

# General technical specification of APOLLO\_light data acquisition box

The Apollo\_light is compatible to our established Apollo\_box and Soundbook Analyzer, but without SLOW channels, SYNC port and AUX port. This reduction to main functions allows us to reduce, dimensions, power consumption and price.
We offer following versions with 2, 4 and 8 channels with differnt connectors (see following table).

 Version
 Apollo\_lt\_2L
 Apollo\_lt\_2B
 Apollo\_lt\_4L
 Apollo\_lt\_4B
 Apollo\_lt\_8C

 Order number
 908500.8
 908501.6
 908502.4
 908503.2
 908504.0

 Input connector
 2x LEMO7
 2x BNC
 4x LEMO7
 4x BNC
 8x NIM-CAMAC

The Apollo\_light is able to operate with any Windows-based PC (or Tablet) via USB 2 or USB 3 interface. We recommend to use a PC with Windows7 or higher.

# Input channels 1-2/4/8

 Resolution
 24-bit

 Real-time bandwidth
 DC ... 20 kHz @ 2 ... 8 channels

 Dynamic range
 110 dB

 Random noise
 < 3 μV(A), < 6 μV(Z) @ 0.1 Hz ... 20 kHz</td>

 Sample rates
 51.2 kHz

Decimation down to 200 Hz sample rate, selectable per channel Anti-aliasing filter yes

 Anti-aliasing filter
 yes

 Max. input voltage
 ± 10 V peak

 Amplification
 0 dB, 20 dB

 Overload detection
 yes

Overload detection yes
Phase mismatch < 0.1° @ 20 Hz ... 20 kHz
Offset adjust yes, automatically with self-calibration

 $\begin{array}{ll} \text{Input coupling} & \text{DC, AC 0.15 Hz, HP 10 Hz, LP 2 kHz} \\ \text{Microphone power supply} & \pm 14 \, \text{V, +20 / 63 / 200 V switchable} \end{array}$ 

(LEMO7 versions only)
ICP power supply 2 mA switchable
Support of IEEE 1451.4 yes

#### **Output channels 1-2**

 $\begin{array}{lll} \mbox{Resolution} & \mbox{24-bit} \\ \mbox{Real-time bandwidth} & \mbox{DC} \dots \mbox{20 kHz} \\ \mbox{Max. output voltage} & \pm 3.16 \mbox{ Vpeak} \\ \end{array}$ 

## Service channels

Trigger / Tacho, trigger level settable via software

### **Physical characteristics**

 Dimensions
 180 mm x 105 mm x 22 mm

 Weight
 700 g

 USB cable
 standard printer cable USB-A to USB-B

 Power supply
 via USB 2

### Available Software

SAMURAI universal multi channel noise & vibration analyzer
SINUS Matlab Toolbox for individual programming using MATLAB as programming language
LabView driver for individual programming
µREMUS universal multi channel NVH software

#### **EMC**

Emission conforming with IEC 61000-6-3 Immission conforming with IEC 61000-6-1



Windows<sup>TM</sup> Soundbook<sup>TM</sup>, Apollo<sup>TM</sup>, SAMURAI<sup>TM</sup> MATLAB<sup>TM</sup>

Micrsoft Corp. SINUS Messtechnik GmbH The MathWorks, Inc.



Thatis

Foepplstrasse 13 D-04347 Leipzig Tel.: +49 - 341 - 24429 - 0 Fax: +49 - 341 - 24429 - 99 www.soundbook.de