DUALCOMM™

USER'S GUIDE

DCSW-1005/DCSW-1005PT

5-Port 10/100base-T Ethernet Switch TAP

USB Powered • Port-Mirroring • PoE Pass-Through

(Patent Pending)

www.dual-comm.com

§1. PRODUCT DESCRIPTION

Dualcomm'spatent pending 5-Port 10/100base-T LAN Switch TAP (DCSW-1005PT/DCSW-1005) can be used as both an 10/100Base-T Ethernet switch and a network TAP (Test Access Point) device. Specifically, it offers several unique features to better meet your network application needs, which include:

- **"Power over Ethernet" Inline Power Pass-Through** (DCSW-1005PT Only)

DCSW-1005PT implements a set of two ports for Power-over-Ethernet (PoE) inline power pass-through, which provides a low cost solution to "expand" a PoE uplink port into four downstream ports, one of which is capable of receiving the inline power from the uplink cable to power a connected PD (e.g. an PoE enabled IP phone).
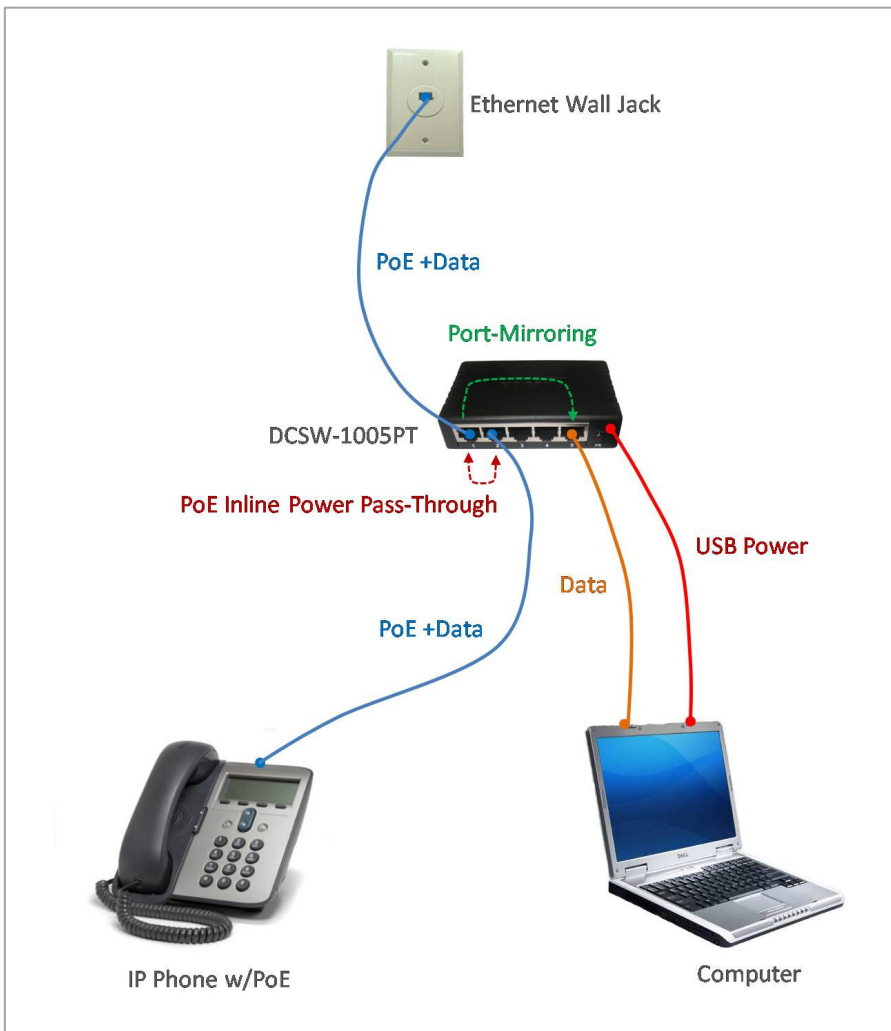
- **Port-Mirroring**

