Features

- Securely mount SNAP I/O racks, controllers, and power supplies to DIN rails
- Easily jumper 4-channel digital I/O modules
- Commission high-density digital modules
- Replace lost or damaged parts
- Use legacy and current brains and mounting racks together



Description

SNAP TEX mounting and wiring tools and spare parts are all part of the SNAP TEX family of wiring and mounting accessories. The parts in this data sheet are used for:

- Securely mounting SNAP I/O racks, controllers, power supplies, and other devices on DIN rails
- Wiring and commissioning SNAP I/O modules
- Replacing lost or damaged parts
- Adapting legacy parts to newer SNAP PAC parts

For cables and breakout boards in the SNAP TEX family, see form #1756, the SNAP TEX Cables and Breakout Boards Data Sheet.

DIN-Rail Mounting Clips and Kits

Opto 22 SNAP I/O mounting racks, controllers, power supplies, breakout boards, etc. can be panel mounted or DIN-rail mounted. For DIN-rail mounting, these clips and kits adapt the bottom of the hardware to attach securely to DIN rails.

Choose the kit or clips you need based on the table on page 2.

Operator Interface for SNAP HDD Modules

The **OptoTerminal-G20** makes it easier to commission and troubleshoot SNAP high-density digital (HDD) modules such as the SNAP-IAC-16 and the SNAP-ODC-32-SRC.

The OptoTerminal-G20 displays the status of a highdensity digital module's points on a two-line LCD display and can also be used to turn output points on and off. See Opto 22 form 1547, the *SNAP High-Density Digital Modules User's Guide*, for more details.

Part Numbers

Part	Description		
Rack Accessories			
SNAP-PSDIN	DIN-rail adapter kit for most SNAP power supplies and controllers		
SNAP-PSUDIN	DIN-rail adapter kit for large-footprint SNAP power supplies		
SNAP-ROKDIN	DIN-rail adapter kit for SNAP-PAC-SRA or SNAP-RPSW		
SNAP-S2DIN	DIN-rail adapter kit for SNAP-PAC-S2		
SNAP-LCM4DIN	DIN-rail adapter kit for SNAP-LCM4		
SNAP-CDBBDIN	DIN-rail adapter kit for classic digital brain boards (E1, B1, B5, B100)		
SNAP-TEX-DRC10	SNAP PAC rack DIN-rail adapter clip, 10-pack		
SNAP-TEX-RCKCAP	SNAP PAC rack connector cap, pack of 16		
SNAP-TEX-REC10N	Narrow end cap for SNAP PAC racks DIN-rai assemblies, 10-pack		
SNAP-TEX-REC10W	Wide end cap for SNAP PAC racks DIN-rail assemblies, 10-pack		
	Other Tools and Parts		
OPTOTERMINAL-G20	Operator interface for commissioning SNAP high-density digital modules		
SNAP-STRAPB	Pack of 10 jumper straps for digital SNAP I/C modules		
SNAP-STRAP-OMR	Jumper strap for SNAP-OMR6 modules		
SNAP-WIRESTRAPB	Pack of 10 jumper connectors for digital SNAP I/O modules		
SNAP-MODTOOL	SNAP I/O module removal tool, 10-pack		
SNAP-FIELDCONB	SNAP module field connector, 10-pack		
SNAP-RCK-B2M	Adapter for using legacy SNAP brain on SNAP PAC or M-series racks		
SNAP-RCK-M2B	Adapter for using SNAP PAC or SNAP M brains on SNAP B-series racks		
SNAP-MR10	Mechanical relay replacement for breakout boards, 10 A		

