<u>= PROFI tap</u>

C1-1G Single Port Copper Tap



Portable Model



Rack Mount Model

CUSTOMER SUPPORT INFORMATION

To order or for technical information support: Phone: +31 (0) 40 782 0880 Mail order: Profitap HQ B.V. High Tech Campus 9 5656 AE Eindhoven - The Netherlands Website: www.profitap.com E-mail: info@profitap.com

Index		pages
1.	General Information	6
2.	Functional Description	7
2.1.	Interface connectors	7
2.2.	Activity/Link	7
2.3.	Speed LEDs	7
2.4.	Link redundancy	7
2.5.	Power	8
2.6.	Power Failure	9
2.7.	Fast Failover	9
3.	Installation	9
4.	Additional information	11

PROFITAP®

Our engineers have been developing innovative LAN/ WAN and Datacom Test Equipment for over 25 years.

Commitment to **Quality** and Customer **Satisfaction** is paramount in everything we do to achieve our first and only mission : Help our customers to raise their networks to **maximum efficiency and security** through our non-intrusive tools.

The confidence placed in our products is the reward for many years listening to customer needs and expectations, improving technology, service and support.

Our products have been recognized worldwide and all of them serve the benefit of our customers.

PROFITAP was founded in 1984 and headquartered in Strasbourg - France.

This Package includes :

- 1x C1-1G Main Unit
- 1x Power adapter 12V-0.5A (except for 48V model)
- 1x Pouch for carrying (Portable version only)

1. General Information

The C1-1G tap avoids downtime in your 10/100/1000Base-T networks. Once in place it allows you to monitor full and half duplex communication and move test equipment without breaking the circuit. It mirrors any packet size, bad CRC, VLAN traffic, sees both ends of full-duplex links.

It is a single port 10/100/1000Base-T Tap for half/full duplex Ethernet networks.

The C1-1G tap has no IP address and is invisible to the network. It is fault tolerant, bypasses data on power failure, the monitor ports are none-intrusive to the network.



C1P-1G

2. Functional description

2.1 Interface connectors

The C1-1G Tap has 4 RJ45 ports. Network ports A and B are connected to the network, Monitor ports A and B are connected to the analyzer.

2.2 Activity/Link

Four LEDs indicate Activity and Link for each of the four ports. Link LED lights up when a link is detected at the port. Activity LED blinks when a signal is detected on one of the ports.

2.3 Speed LEDs

Two LEDs indicate mutual speed at 10/100/1000Mbps.

2.4 Link redundancy

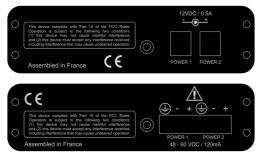
The disconnection of one network port will disconnect all ports until the next connection of the two network ports.



C1R-1G

2.5 Power

The C1-1G tap is redundant powered from the back. Using redundant powering guarantees a maximum uptime off the monitor ports. Two LEDs show the presence of power.



To connect the 48V DC power to the TAP, do the following:

1. Ensure the DC connectors are plugged into the TAP.

2. Connect the wires to the power supply in this order:

A. Connect the ground wire to the ground connection on the TAP. The connection is located on the bottom of the connector. Tighten the screw located on the front of the connector to attach the cable.

B. Connect the 0V wire to the V+ terminal on the terminal block. The connection is located on the bottom of the connector. Tighten the screw located on the front of the connector to attach the cable.

C. Connect the -48V wire to the V- terminal on the terminal block. The connection is located on the bottom of the connector. Tighten the screw located on the front of the connector to attach the cable.

3. For redundant power, repeat steps 1 and 2 using the second power supply and cables.

2.6 Power Failure

When the Tap is not powered, network ports A and B are hardware wired together and monitor ports are disabled.

2.7 Fast Failover (1G)

When a power transition event occurs, the network devices renegotiate the link. This operation can take up to 5 seconds depending on network configuration and can cause a network topology reconfiguration. Fast Failover feature helps to reduce this time by trying to keep the link up without renegotiation during the power change event.

