

# Instructions for PRO2 Star Linking, Part Number KIT-PRO2LINK-01M and Part Number KIT-PRO2LINK-01D

# **Purpose**

This technical note introduces Server Technology's optional PRO2 **Star Linking** feature and provides the step-by-step instructions for installing the kit that provides multi-link arrangement of a master unit with up to three link units.

# **About Star Linking**

Server Technology's PRO2 product line introduces the **Star Linking** technology that supports the optional linking of up to 3 expansion (link) units per one PRO2 master unit, allowing a single IP address for up to 4 PDUs, either in a single cabinet or in multiple cabinets.

**Note:** The optional Star Linking feature of 4 units is available only with PRO2 products.

#### **About the Multi-Link Kits**

# Module vs. Dongle - Which Kit?

Refer to the following table to determine which multi-link kit you need to order for your PRO2 unit:

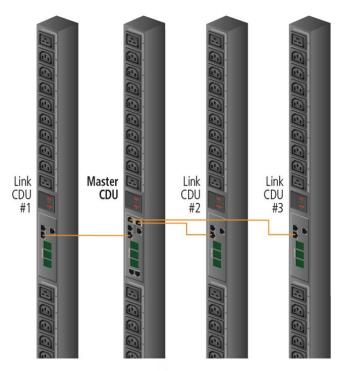
If your PRO2 unit is this wide	then order this kit:	The kit contains this type of multi-link connector	and the kit also contains these items:
2.19-inches (55.5mm) wide.	KIT-PRO2LINK-01 <b>M</b>	module	<ul> <li>Two 21-foot (6.4 meter) link cables</li> <li>LINK 2 and LINK 3 labels</li> <li>One M3x6mm mounting screw</li> <li>One 7-inch (178mm) link cable</li> </ul>
1.75-inches (44.45mm) wide.	KIT-PRO2LINK-01 <b>D</b>	dongle	<ul> <li>Two 21-foot (6.4 meter) link cables</li> <li>LINK 2 and LINK 3 labels</li> <li>One M3x6mm mounting screw</li> <li>One 7-inch (178mm) link cable</li> </ul>

**Note:** All features and benefits of the PRO2 multi-link arrangement are the same whether configured with a module or a dongle.

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# **Star Linking Hardware Arrangement**

The following two illustrations show the (Star Linking) multi-link arrangement between separate PRO2 units and within a cabinet:





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# **Features of Star Linking Technology**

#### **Redundant Power and Communication**

The multi-link arrangement is fault tolerant, with redundant power coming from the first link unit (expansion unit connected through the link port of the master PDU). The arrangement also offers significant cost reduction as the link units do not require a network card.

Another significant advantage of multi-link is that if power in the master unit is lost, communication will continue with the other link units – a major improvement over the daisy chain linking configuration.

## **Outlet Grouping**

The multi-link arrangement allows outlet grouping across the master and the three link units.

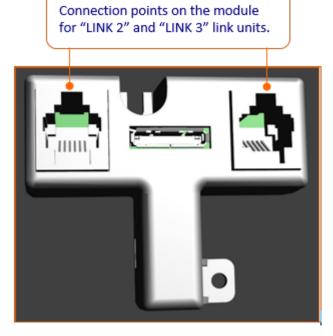
## **Cable Length**

The maximum cable length allowed from link unit to master unit is 21 feet (6.4 meters).

# Multi-Link Module (or Multi-Link Dongle)

In the multi-link arrangement, the first PRO2 link unit connects via the PRO2 link port. However, the second and third link units attach to either a T-shaped module or to a dongle that connects to the AUX port on the PRO2 master unit.