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DIN-Rail Clips and Kits

Power SuppliesSNAP-PS5SNAP-PS5-24DC1 kitSNAP-PSDINSNAP-PS24SNAP-PS24U1 kitSNAP-PSDINSNAP-PS5USNAP-PS24U1 kitSNAP-PSUDINControllersSNAP-PAC-S1SNAP-PAC-S1-FM1 kitSNAP-PSDINSNAP-PAC-S1-WSNAP-PAC-S2-W1 kitSNAP-S2DINSNAP-PAC-S2SNAP-PAC-S2-W1 kitSNAP-S2DINMounting RacksSNAP-PAC-RCK4SNAP-PAC-RCK123 clipsSNAP-PAC-RCK8SNAP-PAC-RCK12-FM3 clipsSNAP-TEX-DRC10* (10 clips in package)SNAP-PAC-RCK16SNAP-PAC-RCK16-FM4 clipsBreakout BoardsSNAP-TEX-MR10-16C3 clipsSNAP-TEX-DRC10* (10 clips in package)SNAP-TEX-MR10-16SNAP-TEX-MR10-16C3 clipsSNAP-TEX-DRC10* (10 clips in package)SNAP-AIMA-HDB SNAP-IDC-HDB SNAP-AIMA-HDB-FM SNAP-TEX-S1SNAP-TEX-32 SNAP-TEX-S22 clipsSNAP-TEX-DRC10* (10 clips in package)	Use this end cap	
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	SNAP-TEX-REC10N* (10 in package; use 2 per board)	
SNAP-ODC-HDB SNAP-SCM-BB4 3 clips		
Other SNAP Devices		
SNAP-PAC-SRA SNAP-RPSW 1 kit SNAP-ROKDIN	N/A	

* Requires the black plastic extrusion that comes with new racks and boards. Older racks and boards have a light-colored plastic extrusion. The black plastic extrusion is not sold separately. It is included with a new board or rack.



SNAP-PSDIN



SNAP-TEX-REC10W



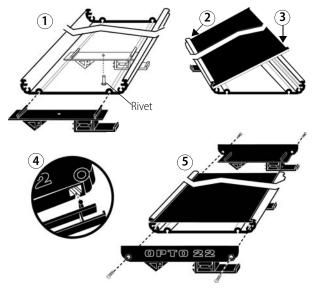
SNAP-TEX-DRC10

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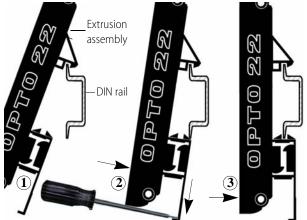
Racks: Installing SNAP Rack DIN-Rail Clips

- 1. For racks with three or more clips only: Slide one DIN clip to the middle position and secure with the provided rivet. For racks with four clips, add another middle clip.
- 2. Insert one edge of the circuit board into the extrusion.
- **3.** Push down hard on the other edge to snap the board into place.
- **4.** Attach one DIN clip to each end cap using the slots in the end caps as shown.
- 5. Using the screws provided, secure an end cap and DIN clip assembly to each end of the extrusion.



Attaching the Adapter Clip to a DIN Rail

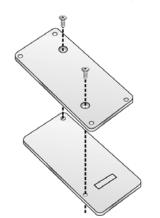
- 1. Hook the DIN-rail clip over the top of the DIN rail.
- 2. Using a screwdriver, pry open the DIN-rail clip flange at the bottom of the clip. Push the clip towards the DIN rail.
- **3.** Snap the DIN-rail clip into place.



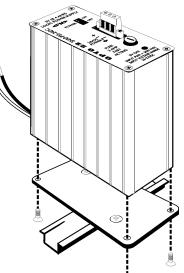
To remove: Use a screwdriver to pry open the DIN-rail clip flange.

Power Supplies: Installing SNAP-PSDIN Adapters

- 1. Remove the four screws that fasten the panel mounting base plate to the power supply.
- 2. Remove the panel mounting base plate making sure to *save the screws*.
- **3.** Using the two flat-head screws included with the kit, assemble the SNAP-PSDIN-RAIL adapter as shown.



- **4.** Using the four screws removed in step 1, fasten the DIN-rail adapter to the power supply.
- **5.** Mount the power supply on the DIN rail next to the rack or controller it will power.



NOTE: The SNAP-PS5-24DC power supply is shown. Other power supplies have similar base plates.

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SNAP TEX Mounting/Wiring Tools and Spare Parts

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Installing the SNAP-ROKDIN Adapter Kit

This adapter kit is for the SNAP-PAC-SRA arbiter or the SNAP-RPSW redundant power switch. The DIN-rail clip adds an additional 0.375 inches (0.95 cm) to the device's height. You need one adapter kit per device.

- **1.** Turn the device over. Unscrew the four flat-head screws and remove the base plate. Save the screws.
- 2. Attach the new, plain base plate to the device using the saved screws.
- **3.** Align the DIN-rail clip to the new base plate so that the spring will be at the bottom of the device when it is mounted on the DIN rail. Use the two round-head screws provided with the kit to attach the clip.