With Fast Failover, the network's path unavailability is between 30 and 300ms.



3. Installation

 Power both network devices, **do NOT** power the TAP Note: A powered TAP will always correct a wrong cable setup. Connect the network using category 5e UTP cables.
a. If the two (2) network devices are of DTE and DCE type, use two (2) straight cables.

b. If the two (2) network devices are of the same type (2*DTE or 2*DCE) use one straight and one cross-over cable.

* The connected network devices show LINK (or Activity). If there is no LINK, change one of the cables by an opposite type.

2. When two devices are connected on the network ports, the two speed LEDs blink simultaneously to indicate the negotiation of the highest mutual Speed. When the connection is establish, the Speed LEDs indicates the network speed:

- the left LED light for a 10Mb connection.
- the right LED light for a 100Mb connection.
- both LEDs light for a 1Gb connection.

If no mutual speed is detected, the two LEDs blink alternatively.

* Network activity is shown on the Activity LEDs of Network A and Network B.

3. Connect the two Monitor Ports to the analyzer using straight or cross-over CAT5e cables.

The Monitor Ports are at the speed of the network ports. The Monitor Ports Link LEDs light when link is found.

* Activity received into NetworkA and NetworkB will be mirrored on the respective Monitor Ports and blink the ACTIVITY LEDs.

The maximum distance between any of the connected devices is 100 m.

4. Additional information

Mechanical Specifications:

Enclosure: Aluminium, Black Front panel

Powered by:

12V model: 90-240VAC / 12V-0.5A external adapter 48V model: DC terminal block Power consumption for one unit: 4W LEDs: 4x Link/Activity, 2x Network speed , 2x Power Connectors: 4x RJ45, 8 pin, gold plated

Dimensions:

C1P-1G: 113 x 133 x 30 mm (WxDxH) 4.448 x 5.236 x 1.181 inches (WxDxH) C1R-1G: 113 x 133 x 30 mm (WxDxH) Front Panel :143 x 35 mm 4.448 x 5.236 x 1.181 inches (WxDxH) Front Panel : 5.629 x 1.377 inches C1R-1G-48V: 113 x 133 x 30 mm (WxDxH) Front Panel :143 x 35 mm 4.448 x 5.236 x 1.181 inches (WxDxH) Front Panel : 5.629 x 1.377 inches

Weight: 300 g

Environmental Specifications:

Operating Temperature: 0°C to 50°C **Storage Temperature:** -22°C to 70°C **Humidity:** 10 to 90%, non-condensing

Certifications: RoHS, CE, FCC class A and IEEE 802.3

Disclaimer

The information in this document is subject to change without notice. The manufacturer makes no representations or warranties with respect to the contents hereof and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose. The manufacturer reserves the right to revise this publication and to make changes in the content hereof without obligation of the manufacturer to notify any person of such revision or changes.

Warranty and Liability

Profitap warrants that this product is free from defects in material and workmanship at time of shipment. The warranty period is 2 years from the date of purchase. The standard 2 year warranty period may be extended at the time of order. Profitap assumes no liability for products that have been subjected to abuse, modification, misuse, or if the model or serial number has been altered, tampered with, defaced or removed. Profitap is not liable under any contract, negligence, strict liability or other legal or equitable theory for any loss of use of the product, inconvenience or damages of any character, whether direct, special, incidental or consequential (including, but not limited to, damages for loss of goodwill, loss of revenue or profit, work stoppage or malfunction)

Copyright

This publication, including all photographs and illustrations, is protected under international copyright laws, with all rights reserved. Neither this manual, nor any of the material contained herein, may be reproduced without written consent of the author

Trademarks

The trademarks mentioned in this manual are the sole property of their owners.

©PROFITAP

v12





+31 (0) 40 782 0880

www.profitap.com

