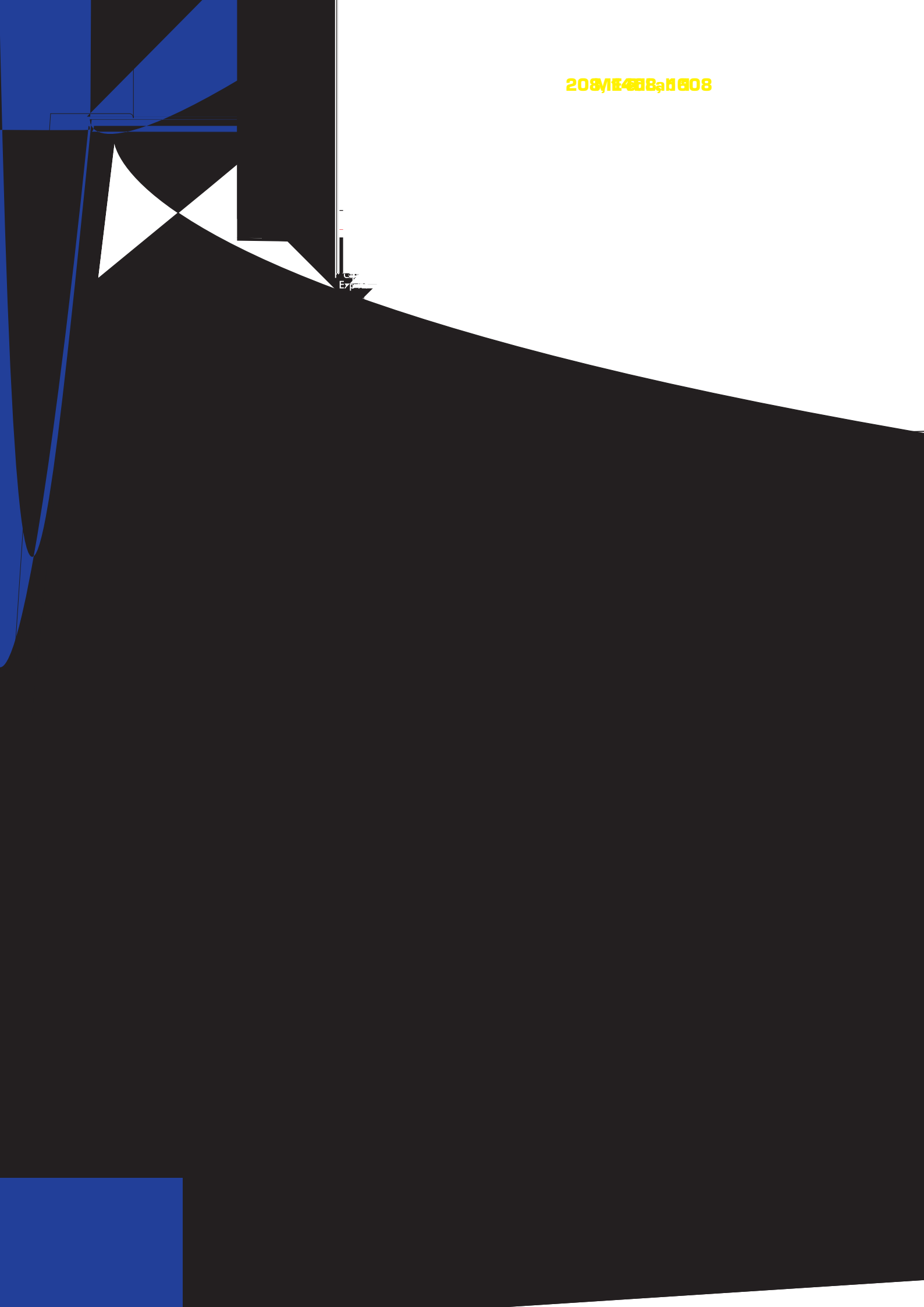# Mini digital control and switching module for USB

ME-RedLab 1024

With the ME-RedLab 1024 you can control digital inputs and outputs via USB. Use the module to control switching applications or relays or for the acquisition of digital status. The unbeatabel benefits of these modules: They are small and space-saving, easy to install and use. And they are available at a very low price.

- Digital interface module for USB.
- 24 TTL/CMOS digital I/O channels (82C55), grouped in three 8 bit ports.
- HLS: High-drive inputs/outputs instead of TTL/CMOS 82C55
- 32 bit event counter.
- Screw terminal connectors.
- Size (mm) only 83 x 80 x 25,4.

Also available as ME-RedPack bundled with software ProfiLab-Expert!

Software
Included: TracerDAQ, Universal Library, driver for LabVIEW and SoftWIRE.

» Ordering codes and funktions		ME-RedLab 1208 and 1608
Model	**Description**	**Included**
ME-RedLab 1224LS	USB digital box, 24 TTL/CMOS digital I/O channels	USB module, USB cable (type A-B), screw terminals, CD/software and PDF manual
ME-RedLab 1224HLS	USB digital box, 24 high-drive digital I/O channels	

Specifications

Digital inputs/outputs		
	Number	24 bidirectional input/output channels, grouped in 3x 8 ports or 2x 8 bit and 2x 4 bit ports; each port programmable as inputs or outputs
	Version LS	82C55 TTL/CMOS; standard: All channels connected to V_s via a 47 kΩ resistor. Optional pull-down to GND. Input high: 2.0 V min./5.5 V abs. max. Input low: 0.8 V max./-0.5 V abs. min. Output high: (I_{OH}=-2.5 mA) 3.0 V min.
	Version HLS	HLS: High-drive, 74ACT373 inputs/74FCT244 outputs Internal 47 kΩ resistor, user configured for pull-up or pull-down via external connector "port x pull-up/pull-down" to USB +5 V or GND. Ports A, B and C independently configurable. Input high: 2.0 V min./5.5 V abs. max. Input low: 0.8 V max./-0.5 V abs. min. Output high: (I_{OH}=-15 mA) 2.4 V min. Output low: (I_{OL}=64 mA) 0.55 V max. Max. current = 15 mA per output
Counter		
	Number, type	1x 32 bit event counter
	Input frequency	Max. 1 MHz
General data		
	Size (mm)	~83 x 80 x 25,4
	Power supply	From PC via USB
	Interface	USB 1.1 low-speed, USB 1.1 and 2.0 compatible with Windows XP, 2000
	Connector	I/O: 2x 10 screw terminals, USB: Type B. Cable type B-A included (max. 3 m cable allowed)
	Environmental	Operating temperature 0...70°C, storage temperature -40...85°C; 0...90% rel. humidity, non-condensing

USB Connectors Type A and Type B

USB type A female/male - at a PC/notebook or Hub

<< USB type A "extension"

USB type B female/male - at a USB device (for example MEphisto Scope)