

All-in-one digital I/O board for PCI, PXI/CompactPCI, USB

ME-630 and MEphisto Switch



PXI™

PCI LOCAL BUS



ME-630 cPCI and PCI



This is the multi-channel all-around model among the digital boards. Switch high loads and control digital statuses with a single board or box! Up to 48 relays, digital and opto channels for USB, PCI or PXI/CompactPCI.

- 16 or 8 relays type C (change-over). For currents up to 2 A/30 V, short time/single relay up to 3.5 A.
- 8 TTL digital inputs. 16 TTL digital I/O channels, expandable with relays or opto-isolation.
- 8 opto-isolated inputs (24 level).
- As StandardPCI or 3 U PXI/CompactPCI version: PCI Local Bus 2.1 compatible. Plug'n'Play. 2 additional TTL interrupt inputs.
- USB version MEphisto Switch: USB 1.1 fullspeed. **Robust metal housing.** External power supply (included).



Software included on CD:

- ME-iDS and ME-iDC driver and configuration tool for **Windows XP, 2000 and GNU Linux 2.6.**
- **Visual C/C++, VEE Pro** (Windows), **LabVIEW** (Windows, Linux), **Python, Java** supported.
- Program examples, **MEsslabor (DAQ lab) software** for Windows.
- "Soft" manuals English and German, for Acrobat Reader/PDF.



MEphisto Switch

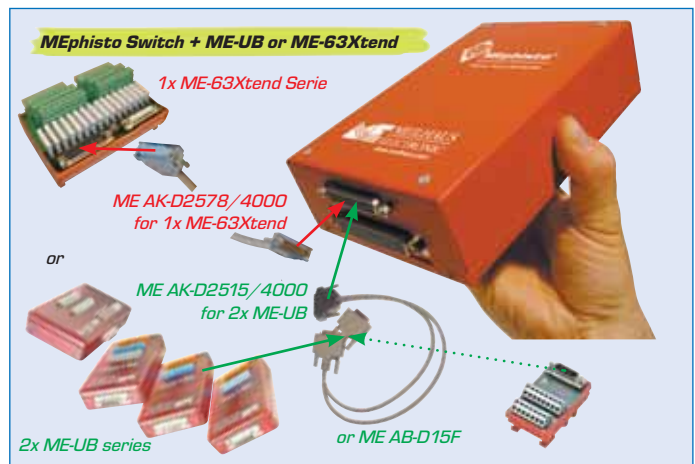
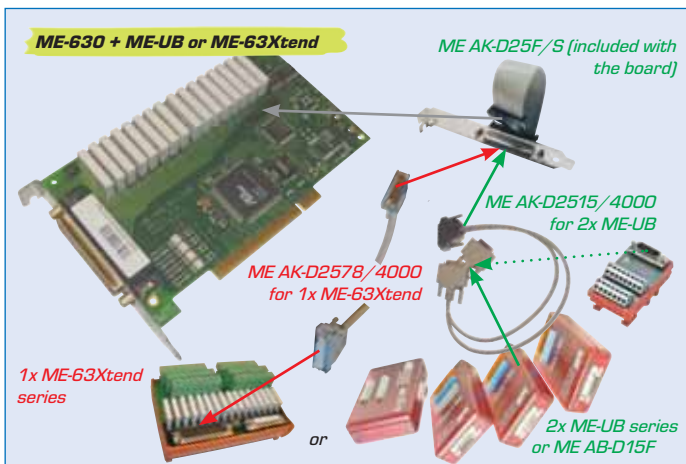
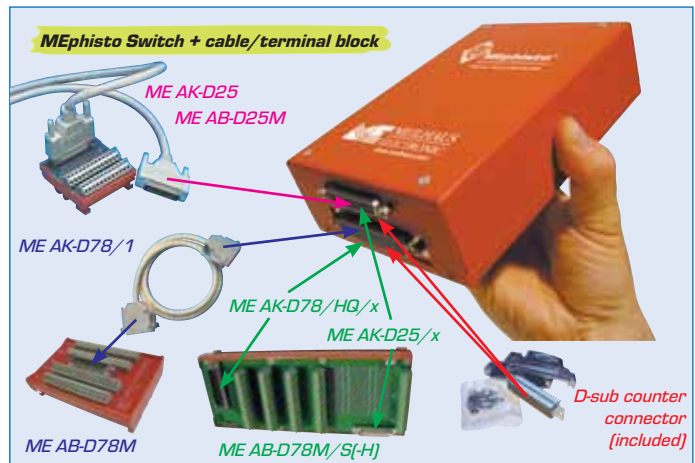
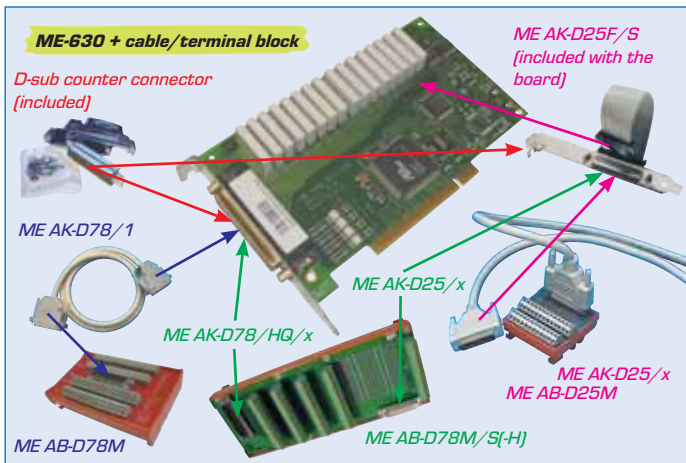
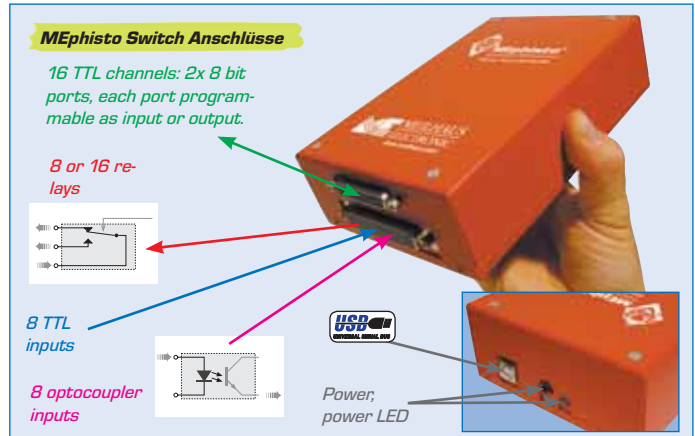
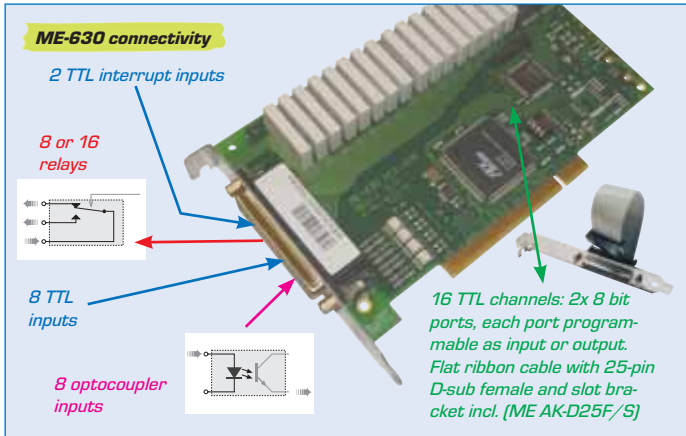


