

DT-400 A1

**eXtreme 11n/ac, 2.4/5GHz 2x2
VLAN Captive Portal Router with Access Point**

EAN Code : 4712757159394



Introduction

Cerio DT-400 A1 eXtreme 11n/ac, 2.4/5GHz 2x2 VLAN Captive Portal Router with Access Point built-in 802.1q VLAN Router mode. It's a Dual Band concurrent wireless AC up to 1200Mbps with latest technology for improvements in the speed, reliability and quality of wireless communications.

The DT-400 A1 bundles Cerio CenOS 5.0 Software Core and in addition have support CAP / AP /Client Bridge and WISP mode. CenOS 5.0 devices can use integrated management functions of Control Access Point (CAP Mode) to manage an AP network.

CAP Mode is Controller-less Access Point can centralize management of up to **64 units** of APs.

Access point Mode is Authentication Access Point built-in 802.1x RADIUS Server and Captive Portal mechanism also Client Bridge (to extend the coverage of an existing network) and **WISP mode** these two mode with Repeater AP function. This device is perfect for enterprise deployment such as corporate offices, public venues, conferences, and other high traffic indoor environments.

Cerio's DT-400 A1 with two external dual band Omni antennas and 11ac chipset design provides enterprise grade CPU performance, allowing the device to handle up to 100 concurrent clients. The DT-400 A1 supports 2.4G and 5G Wi-Fi roaming mechanism, allowing Wi-Fi Client users to run uninterrupted between Access Point stations and Access Point stations while achieving Wi-Fi load balancing.

Highlight Features

- 2.4Ghz band supports standard 802.11bgn protocol with maximum data transfer rate of 300Mbps
- 5Ghz band supports 802.11 an/ac wireless protocol with a maximum data transfer rate of 867Mbps
- Two 2x2 external antennas dual band 5dBi Omni antennas for 2.4GHz & 5GHz.
- Support 5 Gigabits Ethernet ports
- Support QoS bandwidth management
- **Operation Modes:** VLAN Router AP mode, Access Point mode with Captive Portal, Controller-less Access Point Mode (Centralize Access Point management), Client Bridge and WISP mode with Repeater AP function.
- **VLAN Router** built-in 8 VLAN routing of 802.1q tag, different services rights can be configured for different VLANs
- Access Point can choose to use captive portal in different VLAN and each VLAN's captive portal can set different authentication services type, captive portal's authentication function support entry login page Customization, administrator can custom editing via HTML and CSS syntax.
- Support 16 ESSID (2.4G+5G), each Virtual ESSID basis on 802.1q tag VLAN.
- Captive portal function in Access Point mode supports local accounts / local or external RADIUS server / external PoP3 Server and support third-party OAuth2.0 default built-in Facebook / Google authentication.
- CenOS 5.0 **Controller-less** Access Point Mode (CAP) supports centralized management of up to 64 AP devices
- Supports at total of 32 Multiple-ESSIDs per device (16 ESSID on 2.4Ghz and 16 ESSID on 5Ghz)
- Supports Wireless IGMP snooping protocol.

Software Features

- Built-in CenOS5.0 software's AP centralized management in CAP mode. This function support group management.
- Built-in Time Policy function can set multiple times schedule apply to RF on/off and IP/MAC filter or other security function.
- Built-in 802.1x RADIUS authentication server account database for small and medium environments, removing the need to set up external server and avoiding additional costs. Also supports RADIUS Server authentication server account features to fit the needs of large-scale network environments
- Captive Portal Authentication supports by remote RADIUS server, Local account, third-party OAuth2.0, POP3, Guest and remote bulk MAC Address.
- Support max. 16 ESSID (2.4G+5G). Each SSID supports 802.1q VLAN Tag standards, supporting up to 4096 group VLAN Tag capability
- QoS (Quality of Service) for bandwidth management and traffic prioritization, supports network Upload/Download Bandwidth Control speed limits by total or user device.

- Software UI supports Auto reboot setting function. Software setting allows automatically reboot by Daily/Weekly/Monthly settings
- Support IPv6 Pass through
- Support IAPP Wi-Fi roaming.
- Administrative Access : Supports CLI access via Telnet and SSH
- Provides Traffic Monitor and Graphical GUI Status Interface for Network and Radio Overview.

