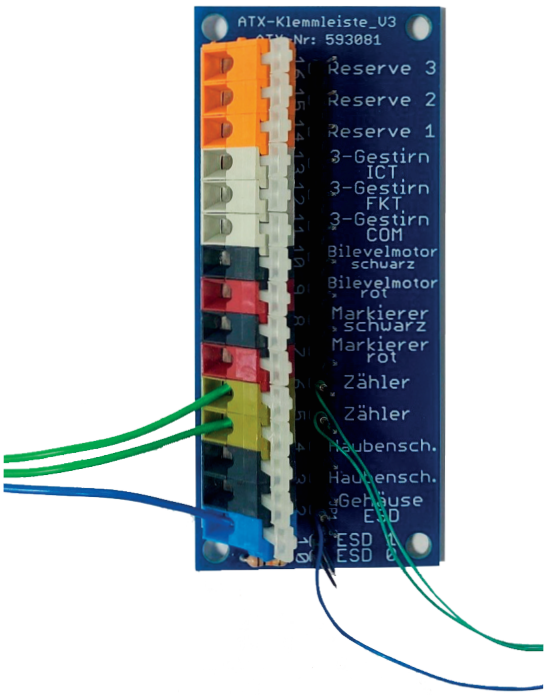
ADDITIONAL CIRCUITS & AUXILIARY BOARDS

for electrical adaptation and protection
in professional test fixture construction

ATX TERMINAL STRIP

Central interface for standard adapter accessories

The ATX terminal strip serves as a central wiring unit for standard adapter accessories and enables structured and reliable connection of the various components. Here, the strands are transferred to wrap pins via terminals. The terminal strip can be used as a connection or terminal block.



Typical accessories with real added value:

- 3x spare connections
- 3-pin connectors
- Bilevel motors (for defined pressure or contact levels)
- Board markers
- Stroke counters
- Hood switches
- ESD wiring

The flexible connection option enables structured and efficient wiring in the system – and at the same time ensures better clarity during troubleshooting.

ATX-Terminal strip

Designation	Designation 2	Order number
ATX terminal strip V3 - pre-assembled	Fully equipped, 15-pin.	398120

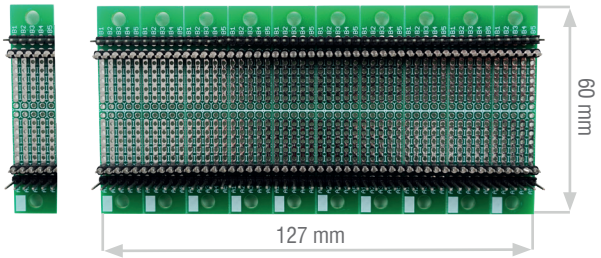
RESISTANCE BOARDS

Resistor boards offer a structured and clear way to mount and solder resistors, diodes, and other components. They also enable easy measurement and analysis, making them ideal for developers, test engineers, and service personnel who need fast and accurate measurement access.

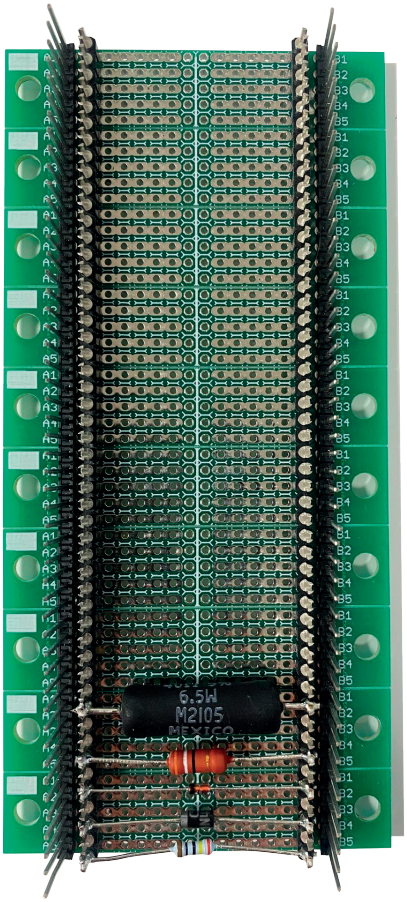
Resistance circuit board, 10-fold use

Resistor board for mounting a maximum of 5 resistors per panel.
Wirewound resistors up to 25 W can be soldered in.
(without resistors)

Designation	Resistors	Order number
Resistance board, 1-fold	for max. 50 resistors	552144
Resistance board, 10-fold	for max. 50 resistors	on request



Connections (example)



Possible connections

The circuit board is used to attach and connect various components of different sizes. The connections can be freely selected.

