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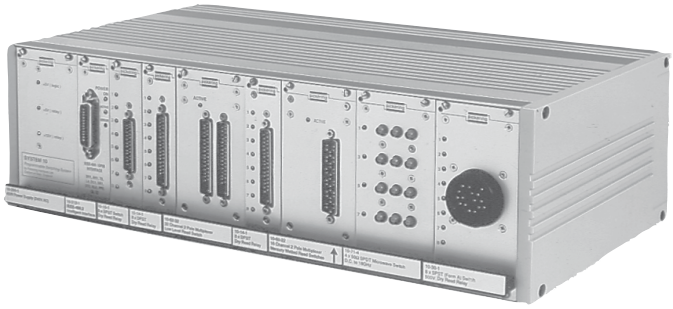
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Find the *Pickering 10-930A-001* at our website: *Click HERE*

# 10-930A/934A
# System 10 Case

- Compact Free Standing Case Which May be Rack Mounted
- Available in 3U and 6U Versions
- Choice of Module Access at Front or Rear of Case
- Use With Any System 10 Module
- Includes Complete Pre-Wired System Backplane
- Special Model Versions Available
- DIN 41494 (IEC 297) Compatible



Full Width Single Height Case With Front Access, Type 10-930A-001.




Double Height Case: Front View, All Switching Modules Plug In At Rear, Type 10-934-002

System 10 Cases come in a variety of sizes and are suitable for both benchtop and rack mounting, with either front or rear access versions to suit all cabling needs. Any combination of switching modules may be loaded into a case.

Switching System Cases may be benchtop or rack mounted (using built in rack mount brackets). The case is supplied complete with pre-wired internal backplane/s and module guides to match the configuration required, unused slots have blanking panels inserted.

If you may later need to add a System 20 module please look at the System 10/20 case datasheet, types 20-935A/936A.

## Front or Rear Access

All case types are available with a choice of front or rear switching module loading:

Front Access Cases are generally popular for smaller systems where the unit will be used on a benchtop, the switching modules plug into the front of the case.

Rear Access Cases are usually more convenient for larger systems where a complete test or data acquisition system is being assembled into a cabinet. The switching modules plug into the rear of the case, keeping all wiring inside the cabinet, leaving the front panel uncluttered. This case version has a simple front panel with power indicator as shown in picture to right.

## Serviceability

All Pickering Interfaces case types are passive, they contain no active components. Therefore virtually all maintenance and servicing can be done by simple module swapping, without having to remove the case.

## Enclosure Range Overview

The following case types are available, with a choice of front and rear access versions (full order codes are contained overleaf):-

- Full Width Single Height Case. Type 10-930A.
- Full Width Double Height Case. Type 10-934A.

## Expansion Modules

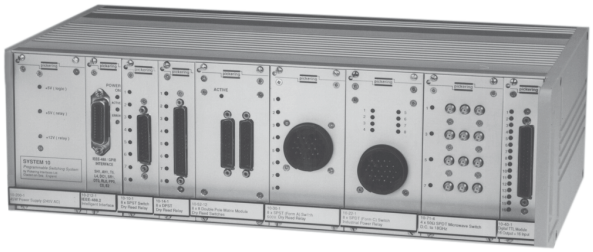
If the number of modules you require does not fit within a standard case or if you wish to split the switching system into two or more cases (e.g. to keep high voltage modules away from low voltage types) then there are 2 options:

- Simply treat each case as a separate system, each with it's own 10-921-001 interface module - This is the preferred option.
- Use 10-925 expansion modules. Here the case with the 10-921-001 interface module acts as the master with all other cases acting as slaves. Each case must contain it's own power supply unit plus expansion module/s. Expansion modules must be used in pairs, the expansion cable linking them can be ordered to the length required.

ISSUE 2, JUL 2006




**Single Height Case: Front View, All Switching Modules Plug In At Rear, Type 10-930A-002**



**Single Height Case: Front Access Version, Type 10-930A-001**

## Power Supplies

Front Access cases require power supply, usually type 10-910A-001, while rear access usually require type 10-910A-002.

On both versions power enters at the rear of the case on an IEC connector.

## Earth & Shielding Details

The whole case (all external surfaces) is earthed to the a.c. power ground. All plug-in modules earth by means of 2 or 4 earth bonding screws on their front panel.

For shielding purposes most switching modules have a shield connection point to be used with user constructed cable assemblies. In addition most modules have supplementary RFI screening, especially RF/Microwave types.

An earthing stud (M8) mounted on a 6HP panel suitable for a central earthing point is available, type 10-942-903.

## System 20 Modules

System 20 modules may be used within a System 10 case, this will require use of case type 20-935A/936A, please refer to separate data sheet.

## System 10 Backplane

The System 10 backplane provides all modules with power and communication. Each slot has a DIN 41612 64 way connector. All slots are arranged on a 0.6 Inch pitch.

There are 22 free slots in the full width 3U case and 50 slots in a full width 6U case.

Maximum number of modules per switching system is approximately 20, the backplane is divided into the following areas:-

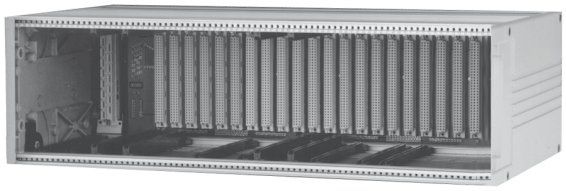
Power Supplies

| | |
|---|---|
| 5V | Logic |
| 5V, 12V | Relays |

System Digital Bus is the internal bus used to communicate with all System 10 modules. It has a "Master/Slave" configuration with the GPIB/RS-232 interface module being the master.

