

Quick Install Guide

Net Optics Tap 10/100/1G Copper



TP-CU3-ZD, -DC Gig Zero Delay



TP-CU3, -DC 10/100/1000BaseT Tap

913-2114-01 Rev C 3/15

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TP-CU3-ZD and **TP-CU3** Content

This guide provides the initial steps to set up and configure the following Tap models:

- TP-CU3-ZD 10/100/1000 Tap with Zero Delay
- TP-CU3-ZD-DC10/100/1000 Tap with Zero Delay, -48V DC power
- TP-CU3 10/100/1000 Tap
- TP-CU3-DC 10/100/1000 Tap, -48V DC power

Carefully unpack the Tap and check for damaged or missing parts.

- 2 Power cords and power supplies, 12VDC, 3.3A, 2.5mm, IEC-C13
- 2 Power cords and power supplies, 12VDC, 1.5A, 2.5mm, IEC-C13 (TP-CU3 only)
- Retainer clip (not included with -DC models)
- 3 CAT 5e 4-pair (purple) cable, 3-meter, RJ45
- 1 CAT 5e 4-pair (green) Crossover cable, 3-meter, RJ45
- Registration card

You may have also ordered a panel for rack mounting and an extended warranty. Check the packing slip against parts received. If any component is missing or damaged, contact our Order Management department via email at **Order-Management@ ixiacom.com** or if this is a Demo unit, contact **Demo@ixiacom.com**.

TP-CU3-ZD and **TP-CU3** Overview



Figure 1 - Front Panel, Gig Zero Delay Taps (TP-CU3-ZD, -DC)



Figure 2 - Front Panel, 10/100/1000BaseT Taps (TP-CU3, -DC)

LED Indicators

Power Indicator: Current power source LED illuminates white.

Link/Activity Indicator: Located in the upper right corner. If a good link is established, the LED lights up. The LED flashes when there is activity.

10/100/1000 Indicator: In the upper left corner. The LED is orange when the Port is set to 10 Mbps . The LED is yellow if the Port is set to 100 Mbps. The LED is green when the Port is set to 1000 Mbps.



Figure 3 - Rear Panel AC (external transformer "brick") power models







Figure 5 - Rear Panel DC power model TP-CU3-ZD-DC

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Step 1 Rack Mount Tap

If you ordered the rack mounting panel, do the following:

- 1. Remove the panel and screws from the shipping bag.
- 2. Screw the panel onto the rack.
- Slide the switches in place in the rack. See Figure 6.
 See Figure 7 if you ordered the 12-Slot version.
- 4. Fasten the switches in place with the Phillips screws.



Figure 6 - 1U Version



Figure 7- Tall 12-Slot Rack Mount Version

Step 2 Connect AC Power

Ensure the Tap is grounded before connecting power. Do the following to connect and apply power to the AC powered tap:

- 1. Plug one of the supplied power cords to a power connector located at the rear of the chassis. Plug the other end to a power source. See Figure 8.
- 2. For redundancy, plug the other power cord to the other connector. Plug the other end to a source independent from the first power source.

The second power supply is available to support the flow of traffic to the monitoring device in the event that the first power supply becomes unavailable.

3. Verify the Power LEDs on the front illuminate.



Figure 8 - Power Connections

Connect DC Power

Model TP-CU3-DC has screwless terminal blocks for DC power. Push in the orange button to open the socket, insert the power wire, and release the button to clamp the wire into the socket.

Model TP-CU3-ZD-DC has a two-piece, screw-type terminal blocks for DC power. You can unplug half of the terminal block for convenience when connecting the power wires. Just pull to unplug the removable part, and push it back in to reconnect it. To connect the power wires, insert a wire into a socket and tighten the screw to hold it in place.



Figure 9 - Two-piece DC terminal block on model TP-CU3-ZD-DC

Note: The symbols $\stackrel{\bullet}{=}$ and $\stackrel{\bullet}{h}$ both indicate safety ground, also called earth or chassis ground. When attaching the DC power wires, always connect the safety grounds first; and when disconnecting the DC power wires, always disconnect the safety grounds last.