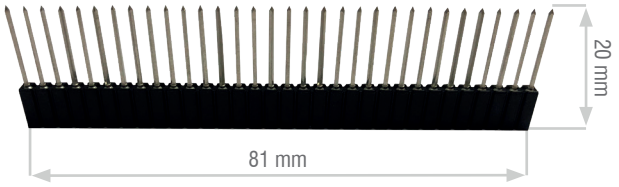
Here, for example, we show connections for resistors, diodes, capacitors, coils, etc.

PIN AND SOCKET STRIPS

Our 32-pin and 36-pin female connectors are used for electrical contacting and signal-compatible, plug-free wiring on male connectors within the respective adapter assemblies. Thanks to their precise design with a pitch of 2.54 mm, they enable error-free plug connections and ensure stable, long-lasting signal transmission – even under increased mechanical and thermal loads. At the same time, they make it much easier to replace additional electronics.

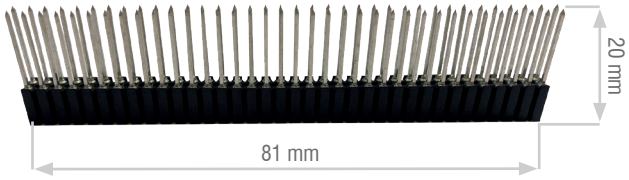
32-pin female connector strips - single row

Designation	Order number
Socket strips 1x 32-pin WW	522005



36-pin female connector strips - double row

Designation	Order number
2x 36-pin female connector	522006

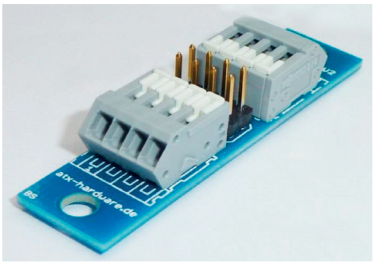


UNIVERSAL CLAMP

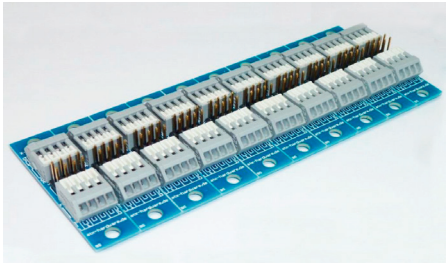
X-FEDER-4

The X-Feder4 universal terminal is our versatile connection solution, specially designed for the secure and flexible connection of dissimilar cables, wires (up to 0.5 mm²) and wire wrap wires. With four contacts per terminal, it enables looping of wires and multiple voltage taps at a single node. Thanks to its easy access, it facilitates the replacement of components such as board markers, safety switches, signal transmitters, LEDs, and light sensors. The X-Feder4 can be used as a connection, terminal, or distribution terminal and is available in various sizes.

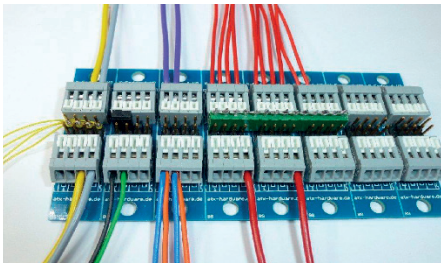
X-spring 4-terminal block



Single (with 2-row bar)



10-fold (with 2-row bar)