Analogue Bus Is used by multiplexer modules to carry analogue signals. 10 poles, each pole separately screened, plus "settled" line. Cases with System 20 capability are usually fitted with an additional 24-pole analogue bus.

Backplane Connector Type DIN 41612 type A/C (64 way), rated for 500 insertions.

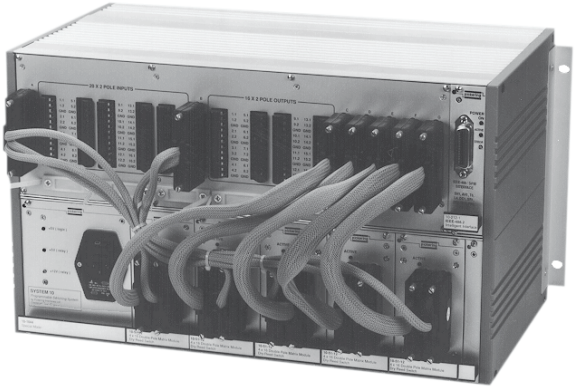


**Inside View of 10-930A-001 System 10 Case**

## Built In Rack Mounting Ears

The case has built-in rack mounting ears (see picture). These allow the case to be either used on a benchtop or in a cabinet with the ears pulled out.





**Customised 6U Case: Rear Access Model with Special Screw Terminal Connector Block and Custom Cable Assembly**

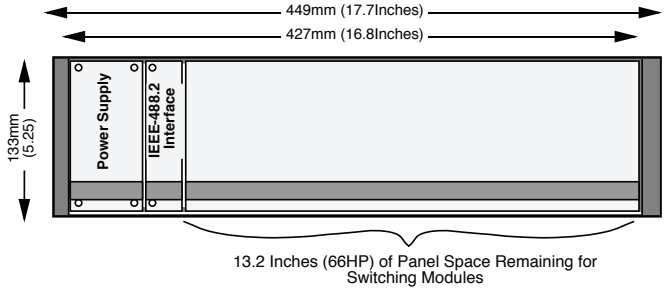


**View from rear of 10-930A-001 Case**

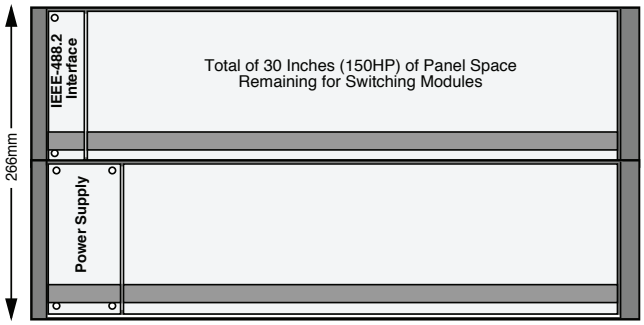
## Case Schematic Diagrams

The diagrams below illustrate all case variants showing how much switching module space is available for each type. These will allow the most suitable case type to be selected.

If your application exactly fills a case it may be worth looking at the next size up, so that unforeseen requirements needing additional modules can easily be added at a later date.




**Full Width Single Height Case 10-930A-001 (Front Access) and 10-930A-002 (Rear Access)**




**Full Width Double Height Case 10-934A-001 (Front Access) and 10-934A-002 (Rear Access)**

### Dimensional Data

All cases conform to DIN 41494 Part 5, IEC 297 Sec 2 (see diagram on above) for further dimensional data please contact Pickering Interfaces.

| | |
|---|---|
| Case Colour: | Light Grey |
| Case Weight: | Depends upon case size and number and type of modules being used, please contact factory to discuss. |
| Case Width: | 449mm (without rack mount brackets) |
| Case Height: | 3U (133mm)<br>6U (266mm) |
| Case Depth: | 250mm |

For rear access case types allow extra space for switching module protruding connectors (possibly up to 100mm).

### Environmental Specification

| | |
|---|---|
| Operating Temperature | 0°C to 50°C. |
| Storage Temperature | -20°C to 75°C. |
| Humidity | 95% Non Condensing. |
| Cooling Requirements | Natural Convection, No Internal Fan. |

### Product Order Codes

| | |
|---|---|
| 3U Full Width Case, Front Access | **10-930A-001** |
| 3U Full Width Case, Rear Access | **10-930A-002** |
| 6U Full Width Case, Front Access | **10-934A-001** |
| 6U Full Width Case, Rear Access | **10-934A-002** |

### Additional Product Order Codes

| | |
|---|---|
| System 10/20 Expansion Module | **10-925-001** |
| Expansion Cable Assembly (2m length) | **10-953-020** |
| Other cable lengths may be specified e.g. -010 (1m), -005 (0.5m) (Expansion Modules must be used in pairs). | |
| PCB Card Guide | **10-941-001** |
| Plug-In Module Card Guide | **10-941-002** |
| 3HP Blanking Panel (3U) | **10-942-003** |
| 6HP Blanking Panel (3U) | **10-942-006** |
| 12HP Blanking Panel (3U) | **10-942-012** |
| 21HP Blanking Panel (3U) | **10-942-021** |
| Earthing Stud (M8) 6HP Panel (3U) | **10-942-903** |

Other case sizes & options are available, please contact factory if you require further information. All switching systems are shipped with blanking panels installed in unused slots.

### Latest Details

Please refer to our Web Site for Latest Product Details.
www.pickeringtest.com

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