Data Loggers DST Milli HRT

Caractéristiques

DST Milli HRT - implantable heart rate and temperature logger

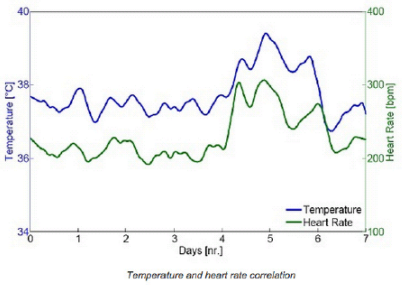
- Key features
- Leadless and small (13mm x 39.5mm)
- Data stored in memory
- Automatic measurements
- Simple and cost effective
- Group and unconfined housing

The heart rate logger DST milli-HRT simultaneously measures long term heart rate and core temperature in the animal. This makes it ideal for studies in which baseline and immunology responses are recorded. The logger is also suitable for toxicological, metabolic and thermoregulation studies. The heart rate is derived from a leadless single channel ECG (electrocardiogram) in which the electrodes are part of the housing material, making the logger especially easy to implant. For heart rate the logger takes a burst measurement on any set time interval and calculates the mean heart rate for each recording. Each recorded burst measurement consists of 600 measurements. For validation purposes, each individual burst is graded with a certain QI (quality index) accessible in the accompanying application software.

The heart beat logger can store up to 21844 heart rate and temperature measurements and has a battery life of circa 9.5 months (with sampling interval of 10 min). DST milli-HRT logger is easy to sterilize (gas sterilizer or 70% ethanol) and can be reused as long as the batteries last, which makes the logger very cost efficient. Each DST milli-HRT has its own five digit serial number permanently marked on the logger housing as well as placed in the logger's memory and provided with all downloaded data. DST milli-HRT is especially useful when a comprehensive data set throughout the research with no disturbance to the animal is needed. Each logger comes with a calibration certificate.

The DST milli-HRT is supported by the Mercury software and the Communication Box which serves as an interface between the logger and a PC computer. Communication between the logger and the Communication Box is wireless when logger is placed in the Communication Box.
In the software, the user programs the start time, start date and sampling interval before the logger is implanted/deployed. Fastest sampling interval is 1 minute. Optionally the loggers can be programmed with up to seven

different intervals within a measurement sequence. The user defines the number of measurements for each of the interval so it's possible to have more/less frequent measurements during specific periods.
After recovering the DST, recorded data is uploaded in the software where the results are displayed both in graphic and tabular form. The software also provides the user with some basic statistic information on the data such as minimum and maximum values on defined area, median, average, distribution of values etc. When recorded data has been retrieved, the DST can be re-programmed and reused as long as the batteries last.
A set of Communication Box and Mercury software needs to be purchased with the first order.



Temperature and heart rate correlation

Spécifications techniques

Sensors	Temperature
Size	39,4 mm x Ø 13 mm
Housing Material	Alumina (Ceramic)
Weight in air/in water	11,8 g
Memory type	Non-valotile EEPROM
Memory capacity	43,690 measurements
Data resolution	12 bits
Temperature resolution	0,032°C
Temperature accuracy	+/- 0,2°C
Temperature range	5 to 45°C
Data retention	25 years
Clock	Real time clock, accuracy +/- 1 min/month
Sampling Interval	In Minute(s) or Hour(s)
Number of different sampling intervals	-Single interval throughout measuring period -Or multiple intervals throughout period
Communications	Communication box, RS232C 9 pin serial or USB
Battery life	9,5 months - with a sampling interval of 10 min at room temp. Non-replaceable batteries

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YOUR SUPPLIER FOR ALL LABORATORY NEEDS

Numéro de commande

1800000103	DST milliHRT Heart rate and temperature recorder