2428TE

Reimagine Your Edge

2428TE Wi-Fi 6 Ethernet Wireless Controller

Advanced 802.11ax Ethernet service point enables subscribers to enjoy multimedia services over wireless with DZS leading-edge technology.

Features & Benefits

+ Supports 2.5Gbps/2.5Gbps (Downstream/Upstream) with multi-rate Ethernet WAN interface

+ Four gigabit multi-rate 10/100/1000M Ethernet interfaces

+ Two POTS interfaces compliant to SIP and MGPC telephony standards

+ Dual-band 2.4GHz 3x3 802.11ax, 5GHz 4x4 802.11ax Carrier-grade Wi-Fi 6 interfaces

+ Support of DZS Xperience Mesh. Future support of EasyMesh R1 and R2

+ USB 3.0 with supportz of 3G and LTE wireless WAN backup

The DZS 2428TE is a next-generation Ethernet Wireless Controller with integrated Wi-Fi 6 802.11ax, able to support service provider requirements for high-speed data and video over wireless interfaces. The CPE offers data rates of 2.5Gbps downstream and 2.5Gbps upstream able to deliver access edge services and full range of residential wireless use cases required, including whole-home wireless extensions using DZS Xperience and future support of WiFi Alliance EasyMesh standard. With unique DZS's software management features, subscribers can enjoy hyper-connected multimedia services much easier, faster, and more reliably than ever before.

The DZS 2428TE includes one 2.5G Base-T WAN interface, four 10/100/1000Base-T LAN ports, two FXS RJ11 voice ports, dual-band 2.4GHz and 5GHz 802.11ax wireless, and one USB3.0 compliant port. The ONT supports wire-speed L2 bridging and L3 gateway features, with carrier grade voice services with the option for DZS approved battery backup unit with battery status telemetry.

DZS

2428TE

Advanced Wi-Fi 6 Ethernet Wireless Controller

Service Scenario

Designed to enhance FTTH deployments with high-bandwidth services, the 2428TE supports whole-home coverage solutions through high-power radio interfaces and advanced mesh technology. With WiFi6 802.11ax this advanced CPE acts as the central Ethernet Wireless Controller with support of subtending Wireless Access Points. The 2428TE offers the robustness, carrier-class features and capacity necessary for premium wireless whole-home networks.

Key Service Attributes

+ One 100/1000/2500MBase-T Ethernet WAN ports, RJ45 supporting 2.5Gbps symmetrical services

+ Four 10/100/1000MBase-T Ethernet ports, RJ45 supporting 1Gbps

+ Two voice ports, FXS interfaces compliant to ANSI and ETSI standards, SIP and MGCP

+ 2.4GHz 3x3 802.11ax, 20MHz and 40MHz channels

+ 5GHz 4x4 802.11ax, 20MHz, 40MHz and 80MHz channels

+ Downstream and Upstream MU-MIMO

+ Support of Mesh topologies with DZS Xperience

+ USB 3.0 port, support of 3G and LTE wireless dongles

+ IPTV multicast, IGMPv2 and IGMPv3 services

+ Any-port, Any-service data model

+ Traffic management including Q-in-Q tagging, 802.1Q VLANs, multiple subscriber VLANs, per-port rate limiting

+ 802.1p priority bits, DiffServ and priority ques based on services types.

+ 12 VDC uninterruptable service power source, option for battery backup

DZS
2428TE
Advanced Wi-Fi 6 Ethernet Wireless Controller

Product Specifications

Hardware

+ Dimensions
  Width: 10.3" (260mm)
  Depth: 6.1" (155mm)
  Height: 1.4" (35mm)
+ Weight 0.81 LB (0.37 kg)+
+ 256GByte Flash Memory
+ 512GByte SDRAM (DDR3)
+ Ethernet WAN Interface
+ Capacity:1.0Gbps Down/1.0Gbps Up

Interfaces

+ WAN: 1 100/1000/2500MBase-T port (RJ45)
+ LAN:4 ports 10/100/1000MBase-T Ethernet (RJ45)
+ Telephone: 2 ports 2-wire RJ11
+ Power: 1 2-pin barrel connector, 1 2x4 8-pin battery connector
+ USB 3.0 Type A
+ WiFi push button setup (WPS)
+ Recessed RESET button

