



- Single Pole Power Matrix
Available in a Variety of Configurations
- 10 A Current Rating With 300 W/2500 VA
Maximum Power
- Hot Switch to 125 VDC/250 VAC, Cold Switch to
400 VDC/250 VAC
- Uses Electro-Mechanical Power Relays
- 1U Rack Mountable Enclosure
- LXI Standard 1.4 Compliant
- IVI & Direct I/O Drivers
- 3 Year Warranty

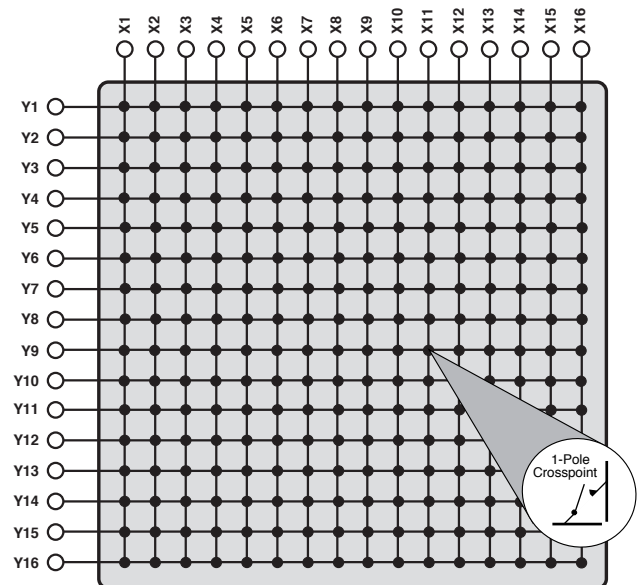
The 60-600 is a high power single pole matrix suitable for power signal routing in large ATE systems. It is available with a selection of X and Y sizes as well as partially populated configurations. Connections to the X and Y buses are via 8-pin power D-type connectors.

The matrix configurations are as follows:

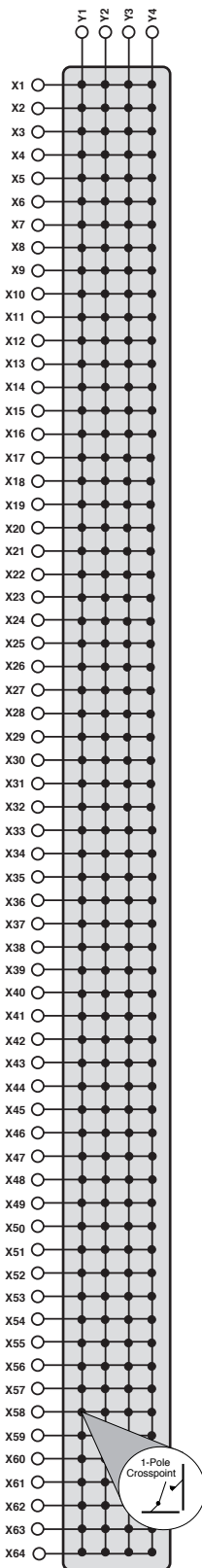
- 60-600-001 - Single 16x16 1-Pole Matrix
- 60-600-002 - Single 32x8 1-Pole Matrix
- 60-600-003 - Single 64x4 1-Pole Matrix
- 60-600-004 - Dual 16x8 1-Pole Matrix
- 60-600-005 - Dual 32x4 1-Pole Matrix
- 60-600-006 - Single 16x8 1-Pole Matrix
- 60-600-007 - Single 32x4 1-Pole Matrix
- 60-600-008 - Single 16x4 1-Pole Matrix

It is designed in accordance with the LXI Standard 1.4 and is supplied in a 1U high, full rack width case with 500 mm depth. It is programmable via the LAN interface using Pickering Interfaces generic switch driver. Standard (W3C) web browsers can be used to access and change configuration information and provide access to the soft front panels.

