

ActiGraph wGT3X+ Monitor

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The wireless wGT3X+ monitor, in conjunction with the ActiLife analysis software, delivers objective 24 hour physical activity and sleep/wake measurements including raw acceleration, activity counts, energy expenditure, physical activity intensity, body position, and amount of sleep, while an integrated ambient light sensor provides valuable information about the subject environment. The wGT3X+ communicates wirelessly with compatible ANT+ enabled devices, allowing for the acquisition and integration of additional subject data such as heart rate, weight and blood pressure into the ActiGraph data set. The wGT3X+ is fully backwards compatible with other ActiGraph devices.

wGT3X+ Features

Wireless Initialization

Improve study site efficiency and eliminate mail time data collection with wireless, multi-device initializations through the ActiLife software or with the ActiLife Mobile smart phone app.

Interoperability with other Devices

The wireless wGT3X+ communicates with compatible wireless devices and sensors to acquire and integrate additional subject data such as heart rate, BMI, weight and blood pressure into the ActiGraph data file.

wGT3X+ Technical Specifications

Dimensions:	4.6cm x 3.3cm x 1.5cm
Weight:	19 grams
Sample rate:	30-100 Hertz (10 Hertz increments)
Memory/Storage capacity:	512 MB/40 days at 30 Hz
Battery Life:	30 days
Communication:	USB, ANT+ wireless
Water resistance:	1 meter, 30 minutes
Lux Range:	350-850 nm, 600 nm peak



Real-time Device Status:





Wirelessly view the wGT3X+ device information and operating status including serial number, battery voltage, amount of recorded data, and sample rate through the ActiLife software or with the ActiLife Mobile smart phone app.

Daily Data Summary:

View a daily summary of collected data while the subject is still wearing the device. The wGT3X+ wirelessly transmits daily kcals, cut point details, steps and more to the ActiLife software or the ActiLife Mobile smart phone app.

wGT3X+ Technology

The ActiGraph wGT3X+ uses a 3-axis MEMS accelerometer to record time varying accelerations ranging in magnitude from +/- 6 g's. The accelerometer output is sampled by a twelve-bit (12) Analog to Digital Convertor ranging from 30 Hz to 100 Hz. This raw acceleration is stored in non-volatile flash memory. Utilizing the ActiLife software, the raw data collected by the wGT3X+ can be reviewed directly or further processed through ActiGraph's digitally matched filter. This digital filter band-limits the accelerometer to the frequency range of 0.25 to 2.5 Hz, which has been carefully chosen to detect normal human motion and to reject changing accelerations outside the pass band. Each sample is then summed over a user specified interval of time called an 'epoch'.



Communicate wirelessly with wGT3X+ devices anywhere anytime using the ActiLife Mobile app!

- Wirelessly initialize devices in the lab or in the field
- Verify device operating status in real time
- View summary subject data, no downloads required!

The wGT3X+ is an FDA cleared Class II medical device within the United States and a Class I medical device within the European Union that abides by the regulatory requirements listed below:



ActiGraph is compliant with IEC standards for "Type BF Applied Part"



Part 15.109 (US) – Radiated Emission Limits of Unintentional Radiators
Part 15.249 (US) – Radiated Emission Limits of Intentional Radiators

ICES-003 (Canada) – Interference Causing Equipment Standards for a Digital Apparatus.



EN60601-1-Medical Device General Safety Requirements



All ActiGraph products are manufactured Lead Free and are RoHS Compliant



The wGT3X+ is water resistant in accordance with IEC 60529 IPX7, or immersion in one (1) meter of water for up to 30 minutes.