4. To mount, align the spring clip with the bottom edge of the DIN rail, push up to engage the spring, and slip the two top flanges over the top edge of the DIN rail.

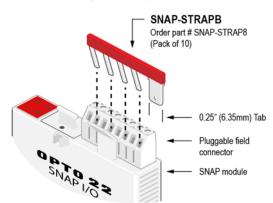
Wiring Accessories

Jumper Straps for SNAP Digital I/O

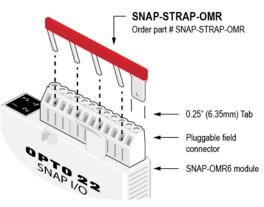
SNAP I/O module jumper straps let you easily make jumper connections on a 4-channel digital SNAP I/O module.

- The **SNAP-STRAPB** plugs into individual wire connections on an an 8-position pluggable field connector.
- The SNAP-STRAP-OMR plugs into the 12-position field connectors on SNAP-OMR6 mechanical relay output modules to connect the third wire of each channel.
- SNAP-STRAPs on multiple modules can be connected using the **SNAP-WIRESTRAPB**.

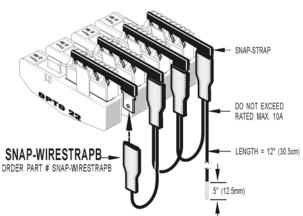
Both parts are Factory Mutual approved.



SNAP-STRAPB works with 8-position field connectors on many SNAP I/O modules.



SNAP-STRAP-OMR works with 12-position gray field connectors on SNAP-OMR6 modules.



Length of wire between connectors = 3.25" (8.26 cm)

For other wiring options, see form #1756, the SNAP TEX Cables and Breakout Boards Data Sheet.

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Other Accessories

Connector Caps

The **SNAP-TEX-RCKCAP** slips over an empty module connector on the rack to keep it dirt- and dust-free. The flexible black plastic cap is removable at any time. Pack of 16.

Replacement Parts

The **SNAP-FIELDCONB** replaces lost or damaged field connectors (pack of 10). The connector plugs into the top of a SNAP I/O module and is used for wiring field devices to the module. Used with most 1-, 2-, and 4-channel digital and analog modules, it accepts up to 14 AWG wire. Torque specifications for connector screws: 5.26 inch lbs (0.6 Newton m.)

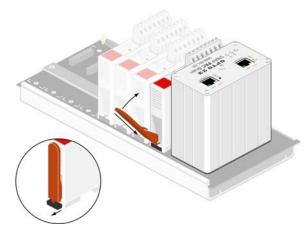
The **SNAP-MR10** is a replacement mechanical relay (10 A) and clip for SNAP-TEX-MR10-16, SNAP-TEX-MR10-16C, and SNAP-TEX-MR10-4 breakout boards. Typical life expectancy (Electrical): 1×10^5 .

SNAP I/O Module Removal Tool

The **SNAP-MODTOOL**, included with each I/O mounting rack, is used to remove a SNAP I/O module from the rack. If you need extra tools, order this pack of 25.

To remove a module:

- 1. If the modules are held in place with screws, remove them.
- 2. Holding the SNAP module tool (provided) as shown in the illustration below, insert it into the notch at the base of the module.
- **3.** Squeeze the module tool against the module to open the release latch, and pull straight up on the module to remove it.



Rack Adapters for Mixing Legacy and Current Brains and Racks

While it's always best to use brains and racks designed to work together, sometimes mixing them is temporarily necessary. Two rack adapters are available:

- **SNAP-RCK-B2M** allows a legacy SNAP brain such as a SNAP-B3000-ENET (blue connector) to be used on a SNAP PAC rack or a SNAP M-series rack (black connector).
- **SNAP-RCK-M2B** allows a newer SNAP PAC brain or rackmounted controller, such as a SNAP-PAC-EB2 or a SNAP-PAC-R1 (black connector), to be used on an older SNAP Bseries rack (blue connector).

Please note that the adapter does not change the functionality or limitations of the older products. For example, when used with a newer brain or controller, a SNAP B-series rack is still limited to using digital modules only in its first eight slots.

For additional information, see form #1688, *SNAP PAC System Migration Technical Note* and form #1693, *Legacy and Current Product Compatibility Charts.*

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