» Ordering codes and functions		ME-630 and MEphisto Switch					
Model		Relays	24 V opto-inputs	TTL digital inputs	TTL digital I/O	Interrupt inputs	Bus
ME-630 PCI	ME-630/8 PCI	8 type C	8	8	16 (2x 8 bit)	2	PCI
	ME-630/16 PCI	16 type C	8	8	16 (2x 8 bit)	2	PCI
ME-630 cPCI	ME-630/8 cPCI	8 type C	8	8	16 (2x 8 bit)	2	PXI/CompactPCI
	ME-630/16 cPCI	16 type C	8	8	16 (2x 8 bit)	2	PXI/CompactPCI
ME-630 USB (MEphisto Switch)	MEphisto Switch 8	8 type C	8	8	16 (2x 8 bit)	-	USB 1.1 full speed
	MEphisto Switch 16	16 type C	8	8	16 (2x 8 bit)	-	USB 1.1 full speed
Included	Board or USB box, ME-Power-CD, 78- and 25-pin counter connector. Board versions: ME AK-D25F/S. USB versions: USB cable, power supply.						
Save money with ME bundles:							
Select a combination of an ME board and accessory! For example:							
ME-SK ME-630/___	StarterKit with: ME-630/x of your choice + cable of your choice + terminal block of your choice.						
ME-PP ME-630/___	PowerPack with: ME-630/x of your choice + cable of your choice + terminal block of your choice + graphic software development environment VEE Pro, current full version.						