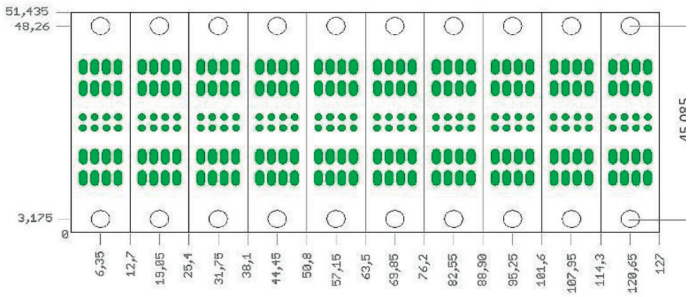


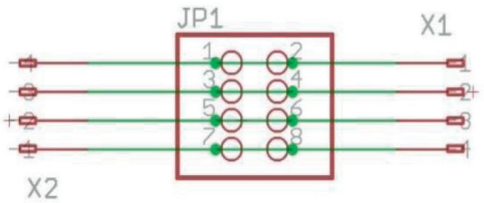
Example

Designation	Groin	Order number
1-fold “X-Feder_4_v2” WAGO-WIRE-WRAP strip - assembled	with 2-row pin header	555024
10-fold “X-Feder_4_v2” WAGO-WIRE-WRAP strip - assembled	with 2-row pin header	555022

Nominal current:	6 amps per terminal Minimum	Cross-section:	0,08mm (AWG 28)
Grid dimension:	2,54 mm	Max. cross-section:	0,50mm (AWG 20)

Drill chart





SENSOR CONNECTION BOARD

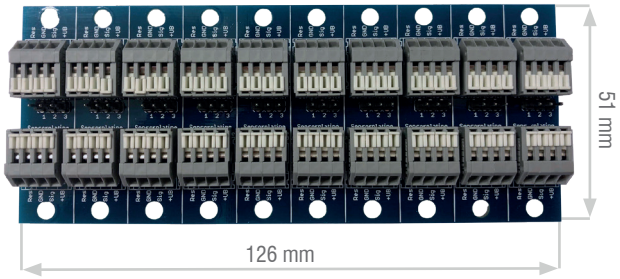
SENSOR BOARD

The sensor board for connecting sensors, 10-fold use with continuous power supply +/- and separate outputs.

Sensor board

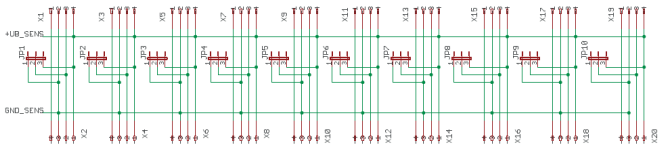
The benefits can be separated.

Designation	Order number
Sensor board - assembled	555030



Nominal current:	6 amps per terminal Minimum	Cross-section:	0,08mm (AWG 28)
Grid dimension:	2,54 mm	Max. cross-section:	0,50mm (AWG 20)

Drill chart

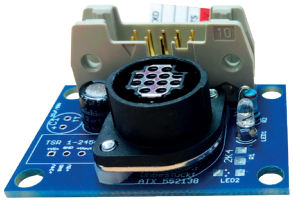


SCANNER CONNECTION BOARD

KEYENCE

Connection board on connector strip

Designation	Stufen	Order number
Keyence scanner connection circuit board	5 V	555031

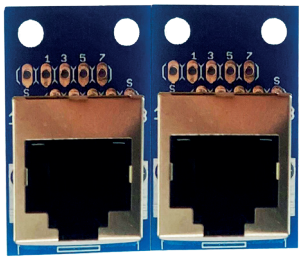


CONVERTER BOARD

RJ45 CONVERTER

Converter board including RJ45 socket - 2-way use

Designation	Nutzen	Order number
RJ45 converter board assembled	2-fold benefit	552135



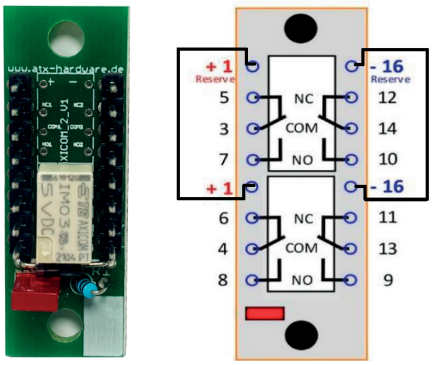
ATX RELAY MODULES

2A (SMALL DESIGN)

Note: All monostable relay modules are equipped with a free-wheeling diode and LED indicator as standard. All bistable relay modules are supplied without a free-wheeling diode and without an LED.