Depending on the kit you order, you receive either a module or a dongle. See the previous table to determine which kit to order. The module and dongle are illustrated as follows:







**Multi-Link Dongle** 

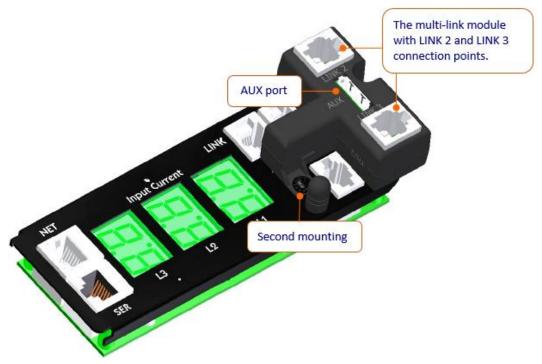
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#### **Installation Instructions**

Based on your purchased kit, follow these installation instructions for either the module or the dongle.

#### Installing the Module (Part Number KIT-PRO2LINK-01M)

The T-shaped multi-link module is shown connected to the communication/display area of a PRO2 master unit:



Using the **module** illustration above for reference, follow these steps:

- 1. Remove the M3x6mm mounting screw from the communication/display module of the master unit. Do not discard the screw.
- Plug the multi-link module (supplied in your kit) into the AUX port on the communication/display module of the master unit.
- 3. Re-install the M3x6mm mounting screw removed in Step 1.
- 4. Install the new M3x6mm screw (supplied in your kit) into the second mounting hole of the multi-link module.
- 5. Connect a link cable from the primary link port of the master unit to the primary link port of the LINK 1 unit.
- 6. Connect a link cable from the LINK 2 port of the master unit (on the multi-link module) to the link port of the LINK 2 unit.
- Connect a link cable from the LINK 3 port of the master unit (on the multi-link module) to the link port of the LINK 3 unit.
- 8. Apply the "LINK 2" and "LINK 3" labels (supplied in your kit) over the "LINK" PDU silkscreen on the LINK 2 and LINK 3 units accordingly.

**Note:** The cable that was shipped in the box with your link unit (or the 7-inch cable from the kit) can be used for the first LINK 1 connection (Step 5). The two 21-foot (6.4 meter) cables supplied in your multi-linking kit can then be used for the second LINK 2 and third LINK 3 connections (Steps 6 and 7). However, if all three link units are installed in the same cabinet, if you prefer, the shorter cables shipped with the link units can used for the multi-link connection.

#### Installing the Dongle (Part Number KIT-PRO2LINK-01D)

The following illustration shows the multi-link dongle connected to the communication/display area of a PRO2 master unit.



Using the **dongle** illustration above for reference, follow these steps:

- 1. Plug the dongle (supplied in your kit) into the AUX port on the communication/display module of the master unit.
- 2. The dongle hangs freely; a screw is not needed to secure the dongle.
- Connect a link cable from the primary link port of the master unit to the primary link port of the LINK 1 unit.
- Connect a link cable from the LINK 2 port of the master unit (on the dongle module) to the link port of the LINK 2 unit.
- Connect a link cable from the LINK 3 port of the master unit (on the dongle module) to the link port of the LINK 3 unit.
- 6. Apply the "LINK 2" and "LINK 3" labels (supplied in your kit) over the "LINK" PDU silkscreen on the LINK 2 and LINK 3 units accordingly.

**Note:** The cable that was shipped in the box with your link unit (or the 7-inch cable from the kit) can be used for the first LINK 1 connection (Step 3). The two 21-foot (6.4 meter) cables supplied in your multi-linking kit can then be used for the second LINK 2 and third LINK 3 connections (Steps 4 and 5). However, if all three link units are installed in the same cabinet, if you prefer, the shorter cables shipped with the link units can used for the multi-link connection.

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# **Contact Technical Support**

For assistance with the Star Linking arrangement on your PRO2 products, Server Technology's Technical Support department is available as follows:



#### **Experience Server Technology's FREE Technical Support**

Server Technology understands that there are often questions when installing and/or using a new product. Free Technical Support is provided from 8 a.m. to 5 p.m. PST, Monday through Friday. After-hours service is provided to ensure your requests are handled quickly no matter what time zone or country you are located in.

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