



One channel to measure absolute oxygenated hemoglobin percentage, three channels to measure relative concentrations.



Measure with more PortaMon devices simultaneously on your muscle of interest.



Utilizing the non-invasive NIRS technique.



Easy data analysis with our superior analysis software OxySoft or OxyLite app (available for Android).



Measure oxy-, deoxy-, total hemoglobin concentration changes, and tissue saturation index (TSI).



Perform real-time measurements using Bluetooth or measure offline using the on-board data collection.

Interested?

Contact us at askforinfo@artinis.com

www.artinis.com +31 481 350 980 Einsteinweg 17 6662 PW Elst The Netherlands



References to wireless NIRS

Buchheit, M., Bishop, D., Haydar, B., Nakamura, F. Y. & Ahmaidi, S. Physiological Responses to Shuttle Repeated-Sprint Running. Int. J. Sports Med. 31, 402-409 (2010).

Buchheit, M., Ufland, P., Haydar, B., Laursen, P. B. & Ahmaidi, S. Reproducibility and sensitivity of muscle reoxygenation and oxygen uptake recovery kinetics following running exercise in the field: Reproducibility and sensitivity of muscle reoxygenation. Clin. Physiol. Funct. Imaging 31, 337–346

Dascombe, B., Laursen, P., Nosaka, K. & Polglaze, T. No effect of upper body compression garments in elite flat-water kayakers. Eur. J. Sport Sci. 13, 341–349 (2013).

Hesford, C., Cardinale, M., Laing, S. & Cooper, C. E. NIRS Measurements with Elite Speed Skaters: Comparison Between the Ice Rink and the Laboratory. in Oxygen Transport to Tissue XXXIV (eds. Welch, W. J., Palm, F., Bruley, D. F. & Harrison, D. K.) 765, 81–86 (Springer New York, 2013).

Hesford, C. M., Laing, S. J., Cardinale, M. & Cooper, C. E. Asymmetry of Quadriceps Muscle Oxygenation during Elite Short-Track Speed Skating: Med. Sci. Sports Exerc. 44, 501-508 (2012).

Kenjale, A. A. et al. Dietary nitrate supplementation enhances exercise performance in peripheral arterial disease. J. Appl. Physiol. 110, 1582-1591 (2011).

Rittweger, J., Moss, A. D., Colier, W., Stewart, C. & Degens, H. Muscle tissue oxygenation and VEGF in VO2-matched vibration and squatting exercise: Muscle tissue oxygenation, VEGF and vibration. Clin. Physiol. Funct. Imaging 30, 269-278 (2010).



Technical specifications

MEASURES

TECHNOLOGY Continuous wave near-infrared spectroscopy

using the modified Lambert-Beer law

Oxy-, deoxy-, total hemoglobin, and tissue

saturation index (TSI)

DATA ANALYSIS SOFTWARE OxySoft **OPERATING SYSTEM** Windows 10

LIGHT SOURCE Light emitting diodes: 3 x 2 wavelengths **CHANNELS** 1 channel to measure tissue saturation

percentage, 3 channels to measure relative

concentrations

EVENTS Insert events online and offline

WAVELENGTHS Standard nominal 760 and 850 nm, others possible **DETECTORS** Photodiode with ambient light protection OPTODE DISTANCE Three distances use between receiver and

transmitters: 30, 35, and 40 mm

POWER Fast charging battery that lasts up to 8 hours

on a single charge

TOTAL WEIGHT 75 grams including battery SI7F W x D x H: 83.8 x 42.9 x 17.2 mm **ENVIRONMENT** Operating temperature: 10 - 35 °C

SAMPLE RATE Up to 10 Hz

OPTIONAL Incorporated 3D accelerometer

ELECTROMAGNETIC COMPATIBILITY No interference with EEG, ECG or EMG **ACCESSORIES** Can be combined with the PortaSync





Get a quote:

askforinfo@artinis.com

What's in the box?