Hardware Features

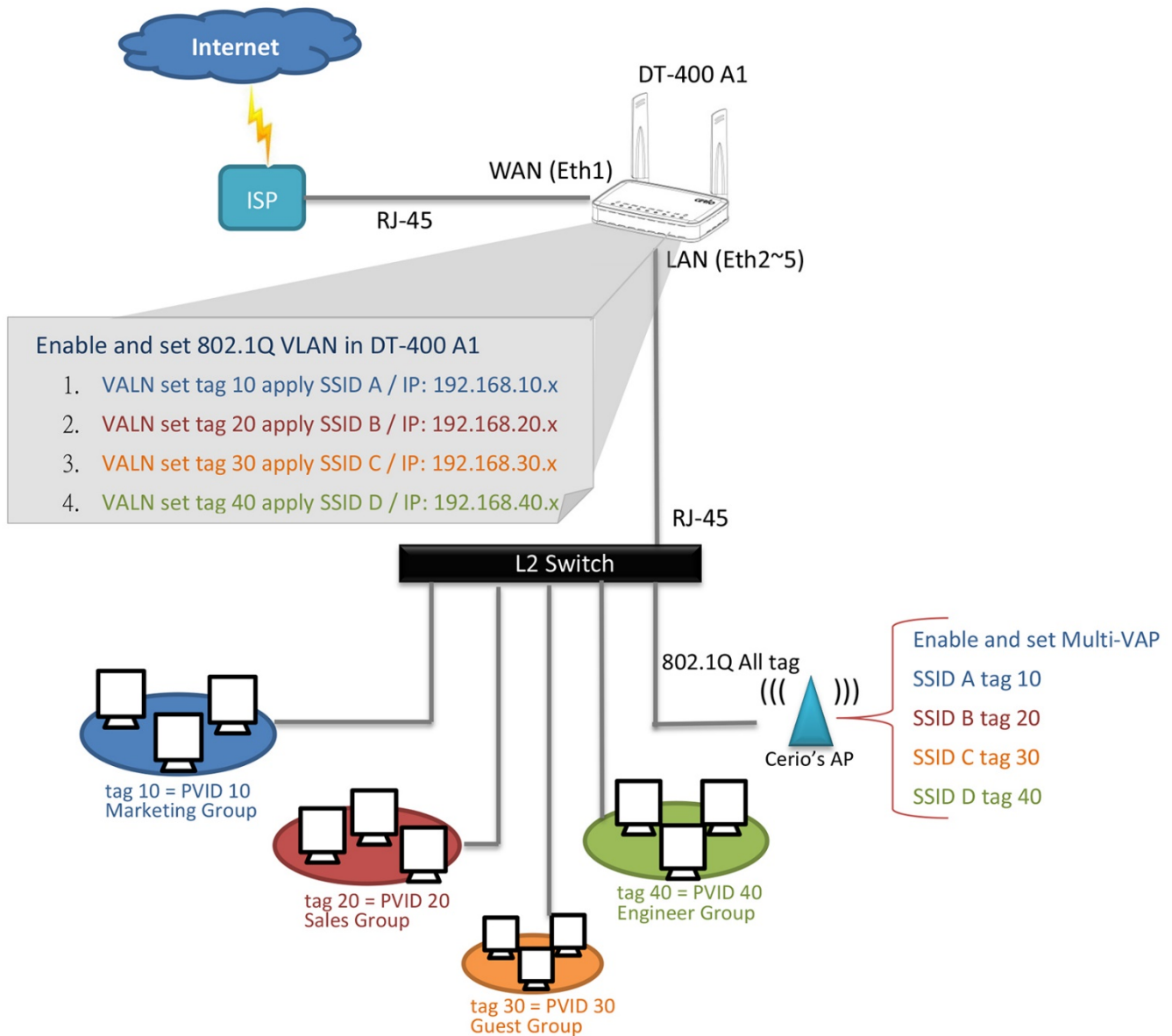
- Two 2x2 external antennas dual band 5dBi Omni antennas for 2.4GHz & 5GHz design.
- Supports 5 Gigabit Ethernet ports, administrator can change 1WAN/4LAN or 5 LAN
- Built-in hidden reset to default button.
- Hardware RF on/off and hardware power on/off button
- Desktop and Wall mounting design