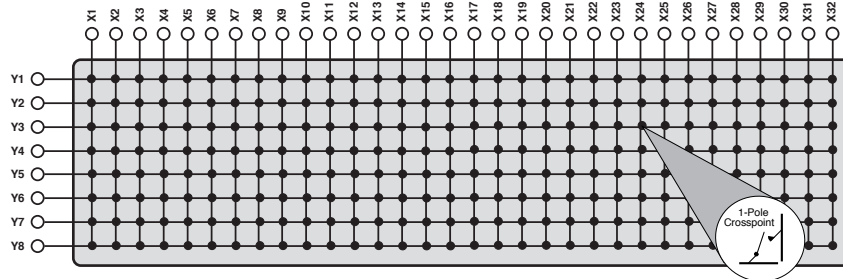
The 60-600 is ideal for applications where a simple start-up process is required and for applications requiring control over large distances.



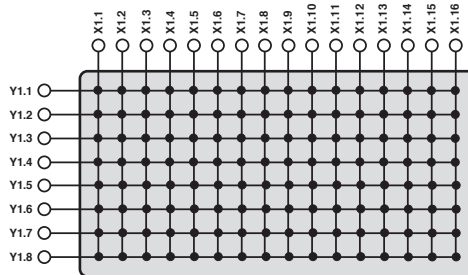
60-600-001 10 Amp 16x16 1-Pole Matrix



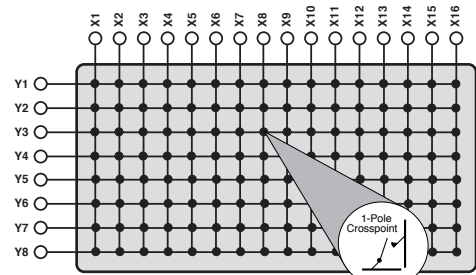
**60-600-003 10
Amp 64x4
1-Pole Matrix**



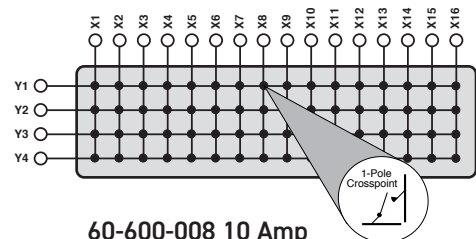
60-600-002 10 Amp 32x8 1-Pole Matrix



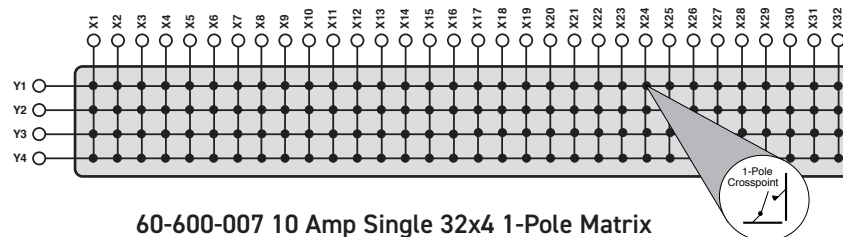
**60-600-004 10 Amp
Dual 16x8 1-Pole Matrix**



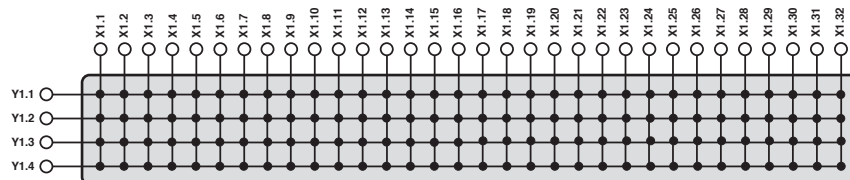
**60-600-006 10 Amp
Single 16x8 1-Pole Matrix**



**60-600-008 10 Amp
Single 16x4 1-Pole Matrix**



60-600-007 10 Amp Single 32x4 1-Pole Matrix



60-600-005 10 Amp Dual 32x4 1-Pole Matrix

Power Relay Type

The 60-600 is constructed with high quality electro-mechanical power relays. 4 spare relays are included inside the unit to allow easy maintenance with minimum downtime.