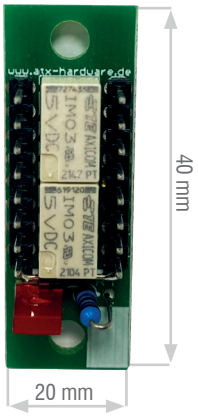
Single relay module (1-slot) with 2x switch

Designation	Switching stage	Order number
Relay module Single 3 V, 2 switches	monostable	550063
Relay module Single 5 V, 2 switches	monostable	550005
Relay module Single 5 V, 2 switches	bistable	550008
Relay module Single 12 V, 2 switches	monostable	550006
Relay module Single 12 V, 2 switches	bistable	550045
Relay module Single 24 V, 2 switches	monostable	550007
Relay module Single 24 V, 2 switches	bistable	550053



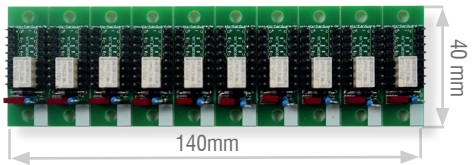
Single relay module (1-slot) with 4x switch

Designation	Switching stage	Order number
Relay module Single 3 V, 4 switches	monostable	550064
Relay module Single 5 V, 4 switches	monostable	550015
Relay module Single 5 V, 4 switches	bistable	550038
Relay module Single 12 V, 4 switches	monostable	550016
Relay module Single 12 V, 4 switches	bistable	550046
Relay module Single 24 V, 4 switches	monostable	550017
Relay module Single 24 V, 4 switches	bistable	550054



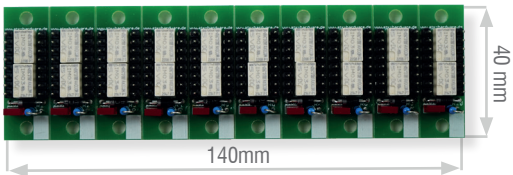
10-fold relay module with 2x switch

Designation	Switching stage	Order number
Relay module 10-fold 3 V, 2 switches	monostable	550065
Relay module 10-fold 5 V, 2 switches	monostable	550018
Relay module 10-fold 5 V, 2 switches	bistable	550039
Relay module 10-fold 12 V, 2 switches	monostable	550019
Relay module 10-fold 12 V, 2 switches	bistable	550047
Relay module 10-fold 24 V, 2 switches	monostable	550020
Relay module 10-fold 24 V, 2 switches	bistable	550055



10-fold relay module with 4x switch

Designation	Switching stage	Order number
Relay module 10-fold 3 V, 4 switches	monostable	550066
Relay module 10-fold 5 V, 4 switches	monostable	550021
Relay module 10-fold 5 V, 4 switches	bistable	550040
Relay module 10-fold 12 V, 4 switches	monostable	550022
Relay module 10-fold 12 V, 4 switches	bistable	550048
Relay module 10-fold 24 V, 4 switches	monostable	550023
Relay module 10-fold 24 V, 4 switches	bistable	550056



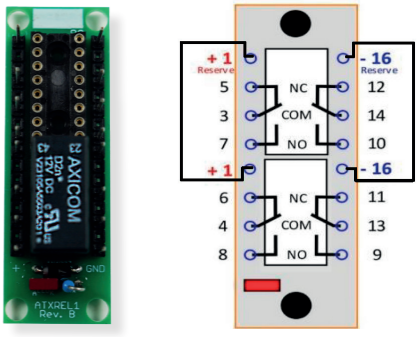
ATX-RELAY MODULE

3A (LARGE DESIGN) - SOCKETED

Note: All monostable relay modules are equipped with a free-wheeling diode and LED indicator as standard. All bistable relay modules are supplied without a free-wheeling diode and without an LED.

