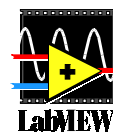


# ME630-USB

## General Purpose USB Relay Module

- Adds 8 or 16 SPDT Relays to your computer.  
*Switch signals or control power.*
- Flexible Digital Lines  
*Sense, monitor and control digital signals.*
- Plugs into any USB port.  
*Easy installation without opening the computer.*
- Plug&Play drivers support Visual Basic, C++, Delphi, Linux, LabVIEW and Agilent's VEE.  
*Works with virtually any test program.*

CE Approved

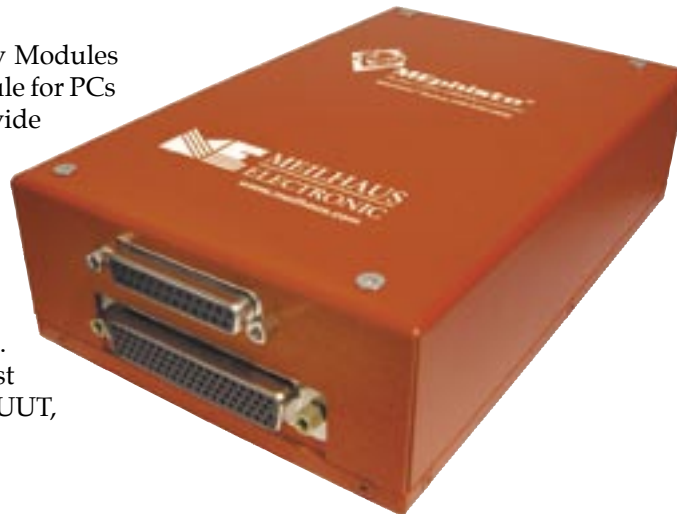


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## Description

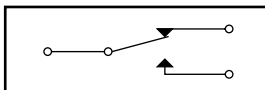
The ME630-USB Series Relay Modules are an all in one digital I/O module for PCs with USB port. The Modules provide 8 or 16 form 'C' relay contacts, TTL I/O signals, and 8 optically isolated inputs. Status readback lets the user verify each relays' position. Drivers supplied for Agilent VEE, LabView, Linux, VxWorks, QNX, and Windows. Use for industrial switching, test systems, control of power to the UUT, and to monitor digital signals.



ME630-USB Relay Module

## Relay Contacts

The ME630 Series Relay Modules are available with 8 or 16 'C' SPDT relay contacts that open one circuit while closing another. The relay contacts are designed for low level signals yet switch high currents. The gold plating over silver contacts has an initial on resistance of 30 milliohms. This is ideal for switching low level analog or digital signals. When used with high currents up to 2 amperes, the gold burns off, leaving the high current silver contacts.



Form C Relay Contacts

For signals up to 100 mA use the standard ME-AKD78 Cables and MEAB-D78 Terminal Strip Box with Spring Clips. For currents over 100 mA, use the heavy duty MEAK-D78HQ Cable and ME-ABD78MSH Terminal Strip Box.

## Software Support

The ME630 Relay Modules include a full set of drivers for Windows NT, 2K and XP. Win 95/98 and Me are not supported. The drivers support Visual Basic, Visual C++, Delphi, Borland C/C++ Builder and Linux. C source code is available for Linux Kernels 2.2-2.4 and QNX kernels. Drivers are also available for LabVIEW, and Agilent VEE.

## Digital I/O

The ME630 Series Relay Modules have three types of digital input and output circuits that handle standard TTL and industrial 24V signal levels.

8 TTL input lines. Standard TTL levels.

16 TTL input/output lines organized as two 8-bit ports. Each port may be set as an input or output port.

8 optically isolated inputs that handle up to 24 volts. Isolation from PCI bus is >500 V



ME-ABD78M - Terminal Box with standard spring clips for low current signals

## ME630 SPECIFICATIONS

### Relay Contacts

Switch low level signals or high currents. Module includes relay status readback.

