

## Main Features

- Wrist worn or collar-worn ultra light-weight sleep and activity monitor for ambulatory monitoring of activity and sleep especially in paediatrics and veterinary applications
- Recording of physical activity by means of an accelerometer
- Used with the ActiLight light intensity monitor to assess the effects of light intensity on activity and sleep
- Designed for use with custom sleep and activity analysis software with a reader for data transfer to a PC
- Records for up to 90 days with a 1 minute epoch
- Suitable for use in sleep disorder monitoring and circadian rhythm studies
- Validated against polysomnography for use in sleep
- All data stored in the software is fully exportable for analysis in a third party program



**The Actiwatch Mini** is an ultra light-weight version of the Actiwatch designed especially for use with children. It is a wrist-mounted device which detects and logs movement intensity and duration. The data is stored in the watch and can be downloaded to a PC for analysis. As such, it is a convenient tool for the ambulatory recording of either limb activity or general physical activity for clinical use and for research purposes.

### Physical Activity

The activity plots coupled with specialised software serve to quantify the intensity and duration of daily physical activity as an indicator of a particular lifestyle or to monitor the effects on mobility of a medical condition as well as the efficacy of treatment for that condition.

### Sleep

The Actiwatch Mini is also useful for screening patients with suspected sleep disorders before resorting to tests in a sleep clinic.

Sleep analysis software serves to analyse sleep wake patterns and to calculate sleep onset latency, sleep efficiency and sleep fragmentation.

### Validation

The Actiwatch has been validated against polysomnography the 'gold standard' for use in sleep studies<sup>1,2</sup> and it has been used extensively for other applications.

### Fields of Applications

The Actiwatch is in use in the fields of physical activity monitoring, sleep, respiratory medicine, paediatrics, psychiatry, health psychology, pain, Parkinson's research, geriatric medicine, dermatology and urology.

### Bibliography

**1. Kushida C, Chang A, Gadkary C, Guilleminault C, Carrillo O, Dement W.**

Comparison of actigraphic, polysomnographic, and subjective assessment of sleep parameters in sleep-disordered patients. *Sleep Medicine 2 (2001) 389-396*

**2. Kevin So, Pat Buckley, T. Michael Adamson, and Rosemary S. C. Horne**

Actigraphy correctly predicts sleep behavior in infants who are younger than six months, when compared with polysomnography. *Pediatric Research, Vol. 58, No. 4, 2005, 761-765*

### Technical Specification

Weight:	7.5 grams
Battery life:	500 days
Battery type:	CR 1220
Memory:	128 KB
Waterproof:	Yes
Warranty:	2 years
Diameter:	24 mm
Depth:	7 mm
Epoch Range:	2s-15min
PC Analysis:	Windows <sup>®</sup> XP/Vista Windows <sup>®</sup> 7

Epoch length	2 sec	5 sec	10 sec
Recording time	72 hours	180 hours	15 days
Epoch length	15 sec	30 sec	1 min
Recording time	22.5 days	45 days	90 days

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