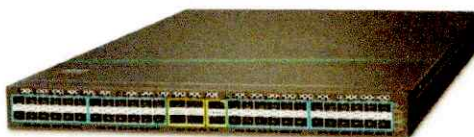


Дэд сүлжээний өргөтгөл:

Төхөөрөмжүүдийн тоо ширхэг

№	Тоног төхөөрөмжийн нэр	Хэмжих нэгж	Тоо ширхэг
3	10G Layer 3 Managed Switch	ш	7
5	10G SFP+ 2 Core LR Module	ш	24
6	10G SFP+ 1 Core LR Module	ш	24

10G Layer3 managed switch



Details	
Ports	48x 10GE 4x 40GE QSFP
Performance	Up to 2.5Tbps throughput
Physical specification	1RU
CPU	4-Core 1.5Ghz x86 CPU
Memory	8GB DRAM
Storage	4GB storage
Power inputs	AC (100-240V); DC (-48V to -60V)
Layer 2	<ul style="list-style-type: none"> • 4096 VLANs • Q-in-Q • 802.3ad Link Aggregation/LACP • 64 ports/channel • 104 groups per system • Multi-Chassis Link Aggregation (MLAG) • 64 ports per MLAG • Custom LAG Hashing • 802.1AB Link Layer Discovery Protocol • 802.3x Flow Control • Jumbo Frames (9216 Bytes) • IGMP v1/v2/v3 snooping • Storm Control • RAIL
Layer 3	<ul style="list-style-type: none"> • 802.1w Rapid Spanning Tree • 802.1s Multiple Spanning Tree Protocol • Rapid Per VLAN Spanning Tree (RPVST+) • Routing Protocols: OSPF, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2 • 64-way Equal Cost Multipath Routing (ECMP) 2 • Resilient ECMP Routes

Б.У.С.О.У

	<ul style="list-style-type: none"> • VRF • BFD • Route Maps • IGMP v2/v3 • PIM-SM / PIM-SSM / PIM-BIDIR • Anycast RP (RFC 4610) • VRRP • Virtual ARP (VARP) • Policy Based Routing • uRPF • Selective Route Download
QoS	<ul style="list-style-type: none"> • Up to 8 queues per port • 802.1p based classification • DSCP based classification and remarking • Explicit Congestion Notification (ECN) • QoS interface trust (COS / DSCP) • Strict priority queueing • Weighted Round Robin (WRR) Scheduling • Per-Priority Flow Control (PFC) • 802.1Qaz Enhanced Transmissions Selection (ETS) * • ACL based DSCP Marking • ACL based Policing • Policing/Shaping • Rate limiting • Audio Video Bridging (AVB)
Multicast	<ul style="list-style-type: none"> • 802.1w Rapid Spanning Tree • IGMP v2/v3 • Protocol Independent Multicast (PIM-SM / PIM-SSM) • PIM-BiDir • Anycast RP (RFC 4610) • Multicast Source Discovery Protocol (MSDP)
Automation	<ul style="list-style-type: none"> • Zero-touch provisioning (ZTP), iPXE • Configuration management • Network Configuration Protocol (NETCONG/YANG)

J. Yu Song

10G SFP+ Module (GBIC) 2 core



Details	
Form Factory	SFP+
Connector	LC and Duplex LC
Max Cable Distance	20km
Max Data Rate	10Gbps
Media	SMF
Wavelength	1310nm
Protocols	SFP+ MSA Compliant, CPRI, eCPR
Receiver Sensitivity	<-15dBm

10G SFP+ Module (GBIC) 1 core



Details	
Form Factory	SFP+
Connector	LC and Duplex LC
Max Cable Distance	20km
Max Data Rate	10Gbps
Media	SMF
Wavelength	1310nm