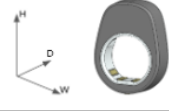


Product Name	Research Ring		
Model	-AT01		
Dimensions	in / oz	mm / grams	Diagram
Height	1.68	42.7	
Width	1.26	32.2	
Depth	0.44	11.4	
Weight	0.32	9	
Sizing			
Finger Size Range	Ring size 6-13 US (52-70 EU) with interchangeable shims		
Temperature Range			
Operating Range	0 - 45 deg C		
Materials	Description		
Housing material and shims	Teijin Panlite polycarbonate is certified ISO10993 for biocompatibility and rated UL94-V0		
Electrodes	Stainless Steel 430 with Nickel and Gold plating		
Sensors	Description	Metric	Max Sampling Rate*
PPG	Photoplethysmography	Heart Rate - optical	400 Hz
EDA	Electrodermal Activity	skin conductance (µSiemens)	400 Hz
ECG	Electrocardiogram	Heart Rate - electrical	800 Hz
Temp	Body Temperature	Celsius or Fahrenheit	20 Hz
Motion	Actigraphy	(TBD)**	100 Hz

* Not all sampling rates may be run concurrently. Consult the Senstream App for defined sessions or contact Senstream for more info.
** Actigraphy using the Research Ring's IMU is under development - Contact Senstream for any requirements you may have.

Connectivity	Description
BLE	Bluetooth Low-Energy (Class B digital device, pursuant to part 15 of the FCC Rules)
Firmware	Automatic firmware updates available w/ Senstream iOS App (15.2 or later)
Cloud [charts.senstream.com]	Senstream's application can automatically upload your data to our cloud application for storage analysis, downloading, or connection to other cloud solution through an API

Battery and Power	Description
Run time	Can exceed 8 hours depending channels and sampling rates
Charge time	2 hours from completely depleted device
Charge Cable	USB-A Charge cable with custom magnetic coupling (Note: USB power adaptor not included)

The Research Ring by Senstream is a revolutionary research platform that enables the capture of high-quality data from numerous physiological signals on a single, small, user-friendly device. Research-grade in a friendly consumer form factor, the Research Ring collects electrodermal activity (EDA, aka GSR) data, pulse (with an optical sensor), electrocardiogram (ECG), and temperature.

The ring allows researchers to gather physiological and other data “in the wild,” in everyday settings with their study participants. This has generally not been feasible because data acquisition hardware and software has historically required large, computer-connected signal acquisition systems, and lab-friendly (but not user-friendly) systems, cables, sensors and software. While more portable systems have evolved, the problem with many of them is that they do not capture high quality data that researchers can use for peer-reviewed studies.

The Senstream Research Ring is a product that gives researchers new possibilities. If the researcher wants to study a user’s psychophysiological and other contextual data, they can give the Research Ring to a study participant along with a companion mobile application. This “mobile first” approach is also cloud-friendly. The data is collected on the phone and can be immediately stored on the cloud when a data collection session ends.

In addition to being a stand-alone research tool the Senstream Research Ring can also be synchronized with AcqKnowledge (BIOPAC’s data acquisition and analysis tool) in real time or imported into AcqKnowledge asynchronously from the mobile application