Type	Form C (SPDT)
Number	8 or 16 relays
Contacts	gold plated silver contacts
Initial res	30 milliohms
Current	2 A maximum
Voltage	30 V
Life	5 x 10 <sup>6</sup> cycles

### Digital I/O

Each Module has the following types of digital signals.

#### 8 TTL Inputs

Logic '0' = 0 to 0.8 V at ± 10 μA  
 Logic 1 = >2.4 V at ± 10 μA

#### 16 TTL Input/Output lines

2 8-bit ports individually assigned as inputs or outputs. Standard TTL I/O levels.

#### 8 optical isolated inputs

Logic '0' = 0 to 12 V  
 Logic '1' = 13 to 24 V  
 Isolation >500 V  
 Rate up to 1 KHz.  
 Filters usec transients

### USB Compatibility

USB 1.1 Full Speed Bus Powered Module

### Compatible Driver Software

Graphical Programs

Agilent VEE, LabVIEW

Languages

Visual C/C++, Visual Basic 6, Delphi, Borland C/C++ Builder

Systems

Windows NT/2K and XP  
 Linux Source for kernel 2.0 to 2.4  
 QNX Source for x87 systems  
 VxWorks 5.4.2

### CE Certification

EMC Directive 89/336/EMC  
 Emission EN 55022  
 Noise immunity EN 50082-2C

### Physical

Power

7.5 to 12 Vdc  
 3.5 mm jack

Power consumption

7.5 V at 800 mA max

Size

115 W x 180 D x 50 H mm

Weight

ME-630-USB 1.1 kg  
 Shipping 2.1 kg

Connector

Relay 78-pin D-Sub female connector  
 16 Dig I/O 25-pin D-sub female connector on separate PC card bracket.

Temperature

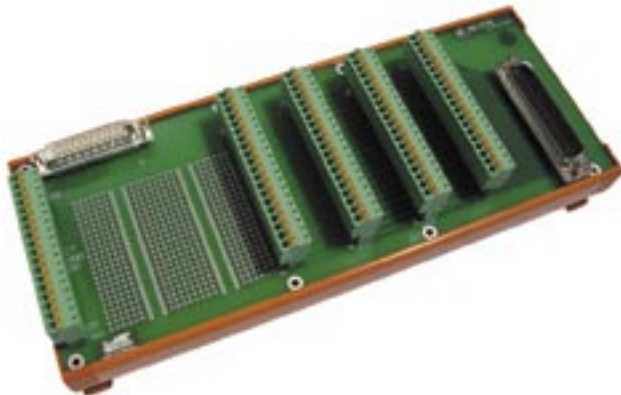
Operating 0 to +70 °C  
 Storage 0 to +85°C

Relative humidity

20 to 55% (not condensing)

### Included Items

8 or 16 Relay Module  
 115 VAC Power Adapter  
 Manual on CD-ROM  
 Drivers for Windows NT/2K and XP  
 Drivers for VxWorks 5.4.2  
 Source code for Linux and QNX  
 Power Adapter



**ME-ABD78MSH - Heavy Duty Terminal Box with Spring Clip**

## ORDERING INFORMATION

	Part Number
8 Relay PCI Module with 8 TTL inputs, 16 TTL I/O lines and 8 opto isolated inputs	ME-630/8-USB
16 Relay PCI Module with 8 TTL inputs, 16 TTL I/O lines and 8 opto isolated inputs	ME-630-USB
Cable, D78 male to D78 female connector, 1 meter long. 0.1 A current capacity	MEAK-D78/1
Cable, D78 male to D78 female connector, 2 meter long. 0.1 A current capacity	MEAK-D78
Terminal Box D78 male connector to spring terminals, 0.1 A current capacity	ME-ABD78M
Cable, D78 male to D78 female connector, 1 meter long. 2 A current capacity	MEAK-D78 HQ/1
Cable, D78 male to D78 female connector, 2 meter long. 2 A current capacity	MEAK-D78 HQ
Terminal Box D78 male connector to spring terminals, 2 A current capacity	ME-ABD78MSH