Relay module Single (1-slot) with 2x switches

Designation	Switching stage	Order number
Relay module Single 5 V, 2 switches	monostable	550014
Relay module Single 5 V, 2 switches	bistable	550034
Relay module Single 12 V, 2 switches	monostable	550009
Relay module Single 12 V, 2 switches	bistable	550041
Relay module Single 24V, 2 switches	monostable	550013
Relay module Single 24V, 2 switches	bistable	550049

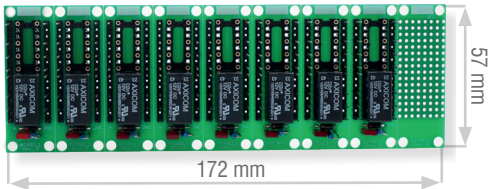


Relay module Single (1-slot) with 4x switches

Designation	Switching stage	Order number
Relay module Single 5 V, 4 switches	monostable	550012
Relay module Single 5 V, 4 switches	bistable	550035
Relay module Single 12 V, 4 switches	monostable	550010
Relay module Single 12 V, 4 switches	bistable	550042
Relay module Single 24V, 4 switches	monostable	550011
Relay module Single 24V, 4 switches	bistable	550050

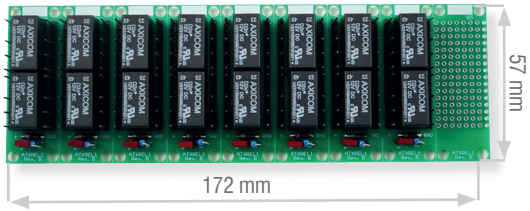
Relay module 8-Fach Nutzen with 2x Switches

Designation	Switching stage	Order number
Relay module 8-Fach 5 V, 2 switches	monostable	550024
Relay module 8-Fach 5 V, 2 switches	bistable	550036
Relay module 8-Fach 12 V, 2 switches	monostable	550025
Relay module 8-Fach 12V, 2 switches	bistable	550043
Relay module 8-Fach 24 V, 2 switches	monostable	550026
Relay module 8-Fach 24 V, 2 switches	bistable	550051



Relay module 8-Fach Nutzen with 4x Switches

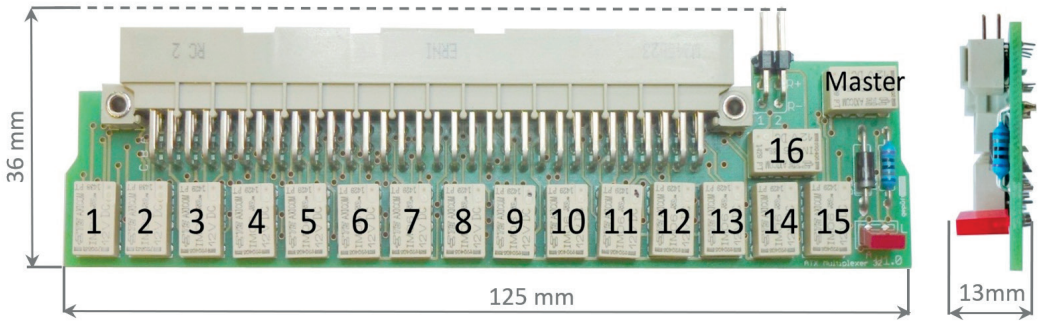
Designation	Switching stage	Order number
Relay module 8-Fach 5 V, 4 switches	monostable	550027
Relay module 8-Fach 5 V, 4 switches	bistable	550037
Relay module 8-Fach 12 V, 4 switches	monostable	550028
Relay module 8-Fach 12V, 4 switches	bistable	550044
Relay module 8-Fach 24 V, 4 switches	monostable	550029
Relay module 8-Fach 24 V, 4 switches	bistable	550052



ATX-MULTIPLEXER

RELAY BOARD

The ATX multiplexer was primarily designed as an expansion module for test systems, but is also suitable for selectively switching off or switching between individual test needle groups (allowing 32 test channels to be expanded to 64 test channels with just one switch signal). Thanks to extremely powerful signal relay components (up to 2 A switching current in a minimal design), it covers a wide range of applications.



