

Stellar Telemetry

The Freedom to move anywhere, anytime and still collect your data



- Pressures
- ECG
- Temperatures
- EEG
- Heart Rate
- EMG
- Activity
- EOG

Mice
to
Large Animals

Recommended publications Stellar®

2018

- Markert M, Trautmann T, Krause F, Cioaga M, Mouriot S, Wetzel M, Guth BD. A new telemetry-based system for assessing cardiovascular function in group-housed large animals. Taking the 3Rs to a new level with the evaluation of remote measurement via cloud data transmission. J Pharmacol Toxicol Methods. 2018 Sep - Oct;93:90-97
<https://www.ncbi.nlm.nih.gov/pubmed/29597013>
- Kotańska M, Kulig K, Marcinkowska M, Bednarski M, Malawska K, Zaręba P. Metabolic benefits of 1-(3-(4-(o-tolyl)piperazin-1-yl)propyl)pyrrolidin-2-one: a non-selective α -adrenoceptor antagonist. J Endocrinol Invest. 2018 May;41(5):609-619
<https://www.ncbi.nlm.nih.gov/pubmed/29110282>

2017

- Zubcevic J, Watkins J, Perez PD, Colon-Perez LM, Long MT, Febo M, Hayward L. MEMRI reveals altered activity in brain regions associated with anxiety, locomotion, and cardiovascular reactivity on the elevated plus maze in the WKY vs SHR rats. Brain Imaging Behav. 2017 Nov 27.
<https://www.ncbi.nlm.nih.gov/pubmed/29181695>
- Park SE, Park D, Song KI, Seong JK, Chung S, Youn I. Differential heart rate variability and physiological responses associated with accumulated short- and long-term stress in rodents. Physiol Behav. 2017 Mar 15;171:21-31.
<https://www.ncbi.nlm.nih.gov/pubmed/28043860>
- Kotańska M, Śniecikowska J, Jastrzębska-Więsek M, Kołaczkowski M, Pytka K. Metabolic and Cardiovascular Benefits and Risks of EMD386088-A 5-HT₆ Receptor Partial Agonist and Dopamine Transporter Inhibitor. Front Neurosci. 2017 Feb 8;11:50.
<https://www.ncbi.nlm.nih.gov/pubmed/28228713>

2016

- Caldara M, Nodari B, Re V, Bonandrini B. Miniaturized Blood Pressure Telemetry System with RFID Interface. Electronics 2016, 5(3), 51
<http://www.mdpi.com/2079-9292/5/3/51/htm>
- Dudek M, Knutelska J, Bednarski M, Nowiński L, Zygmunt M, Kazek G, Mordyl B, Głuch- Lutwin M, Zaręba P, Kulig K, Sapa J. Pyrrolidin-2-one derivatives may reduce body weight in rats with diet-induced obesity. Eur J Pharmacol. 2016 Apr 5;776:146-55.
<https://www.ncbi.nlm.nih.gov/pubmed/26896778>

- Harm Johan Knot H, Lee D. A Novel Freely Moving Animal Based Blood Pressure, ECG, and Dual Body Temperature Telemetry System for Group Housed Mice in Social Context. April 2016 *The FASEB Journal* vol. 30 no. 1 Supplement lb595_
http://www.fasebj.org/content/30/1_Supplement/lb595.short

2015

- Osborn J, Rhoads M, Collett J, Beierschmitt A, Descanio J, Knot H. Long-term Telemetric Blood Pressure Measurement in a Translational Model of Non-human Primate Spontaneous Hypertension April 2015 *The FASEB Journal* vol. 29 no. 1 Supplement 967.7_
http://www.fasebj.org/content/29/1_Supplement/967.7.short

2014

- Collett J, Hicks M, Beierschmitt A, Descanio J, Knot H, Osborn J. Circadian measurement of blood pressures and core body temperature in conscious, freely moving vervet monkeys (LB857). April 2014 *The FASEB Journal* vol. 28 no. 1 Supplement LB857_
http://www.fasebj.org/content/28/1_Supplement/LB857.short
- Rhoads M, Beierschmitt A, Huggins D, Collet J, Osborn J. Spontaneous essential hypertension in the non-human primate *Chlorocebus aethiops sabaeus*, the African green monkey. April 2014 *The FASEB Journal* vol. 28 no. 1 Supplement 1136.16_
http://www.fasebj.org/content/28/1_Supplement/LB857.short



Battery Life

Due to the flexibility in programming the Stellar battery life allows for unsurpassed lengths of recording time with the batteries lasting on average 4 times longer than current systems. The disposable Stellar transmitters can be resterilized and reused as many times as needed and will maintain flexibility and accuracy throughout.

TECH DATA							
TRANSMITTER ANIMAL BODY WEIGHT	XS 17 g+	S 30 g+	M 170 g+	L 240 g+	XL 500 g+	XXL 2500 g+	XXXL 3500 g+
Typical range	5 meters / 16 ft						
Parameters	Pressure(s), Tidal Volume, Heart Rate, Temperature(s), Biopotentials, Activity						
Sample rate / sec	100 / 200 / 500 / 1000 Hz (1 ... 5000 Hz optional)						
Auto on / off	Unit is always in power saving mode until instructed by the computer to conduct a measurement session						
Battery life	up to 6 months	up to 6 months	up to 12 months	up to 24 months	up to 36 months	up to 48 months	up to 60 months
Housing	Silicone	Titanium					
CHANNEL PRESSURE							
Pressure range	-20 to +300 mmHg Solid State Pressure Sensor						
Ambient barometric pressure	up to 7600 mmHg (10 atm.)						
TEMPERATURE							
Temperature range	15...45 °C						
RECEIVER							
Maximum number of transmitters per receiver	Unlimited						
Barometric pressure reading	Built into Receiver Unit						
Computer connection	USB						
Power	from USB Port						