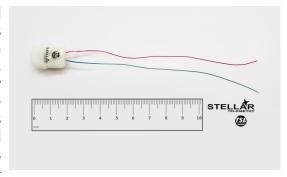


# NEW Continuous mode Stellar Telemetry®

## The all-digital wireless Stellar Telemetry® scheduled System

Stellar Telemetry allows pre-programmed scheduled wireless measurement of pressure(s) (P), biopotentials (B)¹, temperature(s) (T), and movement activity (A) in freely moving group-housed animals from mice to NHPs. All Stellar implants include a temperature and activity sensor. A combination of up to 2 pressure-, 4 biopotential- and 3 extra temperature leads can be added. This functionality allows a powerful combination of scheduled recordings in conjunction with other research instruments to collect vital signs while performing metabolic, pheno-



typing, physiology, pharmacology, behavioural, and inhalation studies. The long transmission range up to 5 meter /16 ft facilitates measurements in other environments outside the "classic" home cage such as TSE Systems' PhenoMaster<sup>TM</sup>, IntelliCage<sup>TM</sup> and PhenoWorld<sup>TM</sup>.

1) Biopotentials for ECG, EEG, EMG and EOG.

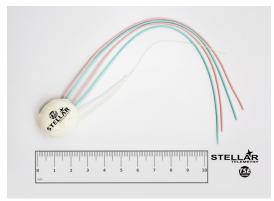
## Key Features of the Stellar Telemetry system

- No data dropout for scheduled acquisition due to built-in memory & digitization<sup>2</sup>
- Catheter tipped solid-state pressure sensor with high fidelity signal
- Remote programming and scheduled on/off switching of implanted transmitters
- One receiver for multiple animals, simple computer connection (USB/Ethernet)
- Animals can be group-housed for testing in a social environment
- Implants suitable for animals weighing 20g or more.

2) Built-in memory storage only available in scheduled memory type implants.



### Introducing the NEW Continuous mode Stellar Telemetry®



In this update, we would like to inform you about the exciting new continuous measurement options of Stellar Telemetry, which still retains the flexibility, animal group housing options, extended receiving range, prolonged battery life, and customizable implant configurations. The new continuous measurement options are now available for mice and rat implants (XS/S/M). A single receiver can record real time continuous data from up to 8 implants with up to 2 pressures and up to 4 biopotentials at the same time in group-housed animals. With multiple receivers, you can record up to 32 implants³. With the Stellar Commander™ software, implants are configured, started/

stopped and each signal channel sampling rate can be individually set to 100, 250, or 500 samples per second. Implants can also be programmed to perform scheduled continuous measurements in intervals to even further extend battery life from the typical 30 days in mice and 4 months in rats. Sampling rates in Stellar mean real data points at these rates and do not constitute interpolated data. 3) With scheduled memory type implants, a single receiver can monitor up to 256 implants!

Data is collected using the NOTOCORD-hem<sup>TM</sup> Evolution acquisition software. This combined hardware / software solution offers an industry unique simultaneous acquisition from very different recording sources (e.g., combined (electro)physiological data and video recording). Options include an extensive library of signal processors and (species specific) analyser modules that closely match your application.

### Key features of the new continuous mode implants

- Continuous real-time data acquisition, with optional user programmable scheduled sessions
- Real-time display and review of data and results during acquisition
- Fast and customizable reporting in Excel® with the possibility to create customized data extraction templates
- Optional GLP/CFR 21 Part 11 compliance module
- The Stellar Commander™ is used to control the implants and allows you to:
  - Start and stop the implants remotely, check health and range
  - Set sensors/select channels to be measured and set the sampling rate per channel
  - Schedule intervals between recording sessions to dramatically increase the battery life of the implant