

# OmniScale

- ▷ Modern data recorder to be connected to data sources via RS232 interface line
- ▷ PC Windows application for collecting, archiving, searching and printing of data under legal control
- ▷ Replacement for Alibi Printers under legal control
- ▷ PTB Test Certificate D09-00.12
- ▷ Uses ATA Flash-Cards as removable and flexible storage media
- ▷ Easy handling and installation
- ▷ Robust, compact and cost-saving
- ▷ Operating temperature: -40 °C to +85 °C

*OmniScale* is a modern alternative to the traditional alibi printer, whenever data has to be recorded, archived, searched and printed out under legal control.

**Instead of manual searching** for interesting data in endless printer outputs, now **PC systems** can **efficiently** be used for this purpose.

**File management** under Windows provides optimal and reliable archive and back-up possibilities.

## Typical Data Sources

- ▷ Weighing terminals and scales
- ▷ Mix or dose units
- ▷ Bottling plant
- ▷ Liquid volume metering instruments e.g. filling stations
- ▷ Many other data sources

## Validated as legal metrology device

*OmniScale* System is authorized by the **PTB**<sup>1</sup> as a device under legal control according the **directive 90/384/EEC** (Non-automatic Weighing Instruments). It fulfills the conditions described in the **WELMEC**<sup>2</sup> guidelines for such systems.



**Identification** of the application and **protection against data manipulation** are realized as key features.

## OmniScale device

*OmniScale* can directly be connected via RS232 to the data source instead of an alibi printer.

The **data communication** is **compatible** with the so called **B-Protocol**<sup>3</sup>.

**ATA Flash-Cards** are used as **data storage media**. Depending on the resulting data amount, a suitable card can be chosen between 32 MByte and 2 GByte.

The memory can be configured as **one-time memory or as ring memory**. Activating the ring memory *option*, the data recording is not stopped after reaching the memory's end, but the oldest data is overwritten.

Hence, a well-defined amount of data sets and recording duration is available. Old and no longer needed data will automatically be deleted.

<sup>1</sup> PTB: Physikalisch Technische Bundesanstalt Germany

<sup>2</sup> WELMEC: Western European Metrology Cooperation

<sup>3</sup> Industrial standard, supported by alibi-printer.

## ***OmniScale Manager (OSM)***

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For handling and data management a **32 Bit Windows application**<sup>4</sup> is provided.

This tool supports all main functions, like

- preparing the ATA Flash-Card for data recording (**Init-Card**)
- data transfer from Card to file (**Read-Card**)
- **display** of a document containing saved data
- **searching** for specific text in the document and
- producing a **printout** of this document.

## ***ASCII Export***

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For the use of the data in other applications, a special function is available which stores the data in a file in ASCII-format.

These data may be read by or imported in many software tools and may be used for documentation, statistics or other helpful applications.

## ***PC Card Drive***

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For the data exchange between ATA Flash-Card and PC a **PC Card Drive** is needed. For this purpose the CSM **OmniDrive** is highly recommended. It is optimally qualified and easy to use.

Alternatively, for low-cost applications the *OmniScale* device can be used in a special mode that allows direct data transfer via the a PC COM-Port interface.

For readout of the data the *OmniScale* has to be disconnected from the data source, connected with a PC and installed there. However, the high data transfer rate of *OmniDrive* can not be reached with *OmniScale*.

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<sup>4</sup> System requirements:  
Win Vista, XP, 2000, NT 4.0 or 9x/Me



# Specification OmniScale

Item	OmniScale device as external box <sup>1)</sup>	
Dimensions (W x H x D)	109 mm x 35 mm x 164 mm (176 mm) <sup>2)</sup>	
Weight	approx. 430 g	
Power Supply <sup>3)</sup>	5 V DC <sup>2)</sup> or 8-32 V DC via 2-pole low voltage connector	
Power Consumption <sup>4)</sup>	Device type <b>5 V DC:</b>	Device type <b>8-32 V DC:</b>
	approx. 300 mW (without PC Card)  approx. 500 mW to 750 mW <sup>4)</sup> (with PC Card, write access)	approx. 500 mW (without PC Card)  approx. 800 mW to 1200 mW <sup>4)</sup> (with PC Card, write access)
RS232 Interface	baudrate, databits, stopbits and parity selectable <b>max. 115,200 Baud</b> (115.2 k, 57.6 k, 38.4 k, 19.2 k, 9.6 k ... Baud)	
Connector	D-SUB 9-pol female	
PC Card Slot	one slot for <b>PC Card type II</b> at front	
PC Card types	ATA Flash Card type II, ATA Compact Flash Card (with adapter)	
LEDs	operation: POWER (green LED) / access: BUSY (red LED)	
Temperature	<b>- 40 °C to +85 °C</b> (operation and storage)	
Humidity	max. 90 % (non condensing)	
Conformity	CE	

<sup>1)</sup> **please ask for:** other mechanical versions, e.g. 3 1/2", 19", PCB-module or front cover

<sup>2)</sup> **depth with front cover**

<sup>3)</sup> **please ask for:** an optional AC adapter, or power supply from PC via keyboard adapter, instead power supply from data-source

<sup>4)</sup> The power consumption depends significantly on the used ATA Flash Card. In case of using CSM SuperStore Flash Cards you get typ. 550 mW (5 V) or 880 mW (8-32 V).

## Shipping Content:

- **OmniScale**  
in external box, with Installation Guide
- **Power Supply Cable**  
(2<sup>nd</sup> end open) to supply OmniScale from data source
- **CD with OmniScale Manager**  
and detailed Windows-Help-File

## Additional products:

- **OmniDrive USB2 Professional**  
Universal PC Card Reader for USB 2.0 interface for data exchange with PCs
- **ATATOOL** (in conjunction with OmniDrive)  
Software tool for analysis and recovery of ATA Flash Cards
- **CSM SuperStore ATA Flash Card**

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