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Step 3 Configure the DIP Switches

The 8-position DIP switch located on the rear panel or on the side of the device sets the communication parameters and battery connection as specified in the following table.

Note: The settings apply to all ports on the Tap (except for Switch 1, Link Fault Detect, which applies only to the Network Ports).

If you use fixed settings, connected devices must match the settings you select for the Tap. If you use Auto-negotiation ON, make sure the network devices connected to the Tap are set to Auto-negotiation ON.



Figure 10 - DIP Switch Settings

Switch	Position	Description				
1	ON OFF	Link Fault D Link Fault D	is active on the Network Ports. is inactive on the Network Ports.			
2-5		See following table				
6	ON OFF	All ports are in Full-duplex mode. All ports are in Half-duplex. If switch 2 is ON, this switch is ignored				
7	- Reserved					
8	ON OFF	Up position. The backup battery is not connected. Down position. The backup battery is connected. The unit is shipped with this switch in the down position.				
2	3	4	5	Line speed for all ports		
ON	Х	Х	х	Auto-negotiation		
OFF	ON	Х	х	1000BaseT (Gigabit)		
OFF	OFF	ON	Х	100BaseT (100Mbps)		
OFF	OFF	OFF	ON	10BaseT (10Mbps)		
OFF	OFF	OFF	OFF	DO NOT USE		

* ON = up position OFF=down position

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IMPORTANT NOTES:

- The Tap is shipped with switches 1 and 2 in the ON position (LFD and Autonegotiation active).
- If you are using a fixed-speed setting, all devices connected to the Tap should also be set to that same speed. Furthermore, you should set only one speed switch to ON (up position). If more than one speed switch is set to ON, the Tap uses the fastest speed.
- When the unit is shipped, dip switch 8 is set to the down position. After you connect power, make sure the power is ON for 12 hours to fully charge the backup battery. In the event of a power outage, the Zero Delay Tap can remain powered for 3 to 5 hours with a fully charged battery.
- If you plan to store or power down this unit for longer than 2 hours, follow this procedure:
 - Step 1 Set the dip switch 8 to the up position.
 - Step 2 Disconnect all power sources.
 - Step 3 When the power sources have been disconnected, set dip switch 8 to the down position.
 - Step 4 Store the unit.
- When you redeploy the unit, ensure dip switch 8 is in the down position. Then connect to the power source.

Step 4 Connect to the Network

To connect the Tap to the Network:

- 1. Connect Network Port A to the appropriate switch, server or router using one of the supplied purple CAT5e cables.
- 2. Connect Network Port B to the appropriate switch, server or router using one of the supplied purple CAT5e cables.
- 3. Verify that the Tap Network Ports are cabled in-line between two devices
- 4. Verify the link LEDs illuminate.



Figure 11 - Connecting to the Network

Step 5 Connect to the Monitoring Devices

To connect the Tap to the Monitoring device:

- 1. Connect Monitor Port A to the appropriate port on the monitoring device using one of the supplied purple CAT5e cables.
- 2. Connect Monitor Port B to the appropriate port on the monitoring device using one of the supplied purple CAT5e cables.



Figure 12 - Connecting to the Monitoring Device

Support

If you have questions while your product is under warranty or you are enrolled in a support plan, please contact one of Ixia's Technical Assistance Centers (TACs) by phone or e-mail.

US:	+1 818 595 2599	E-mail:	support@ixiacom.com			
EMEA:	+40 21 3015699	E-mail:	support-emea@ixiacom.com			
India:	+91-80-49396410	E-mail:	support-india@ixiacom.com			
Japan:	+81-3-5326-1980	E-mail:	support-japan@ixiacom.com			
APAC:	+65-6332-0126	E-mail:	support-asiapac@ixiacom.com			
China:	+400-898-0598	E-mail:	support-china@ixiacom.com			
Taiwan/Hong Kong:						
	+86-10-5732-3932	E-mail:	support-china@ixiacom.com			

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