Switching Specification

Switch Type	Electro-mechanical
Contact Type:	Gold flash over silver alloy
Cold Switching Capacity	
Maximum Current:	10 A
Maximum Voltage:	400 VDC/250 VAC*
Hot Switching Capacity	
Maximum Current:	10 A
Maximum Voltage:	125 VDC/250 VAC*
Maximum Power:†	300 W/2500 VA
Minimum Switching Capacity:	10 mA, 5 VDC
Initial On Path Resistance:	<100 mΩ (50 mΩ typical)
Off Path Resistance:	>10 ⁹ Ω
Operate Time:	10 ms typical
Expected Life (operations) ‡	
Mechanical Life:	>5×10 ⁷
At Max Hot Switch Capacity:	>1×10 ⁵

* For full voltage rating, signal sources to be switched must be fully isolated from mains supply and safety earth.

† For variation of maximum hot switching capacity of voltage with current refer to plot.

‡ As switch life deteriorates rapidly when hot switching signals above 30 VDC, it is advisable to only cold switch above this level.

Power Source

Universal AC mains supply, 90-120/200-240 V 50-60 Hz	
Power Inlet:	Male IEC connector
Power Rating:	100 VA maximum
Fuse Rating:	2.5 A, 250 V

LAN Interface

Compliant to LXI Standard 1.4, the 60-600 has a 1000Base-T Ethernet Interface via a standard RJ-45 connector mounted on the rear panel with an LCD display showing the unit's IP address.*

*Note: Legacy units may not have 1000Base-T support or be fitted with an LCD display.

Mechanical Characteristics

Supplied with front panel ears to enable rack mounting on a shelf or other rear support mechanism.

Dimensions: 1U high, full rack width, 500 mm depth

3D models for all versions in a variety of popular file formats are available on request.

Connectors

- X connections via 8-pin male power D-types.
- Y connections via 8-pin male power D-types.

(The number of connectors depends upon the total X and Y sizes of the matrix).

For pin outs please refer to the operating manual.

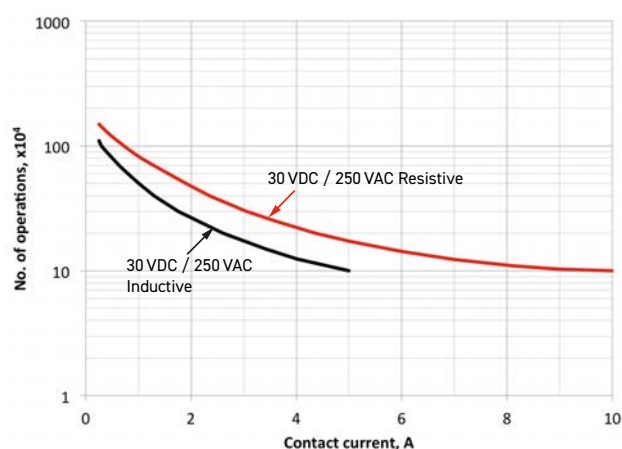
Operating/Storage Conditions

Operating Temperature:	0 °C to +55 °C
Humidity:	Up to 90% non-condensing
Altitude:	5000 m
Storage/Transport Temperature:	-20 °C to +75 °C
Humidity:	Up to 90% non-condensing
Altitude:	15000 m

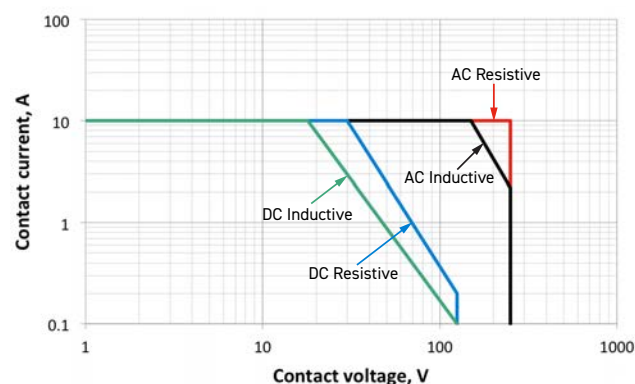
Safety & CE Compliance

All products are fully CE compliant and meet applicable EU directives:

Low-voltage safety EN61010-1:2010,
EMC Immunity EN61326-1:2013,
Emissions EN55011:2009+A1:2010.



