy to deliver. Features MG6 technology.

ProSomnus EVO [PH]

Company:	ProSomnus Sleep Technologies
Website:	prosomnus.com
Warranty (days):	1,095 (+730 for Medicare beneficiaries)
Indications:	Mild-Moderate OSA, Snoring
Materials:	Biocompatible Polymer, Stainless Steel, Medical grade class VI
PDAC Verified:	Yes
How Does the Oral Appliance Work?:	The ProSomnus [PH] uses a continuous advancement protocol. Upper arch connects via Herbst Arm to lower arch with an adjustment nut.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	12/ -1/ 0.1
Upper-Lower Connection:	Connected
Custom Accessories Available:	Monogram customization options.
Supporting Study:	Not provided.
Features:	ProSomnus EVO [PH], FDA cleared and Medicare E0486 verified. EVO [PH] is a dual arm advancement device with innovative materials, manufacturing robotics, and AI designed to provide a better experience for all patients.

SICAT OPTISLEEP

Company:	SICAT GmbH & Co KG
Website:	sicat.com
Warranty (days):	730
Indications:	Mild-Moderate OSA, Snoring
Materials:	Biocompatible Polymer, Hard Acrylic, Nylon
PDAC Verified:	No
How Does the Oral Appliance Work?:	The airway is kept open by protrusion of the mandible with a 2-part appliance. It allows for lateral movement and mouth opening.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	9/ 9/ 1
Upper-Lower Connection:	Connected
Custom Accessories Available:	None.
Supporting Study:	Not provided.
Features:	A transparent and aesthetic therapeutic appliance, comfortable to wear thanks to its slim design. Milled from biocompatible, odorless, and non-discoloring PMMA. 100% preliminary check of STL data to ensure the feasibility and accuracy of fit, enabling individual adjustments after consultation with the practitioner.

Slow Wave DS8

Company:	Slow Wave Inc
Website:	slowwave.net
Warranty (days):	1095
Indications:	Mild-Moderate OSA, Snoring, Bruxism
Materials:	Hard Acrylic, BioMed Clear
PDAC Verified:	Yes
How Does the Oral Appliance Work?:	Incorporates a vertical opening and makes more room for the tongue. Also stimulates the user's brain to naturally migrate the tongue forward during sleep.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	2/ 2/ N/A (no adjustments needed)
Upper-Lower Connection:	Not connected
Custom Accessories Available:	None.
Supporting Study:	Not provided.
Features:	Infinitely adjustable ramp system allows the brain to locate perfect jaw resting spot for each patient.

SomnoDent Herbst Advance Elite

Company:	SomnoMed
Website:	somnomed.com/en/dentists/products
Warranty (days):	730
Indications:	Mild-Moderate OSA, Snoring
Materials:	Biocompatible Polymer, Cobalt-Chromium Alloys, Stainless Steel, Hard Acrylic
PDAC Verified:	Yes
How Does the Oral Appliance Work?:	The device functions as a mandibular repositioner, which acts to increase the patient's pharyngeal space during sleep.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	8/ -1/ 0.1
Upper-Lower Connection:	Connected
Custom Accessories Available:	Distal wrap, breathing hole, edentulous, cheek protector option, discluding element.
Supporting Study:	Phillips CL, Grunstein RR, Darendeliler MA, et al. Health outcomes of continuous positive airway pressure versus oral appliance treatment for obstructive sleep apnea: a randomized controlled trial. Am J Respir Crit Care Med. 2013 Apr 15;187(8):879-87.
Features:	Individually milled from one piece of pre-cured PMMA for greater flexural strength. All the patented strength improvements in the Herbst Advance are also found in the Herbst Advance Elite. SomnoMed will replace it for free if it breaks, no questions asked, for 3 years. The Herbst Advance Elite is only supplied with a Bflex soft inner liner for increased comfort and retention.

DNA

Company:	Vivos Therapeutics Inc
Website:	vivoscare.com
Warranty (days):	60
Indications:	Mild-Moderate OSA, Severe OSA, Snoring
Materials:	Stainless Steel, Hard Acrylic
PDAC Verified:	No
How Does the Oral Appliance Work?:	Mandibular and maxillary slow expansion.
Intraoral-Scan Impression Compatible:	Yes
Max Protrusion/ Max Retrusion/Adjustment Increment (mm):	5/ 5/ 0.2
Upper-Lower Connection:	Not connected
Custom Accessories Available:	None.
Supporting Study:	Katz D, DeMaria S, Heckman S, et al. Use of the Complete Airway Repositioning and Expansion (CARE) approach in 220 patients with obstructive sleep apnea (OSA): A retrospective cohort study. Sleep Med. 2022 Nov;99:18-22.
Features:	Not provided.