Structure

The ATX multiplexer kit consists of one motherboard and one relay card (multiplexer).

Motherboard

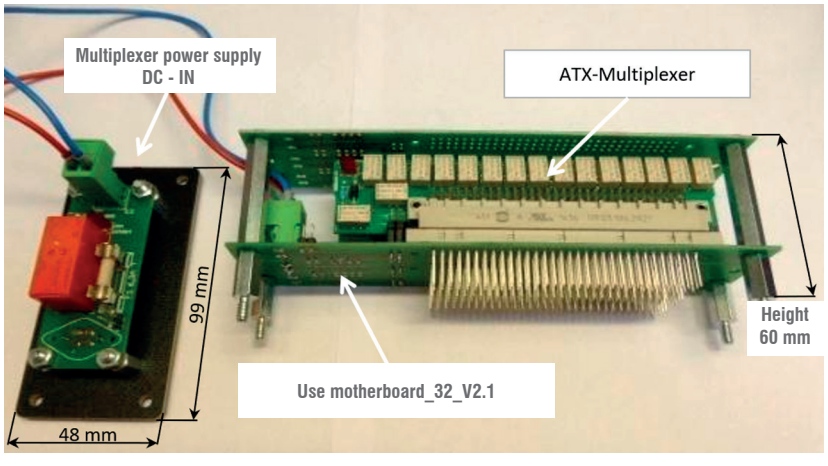
- **32-fold benefit** – segments can be broken off at any point, enabling configurations from 32 to 1024 channels (32 × 32)
- **Selective voltage supply** – operating and control voltages can be fed in channel- or segment-wise via wire bridges

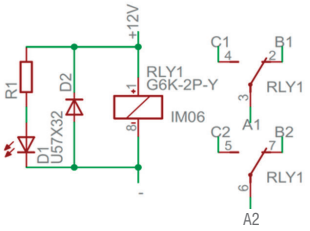
Relay card (multiplexer)

- **16 DPDT relays** – common actuation via a master relay; all channels switch synchronously
- **Potential-free supplies** – for both the master relay and the 16 switching relays; can be grouped for multiple use via wire bridges (see “Wiring” table)
- **Power consumption when fully expanded** – ~6.5 A with 32 cards. A suitable external power supply (laptop-type cable power supply) is available as a separate power supply kit and includes a rear panel cover, DC socket, fuse, and main relay

This modular design allows test systems to be flexibly expanded with high-density, simultaneously switchable signal paths – from compact 32-channel systems to matrix-like 1024-channel solutions. The use of relay cards saves enormous costs for additional test equipment, as complex switching and routing tasks can be performed directly in the system.

Example





Relay connections and counting method 96-pin spring strip

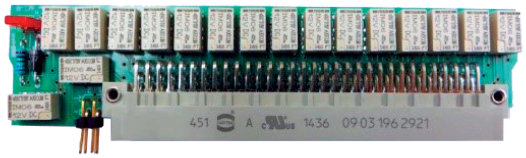
Here are the first 2 changeover contacts of RLY1

ATX-MULTIPLEXER

RELAY BOARD

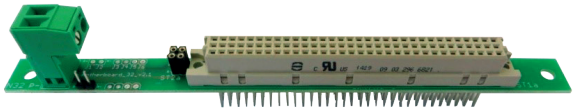
ATX-Multiplexer V1.0

Designation	Designation 2	Order number
ATX-MUX Multiplexer V1.0	16-way with 32 changeover contacts, 12 V	550030



ATX-Motherboard V2.1

Designation	Designation 2	Order number
ATX-MUX-Relais Motherboard V 2.1	-	109511



ATX multiplexer mounting kit

Designation	Designation 2	Order number
ATX-MUX Multiplexer Mounting Kit	suitable for overhead mounting	109508

ATX Multiplexer SET

Designation	Designation 2	Order number
ATX-MUX relay card for switching	32 contacts, includes	109507

ATX multiplexer supply kit

Designation	Designation 2	Order number
ATX MUX Power Supply Kit	-	109509
12V power supply	8,5 A	549074

ATX HARDWARE GMBH WEST

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