60-600 Current/Operating Life Plot



60-600 Current/Voltage Plot

Product Order Codes

LXI 10A 1-Pole Matrix, Single 16x16	60-600-001
LXI 10A 1-Pole Matrix, Single 32x8	60-600-002
LXI 10A 1-Pole Matrix, Single 64x4	60-600-003
LXI 10A 1-Pole Matrix, Dual 16x8	60-600-004
LXI 10A 1-Pole Matrix, Dual 32x4	60-600-005
LXI 10A 1-Pole Matrix, Single 16x8	60-600-006
LXI 10A 1-Pole Matrix, Single 32x4	60-600-007
LXI 10A 1-Pole Matrix, Single 16x4	60-600-008

Product Customization

Pickering LXI units are designed and manufactured on our own flexible manufacturing lines, giving complete product control and enabling simple customization to meet very specific requirements.

Customization can include:

- Alternative reed relay types
- Mixture of reed relay types
- Alternative number of relays
- Different performance specifications

All customized products are given a unique part number, fully documented and may be ordered at any time in the future.

Please contact your local sales office to discuss.

Support Products

Spare Relay Kits

Kits of replacement relays are available for the majority of Pickering's switching products, simplifying servicing and reducing down-time.

Product

Relay Kit

60-600 - All Versions

91-100-085

For further assistance, please contact your local Pickering sales office.

Mating Connectors & Cabling

For connection accessories for the 60-600 please refer to the [90-012D](#) 8-pin Power D-type Connector Accessories data sheet where a complete list and documentation can be found for accessories, or refer to our website.

Connectivity Solutions

We provide a full range of supporting cable and connector solutions for all our switching products—20 connector families with **1200+** products. We offer everything from simple mating connectors to complex cables assemblies and terminal blocks. All assemblies are manufactured by Pickering and are guaranteed to mechanically and electrically mate to our modules. These accessories are detailed in Connector Accessories data sheets, where a complete list and documentation can be found for each accessory.



Connectors
& Backshells



Multi-way
Cable Assemblies



RF Cable
Assemblies



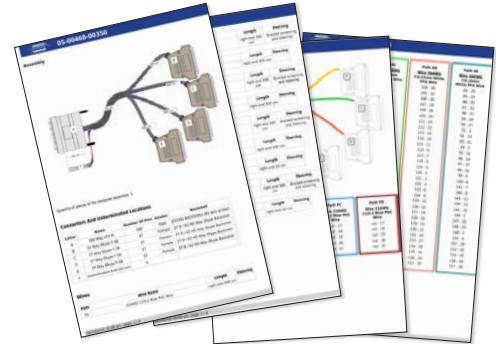
Breakouts



Connector
Blocks

We also offer customized cabling and have a free online **Cable Design Tool** that can be used to create custom cable solutions for many applications.

- Fully supported on modern browsers and tablet operating systems.
- Built-in tutorials and videos allow you to get quickly up to speed.
- Store cable assemblies in the Cloud and develop over time.
- Each cable design has a downloadable PDF documentation file detailing all specifications



Start designing your custom cabling, go to pickeringtest.com/cdt

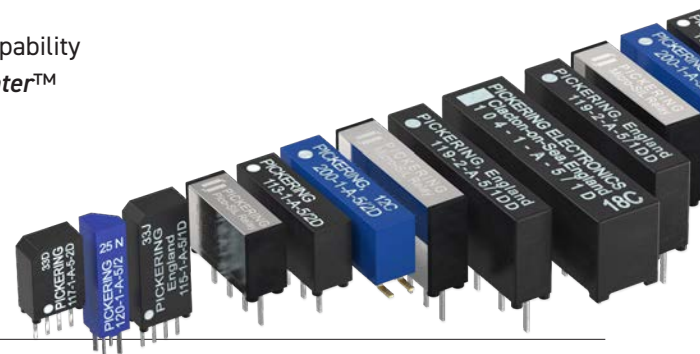
Mass Interconnect

We recommend the use of a mass interconnect solution when an Interchangeable Test Adapter (ITA) is required for PXI/LXI based test systems. Our modules are fully supported by Virginia Panel and MacPanel.