DCSW-1005/DCSW-1005PT offers a unique and low cost solution for capturing and monitoring network traffic by means of Port-Mirroring. Port-Mirroring used to be a feature typically found only in much more expensive managed switches requiring a series of software configurations, but DCSW-1005/DCSW-1005PT makes it plug and play and hassle free without going over your budget.
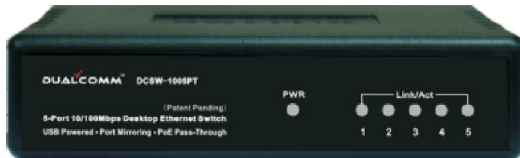
- **USB Powered**

DCSW-1005/DCSW-1005PT is designed to be conveniently powered by any USB port of a computer so that no extra AC/DC power adapter is required and no AC outlet is needed to get this device powered!

§2. TYPICAL APPLICATION DIAGRAM

- Sniffing 10/100base-T Ethernet network traffic
- Recording VoIP phone conversations

§3. FRONT PANEL (LEDs)

DCSW-1005/DCSW-1005PT Switch TAP includes following LED indicators on the front panel:

- **Power LED:** This green LED is tuned on when the device receives external input power properly.

- **Port Status LEDs:** Each port is provided with a green LED to indicate link/activity status of the port as defined below:

  Link/Act: Solid = linked-Up; Blinking = Activity

§4. REAL PANEL (RJ45 JACKS & DC POWER JACK

DCSW-1005/DCSW-1005PT provides five (5) 10/100Base-T ports that support auto-negotiation and auto MDI-X. Each port operates as a standard Ethernet switch port to receive and forward packets.

DCSW-1005/DCSW-1005PT can be used as an aggregation network TAP, in which a copy of both outgoing and incoming packets associated with Port 1 (Target Port) is forwarded to Port 5 (Monitor Port). Such a port-mirroring mechanism is hardware-configured and therefore no software setup is necessary.

DCSW-1005/DCSW-1005PT further implements Port 1 and Port 2 for facilitating PoE inline power pass through between these two ports. When Port 1 is connected with an active Ethernet uplink with PoE inline power, the inline power is coupled to Port 2 to supply power to a powered device (PD) that is connected to Port 2. In the same way, Port 1 also can receives inline power that is passed through Port 2 when Port 2 is connected with a PoE enabled uplink.

§5. SPECIFICATIONS

Standards	IEEE 802.3 10BASE-T and 100Base-TX
Number of Ports	Five (5x) 1 auto-negotiation 10/100Mbps RJ45 ports with Auto-MDI/MDIX
DC input	5VDC or power from a host USB port
LED Indicators	One power status LED and five port Link/Activity status LEDs (each per port)
Port Mirroring	Target Part = Port 1 Monitor Port = Port 5 Pre-configured. A "copy" of Incoming and out-going packets of Port 1 is forwarded to Port 5.
PoE Pass-Through (DCSW-1005PT Only)	Between Port 1 and Port 2
Data Transfer Rate	14,880 pps for 10Mbps 148,809 pps for 100Mbps
MAC Address Size	2K (automatic update)
Packet Buffer Size	256KB RAM
Network Cable Type	Cat.5, Cat.5E or better
Forwarding Method	Store and forward
Dimension	4" x 2.5" x 0.9" (L x W xH)
EMI	FCC Class B and CE
Warranty	1-year limited warranty

§6. ORDER INFORMATION (Model Numbers)

DCSW-1005:   5-Port 10/100 Ethernet switch TAP w/o PoE Pass-Through
DCSW-1005PT: 5-Port 10/100 Ethernet switch TAP with PoE Pass-Through

§7. PACKAGE CONTENT

- One (1x) Dualcomm DCSW-1005/DCSW-1005PT 5-port 10/100Base-T switch TAP unit
- One (1x) USB Power cable
- User's Guide

§8. WEBSITE AND TECHNICAL SUPPORT

For the latest product information and updates, please visit Dualcomm's website:

www.dual-comm.com.

Technical support is also available by contacting Dualcomm via email or phone as listed below.

Email: support@dual-comm.com

Phone: (925) 658-4824