» For the ME-630 and MEphisto Switch we recommend the following accessory...	
For higher currents over 0.5 A/line:	
ME AK-D78/HQ/x	x = 0.25 m, 1 m or 2 m high quality cable. 78-pin D-sub male to female, 1:1 contacted. With metal housing and 2 cable bundles, line diameter 40x 0.25 mm ² . Max. current load 1.4 A per line; load on 20 lines: 2 A.
ME AK-D25/x	x = 1 m or 2 m cable. 25-pin D-sub male to female, 1:1 contacted. Connects on board digital ports and terminal block ME AB-D78M/S(-H).
ME AB-D78M/S	Deluxe terminal block. 78-pin D-sub male to pluggable spring terminals as well as 25-pin D-sub male to spring terminals. In a robust metal box or in a DIN rail mountable card carrier (-H).
ME AB-D78M/S-H	
Alternative:	
ME AK-D78/HQ-OE/1	In case you don't want to use a terminal block: 1 m special cable. 78-pin D-sub male to open ends. Data see .../HQ/x.
For small signals up to 0.5 A/line:	
ME AK-D78/x	x = 0.25 m, 1 m or 2 m cable. 78-pin D-sub male to female, 1:1 contacted. Standard cable.
ME AK-D25/x	x = 1 m or 2 m cable. 25-pin D-sub male to female, 1:1 contacted. Connects on board digital ports and terminal block ME AB-D25M.
ME AB-D78M	Standard terminal block. 78-pin D-sub male to spring terminals. In a DIN rail mountable card carrier.
ME AB-D25M	Standard terminal block. 25-pin D-sub male to spring terminals. For on board digital ports.
Expand the on board digital ports:	
ME AK-D2578/4000	1 m special cable. 25-pin D-sub male to 78-pin D-sub female, connects 1x ME-63Xtend.
ME-63Xtend series	External expansion board, DIN rail mountable, available with relays or opto-isolation. 16 channels.
Alternative:	
ME AK-D2515/4000	1 m cable. 25-pin D-sub male to 2x 15-pin D-sub male, connects 2x ME-UB.
ME-UB series	External expansion boxes, available with relays or opto-isolation. 8 channels. Use in any combination: ME-UB15, ME-UBRE, ME-UBOI, ME-UBOO. The ME-UB15 can also be replaced by a terminal block ME AB-D15F.
ME AB-D15F	Standard terminal block. 15-pin D-sub female to spring terminals. Can be used to replace ME-UB15.
Further accessory:	
ME AB-D78M/P-H	Deluxe terminal block. 78-pin D-sub male to IDC and prototyping area, for user signal conditioning. In a DIN rail mountable card carrier (-H).
ME-Synapse ME-1	"Docking station", converts the cPCI versions of the ME-FoXX ME-46xx to USB 2.0 or TCP/IP Ethernet/LAN.

All-in-one digital I/O board for PCI, PXI/CompactPCI, USB

ME-630 and MEphisto Switch



Specifications

	ME-630 PCI	ME-630 cPCI	ME-630 USB (MEphisto Switch)
Relays			
Number, type	8 or 16, type C (change-over); NAIS APE3005; EN 60255, EN 60335, EN 60730, EN 60950, EN 60065, EN 50178		
Voltage/current	Continuous load (25°C): 30 VDC/2 A; 30 VAC/2 A; short time load, single relay: 3.5 A		
Contacts	Material: Silver, gold plated. Max. resistanced at 6 VDC/1 A: 30 mΩ. Mech. lifetime at 180 cpm 5x 10 ⁶		
Status	Readback function		
Opto inputs			
Number	8; max. 1 kHz transmission rate, effective suppression of fast transients in μs range		
Voltage	24 V level. Low: 0...12 V; high: 13...24 V; input current at 24 V: 7 mA		
Isolation	Isolation voltage 500 VDC		
Digital inputs/outputs			
Number, type	TTL level. 8 inputs and 2x 8 bit ports I/O channels, each port programmable as input or output		
Voltage, 8 inputs	Low: -0.5 V...+0.8 V (I _{lmax} =±10 μA); high: +2.0 V...5.5 V (I _{hmax} =±10 μA)		
General data			
Interrupt lines	2 (TTL compatible)		
Bus interface	32 bit/33 MHz StandardPCI bus. PCI Local Bus 2.1 compatible	32 bit/33 MHz PXI/CompactPCI bus. PCI Local Bus 2.1 compatible	USB 1.1 fullspeed
Size (mm)	~174 x 98	160 x 100 (3 U europa card)	Robust metal housing, ~115 (B) x 180 (T) x 50 (H) without connectors/rubber pads
Connectors	78-pin D-sub female connectors (relays, opto inputs, 8 digital inputs as well as interrupt inputs on the board versions)		
	25-pin D-sub female connector (16 TTL digital I/O channels) on additional slot bracket with flat ribbon cable (ME AK-D25F/S) from on board IDC		25-pin D-sub female connector, USB connector and connector for external power supply