Pickering Reed Relays

We are the only switch provider with in-house reed relay manufacturing capability via our Relay Division. These instrument grade reed relays feature **SoftCenter™** technology, ensuring long service life and repeatable contact performance.

To learn more go to pickeringrelay.com



Programming

Pickering provide kernel, IVI and VISA (NI & Keysight) drivers which are compatible with all Microsoft supported versions of Windows and popular older versions.

For more information go to pickeringtest.com/os

The VISA driver support is provided for LabVIEW Real Time Operating Systems (Pharlap and Linux-RT). For other RTOS support contact Pickering. These drivers may be used with a variety of programming environments and applications including:

- **Pickering Interfaces Switch Path Manager**
- **National Instruments** products (LabVIEW, LabWindows/CVI, Switch Executive, MAX, TestStand, VeriStand, etc.)
- **Microsoft Visual Studio** products (Visual Basic, Visual C++)
- **Programming Languages** C, C++, C#, Python
- **Keysight** VEE and OpenTAP
- **Mathworks MATLAB, Simulink**
- **Marvin ATEasy**
- **MTQ Testsolutions** Tecap Test & Measurement Suite

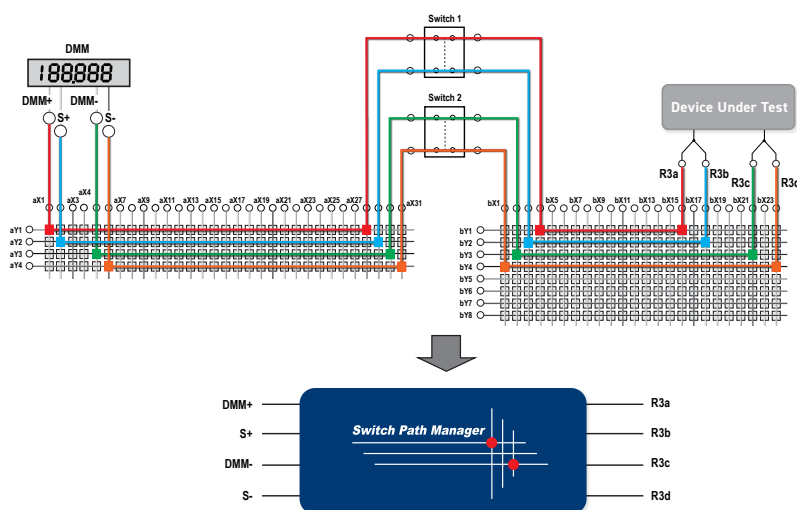
Drivers for popular Linux distributions are available, other environments are also supported, please contact Pickering with specific enquiries. We provide Soft Front Panels (SFPs) for our products for familiarity and manual control, as well as comprehensive documentation and example programs to help you develop test routines with ease.

To learn more about software drivers and development environments go to pickeringtest.com/software

Signal Routing Software

Our signal routing software, Switch Path Manager, automatically selects and energizes switch paths through Pickering switching systems. Signal routing is performed by simply defining test system endpoints to be connected together, greatly accelerating Test System software development.

To learn more go to pickeringtest.com/spm



Diagnostic Relay Test Tools

eBIRST Switching System Test Tools are designed specifically for our PXI, PCI or LXI products, these tools simplify switching system fault-finding by quickly testing the system and graphically identifying the faulty relay.

To learn more go to pickeringtest.com/ebirst



Three Year Warranty & Guaranteed Long-Term Support

All standard products manufactured by Pickering Interfaces are warranted against defective materials and workmanship for three years from the date of delivery to the original purchaser. Extended warranty and service agreements are available with various levels for your requirements. Although we offer a 3-year warranty as standard, we also include guaranteed long-term support—with a history of supporting our products for typically 15-20 years.

To learn more go to pickeringtest.com/support

Available Product Resources

We have a library of resources including success stories, product and support videos, articles and white papers as well as application-specific brochures to assist you. We have also published reference books on switching technology and the PXI and LXI standards.

To view, download or request any of our product resources go to pickeringtest.com/resources