Hardware Overview



DT-400 A1 VLAN Router Application

Enable multi-VLAN application for DT-400 A1 VALN Router



Software

Application Software

Cerio CenOS 5.0 Software Core

Standards & Hardware Specifications

Network Standards Conformance

IEEE 802.11 b/g/n/ac compliant

IEEE 802.3 / IEEE 802.3u

IEEE 802.11 b/g/n compliant

IEEE 802.11Q VLAN

IEEE802.11e WMM

Ethernet Configuration

10/100/1000BASE-TX Auto MDI/MDI-X Ethernet port x5

LED Indicators

PWR (Power) LED	x1
ETH LED	x5
2.4GHz Wi-Fi LED	x1
5GHz Wi-Fi LED	x1
RF timing on/off LED	x1

Wireless Specifications

Data Transfer Rate

IEEE802.11b : 1 / 2 / 5.5 / 11Mbps (auto sensing)

IEEE801.11g : 6/ 9/ 12/ 18/ 24/ 36/ 48/ 54Mbps

IEEE802.11n: 300Mbps(at 40Mhz),150Mbps (at 20Mhz)

IEEE802.11ac: 867Mbps(at 80Mhz),400Mbps(at 40Mhz)

Frequency Range

IEEE802.11nbg @2.4Ghz :

2412 ~ 2462Mhz (US / Taiwan)

2412 ~ 2472Mhz (Europe ETSI)

IEEE 802.11 an/ac @ 5GHz :

US : 5180~5825 Mhz (11a), 5200~5805Mhz(11n),
5180~5805Mhz(11ac)

ETSI : 5180~5700Mhz(11a), 5200~5680Mhz(11n),
5180~5640Mhz(11ac)

Taiwan: 5280~5825Mhz(11a), 5280~5805Mhz(11n),
5500~5805(11ac)

Channel Spacing

IEEE802.11b/g/n : 20/40Mhz

IEEE802.11ac: 20/40/80Mhz

Media Access Protocol

CSMA / CA with ACK

Modulation Method

IEEE802.11b : DSSS (DBPK,DQPSK,CCK)

IEEE802.11a/g/n : OFDM (64-QAM,16-QAM,QPSK,BPSK)

IEEE802.11ac : OFDM (256-QAM, 64-QAM, 16-QAM,
QPSK,BPSK)

Operating Channels

802.11b/g/n : 1 to 11 for FCC, 13 for Europe

IEEE 802.11an/ac @ 5GHz :

36,40,44,48,52,56,60,64,100,104,108,112,116,120,124,
128,132,136,140,149,153,157,161,165

(Please select the channels accordance with different
country regulations)

Transmit Power Variation

2.4Ghz : Max : 20 ± 1 dBm

5Ghz : Max : 18 ± 1 dBm

Receiver Sensitivity

2.4Ghz : 11b -82 dBm, 11g -68dBm, 11n -65dBm@MCS0

5Ghz : 11a -68 dBm, 11n -62dBm, 11ac -63dBm@MCS8

Environmental & Mechanical Characteristics

Operating Temperature

-10 °C ~ 55 °C

Storage Temperature

-20 °C ~ 65°C

Operating Humidity

10% - 90% Non-Condensing

Storage Humidity

10% - 90% Non-Condensing

Antenna

External 2x2 Dual Band 5dBi Omni Antenna x2

Form Factor

Desktop / Wall mounting

System Power Consumption

12Watt (Max)

Power Supply

100 – 240V AC Power ;12 VDC

Package Contents

Input Power
AC to DC 12 VDC
Dimensions (W x H x D)
165 x 135 x 28 mm
Unit Weight
237g
Certifications
FCC,CE, ROHS compliant

Contents	
DT-400 A1 Main Unit	x1
Power Adapter	x1
Screw set for wall mounting	x1
Quick Installation Guide	x1
Warranty Card	x1