DISAGGREGATED CELL SITE GATEWAY
LN-3612Y-2ZT

As the internet data are growing at unprecedented rate due to advancements of 5G, IoT and always connected device, the capacity demand for telecom network is soaring. Locating at the edge of the network, the cell site gateway is high volume deployment product and an ideal location for mobile operators for high-volume cell site and aggregation routing applications.


Product Highlights

• Temperature hardened design for harsh environments

• Precision Timing and Synchronization (IEEE1588v2 & SyncE)

• Compact 1RU design at 250mm depth

• High availability in redundant design: 1+1 PSU Module, and 4+1 Fan Tray

• Serviceability: all I/O and replaceable FRUs are front access for easy maintenance

• Hardware support MACsec IEEE 802.1AE for strong cryptographic protection at Layer 2 data transmission

• Hardware support TSN IEEE 802.1CM Profile B Frame Preemption

• Hardware support SRv6

Open and disaggregated hardware and software solution can reduce CSPs' costs, increase choice, and speed up the pace of innovation to meet the dynamic of market demands. LN-3612Y-2ZT is engineered with the latest Marvell Prestera™ Family with diverse connectivity, timing synchronization capability, and temperature hardened design all integrating into a compact 1RU design for telecommunications network.

LN-3612Y-2ZT is an open hardware design that support the Open Network Install Environment (ONIE) that provides options of installation of alternate
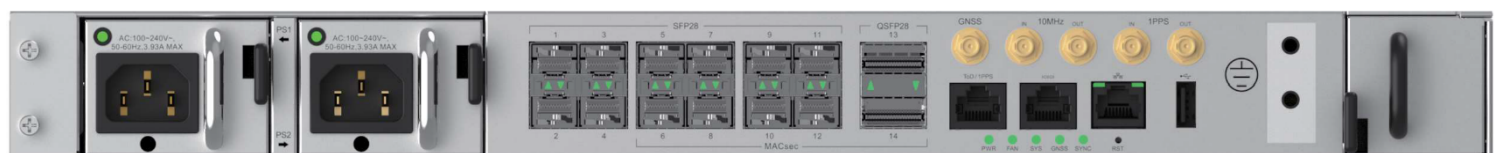
APLICATIONS

- Mobile Backhaul Router
- X-Haul Ethernet Transport Switch in Private Networks
- Carrier Access Switch
- Hardware support SRv6

HARDWARE SPECIFICATION

Function/parameter	Value
Interfaces	12 x 1/10/25G SFP28 ports (multi-rate) 2 x 40/100G QSFP28 ports Or 8 x 25G (Break out cable) 1 x RJ45 Mgmt port 1 x RJ45 Console port 1 x USB2.0 Type A Mgmt port
Timing Interfaces	1 x ToD Input/Output 1 x 10MHz Input/Output 1 x 1pps Input/Output
GNSS	1 x GNSS Antenna Receiver
CPU	Marvell CN9130 4C/1.6GHz
Switch Silicon	Marvell 98DX7320M
Memory	16GB DDR4 w/ ECC
Storage	32GB eMMC 32GB M.2 SSD(optional)
Hareware	**Performance**
Forwarding Bandwidth	500 Gbps
MACsec Forwarding	400 Gbps (16x 25G)
OAM Support	2K
Buffer Size	6MB
Hardware Timing Capability	IITU-T Synchronous Ethernet (SyncE) G.8262 IEEE 1588v2 T-TC,T-BC Class C ITU-T G.8275.1
TSN	IEEE 802.1CM TSN for Fronthaul Profile B Frame Preemption
L1/L2 Cache sizes	L1 32KB, w/ECC L2 512 KB, w/ECC
SRv6	Yes
TCAM	Multiple TCAM / TCAM keys size ranging from 20B to 80B
QoS Support	Yes
VxLAN	Support
Class C clock accuracy	Yes
AC Input	100VAC ~ 240VAC , 50 ~ 60Hz
DC Input	-48VDC~-60VDC
Power	140 Watts (Typical)
Consumption	170 Watts (Max) Redundant 1+ 1 PSU modules
Eniironment Conditions	
Operating	Operating temperature: -40°C to 65°C (-40°F to 149°F) Operating humidity: 5% to 95% (RH), noncondensing
Non-Operating	Storage temperature: -40°C to 70°C (-40°F to 158°F) Storage humidity: 5% to 95% (RH), non-condensing
Physical	
Cooling	Left-to-Right, 4+1 Fans Tray

Dimension	440mm(W) x 250mm(D) x 44mm(H)
Weight	AC model: 5.4 KG/ DC model :5 Kg (NW)

Marvell ROS SOFTWARE FEATURES

MAC-Based VLANs
Voice VLAN
Multicast TV VLAN
Triple Play, MVR
Q-in-Q, Selective Q-in-Q
Multicast Bridging Mode
Static Multicast Groups
IGMP Snooping
MLD Snooping
Flooding of Unregistered Multicast Frames
Per-device Spanning Tree
Rapid Spanning Tree
Multiple Spanning Tree
STP Root Guard
BPDU Filtering
STP BPDU Guard
Per-device Loopback Detection (LBD)
LACP
LAG Balancing
Static and Dynamics (DHCP/BootP) IP assignment
DNS Client
IPv6 Host
Dual Stack

ISATAP Tunneling
MAC-based Port Security (Locked Port)
802.1x Port-Based Authentication
Time Based 802.1x
Guest VLAN
Unauthenticated VLANs
802.1x - MAC Authentication
Action-on-Violation
Flow Monitoring (sFlow)
RADIUS Remote Authorization and Authentication
RADIUS Accounting
TACACS+
DHCP Snooping
IP Source Address Guard
ARP Inspection
DoS Attack Prevention
SSL
SSH
QoS Across the Stack
QoS statistics
Egress Rate Limiting (Shaping)
Ingress Rate Limiting
Packet Storm Control
Dynamic VLAN Assignment

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