Ethernet WAN port

+ Auto-MDI-X crossover control
+ Auto-Speed or manual selection
+ IEEE 802.3bz 2.5G/5GBase-TIEEE
+ IEEE 802.3ab 1000Base-T
+ IEEE 802.3u 100Base-T
+ IEEE 802.3az EEE
+ IEEE 802.1x Authentication

Wireless

+ 2.4GHz 3x3 802.11ax MIMO, 5GHz 4x4 802.11ax MU-MIMO
+ SSIDs: 4x2.4GHz, 4x5GHz
+ Devices per radio: 120
+ Authentication WEP, WPA-PSK, WPA2, WPA2-PSK, 802.1x
+ Encryption: WEP (64-bit, 128-bit), AES, TKIP+AES
+ WPS modes: Push-button, API PIN, STA PIN
+ RADIUS Server support
+ MAC filtering
+ Wireless bridge mode

Telephone

+ SIP (RFC 3261)
+ MGCP
+ Codec: G.711 (u-law and A-law), G.729B, G726
+ RENs per line: 5 maximum
+ Drop length: Residential short loop, 152.4 m (500 ft.)
+ Output max: 25mA
+ Ring voltage: 48Vrms @ 20/25 Hz

Quality of Service

+ HW-based internal IEEE 802.1p (CoS)
+ Strict Priority (SP)
+ 802.1Q(VLAN tag) QoS mapping ToS/CoS
+ 8 queues per port
+ Classified traffic can be tagged with VLAN ID and Ethernet Priority bit, and can be assigned to priority queues
+ Classify packets into different IEEE 802.1p priority queues according to DSCP values (RFC 2475)
+ The range of traffic shaping or rate-limit shall between 64 Kbps to the maximum port rate with 64kbps granularity. The accuracy error shall be less than ±10%.

Software Features

+ IEEE802.1D and IEEE802.1Q
+ Address learning with auto aging-L2/BPDU Filter
+ Support 4096 MAC learning addresses
+ Priority queues and scheduling on up-stream
+ Activation with automatic discovered serial Number and password

IP Routing and Firewall

+ DHCP, Static-IP and PPPoE
+ NAT/NAPT
+ DNS Proxy
+ DHCP Server
+ UPnP, plug and play

IPv6

+ IPv4 and IPv6 Dual-Stack-Lite
+ Bridged Mode (transparent pass thru of IPv6 frames)
+ IPv6 support of BRouted and PPPoE Bridged VLANs
+ DHCPv6 client and server
+ Router Advertisement on LAN-side interfaces
+ SLAAC for automatic acquisition of WAN-side IPv6 addresses and GW
+ CLI, HTTP and TR-069 management via IPv6

Environmental

+ Operating Temperature 32~104°F (0~+40°C) Commercial
+ Storage temperature -4~149°F (-20~65°C)
+ Operating humidity 5 to 90% (non-condensing)
+ Altitude: –200 to 10,000 feet (–61 to 3,048 m) above sea level

Powering

+ DC power, +12 VDC nominal, 2.5
+ Input power, 90-240VAC, 50/60Hz
+ Power consumption, ~16W maximum

Management

+ CPE Manager Web UI
+ CLI over telnet
+ SNMP Client
+ TR-069, TR-104, TR-98
+ LED indications for status

Compliance

+ FCC Part 15 Class B
+ ICES-003 Class B
+ CE Mark
+ Safety ETL/Intertek
+ IEC 62368-1, UL 62368-1, EN 62368-1
+ FDA IEC 60825-1
+ RoHS 2015/863/EU

Ordering Information

Model	
2428TE	1x 2.5G RJ45 port WAN
	2x POTS RJ11 ports, 4x 1G RJ45 ports, 1x USB3.0 2.4GHz 3x3 802.11ax, 5GHz 4x4 802.11ax
	1x 2-pin barrel, 12VDC power input
	1x 2x4 Molex Battery-Backup (BBU), 8-pin power input 0 to +40°C
HX-2428TE-NA	North America
HX-2428TE-EU	EU
HX-2428TE-UK	UK
HX-2428TE-00	No power supply

DZS

info@DZSi.com
www.DZSi.com/contact-us

Contact DZS today
www.DZSi.com
support@DZSi.com