

Device used in the project

1) Router



Specifications	Cisco 2911 (in design)	Cisco ISR 4351
Performance	Up to 75 Mbps	Up to 200 Mbps
PoE Support	Yes (with PoE modules)	Yes (with PoE modules)
QoS Capabilities	Advanced QoS: Traffic shaping, prioritization of voice/video traffic	Advanced QoS: Deep packet inspection, application-aware QoS
Key Features	Modular design, voice, security, VPN, routing	High-performance routing, integrated security, WAN optimization
Target Use	Small to medium-sized businesses	Medium to large businesses
Gigabit Ethernet Ports	3 Gigabit Ethernet ports	3 Gigabit Ethernet ports

2) Access switch



Specifications	Cisco 2960 (in design)	Cisco 2960 x
Performance	Up to 1 Gbps	Up to 1 Gbps
PoE Support	Yes (with PoE and PoE+ models)	Yes (PoE+ models available)
QoS Capabilities	Basic QoS: Layer 2 prioritization, traffic classification	Enhanced QoS: Layer 2/3 QoS, traffic shaping, policing
Key Features	Entry-level Layer 2 switching, VLAN, basic QoS	Enhanced Layer 2/3, more energy-efficient, supports stacking (Flex Stack)
Target Use	Small to medium-sized networks	Small to medium-sized businesses, branch offices

3) Multilayer switch



Specifications	Cisco Catalyst 3650 (in design)	Cisco Catalyst 3850
Performance	160 Gbps switching capacity	480 Gbps switching capacity
PoE Support	Yes (with PoE+ models)	Yes (with PoE+ models)
QoS Capabilities	Advanced QoS: Modular QoS, dynamic per-flow queuing, Cisco's MQC	Advanced QoS: Hierarchical QoS, deep packet inspection, bandwidth management
Key Features	Stackable, enhanced Layer 3 routing, high-performance switching	Stackable, flexible NetFlow, full Layer 3 routing support
Target Use	Medium businesses, high-traffic environments	Large enterprises needing scalable solutions

4) Firewall



Specification	Cisco ASA 5506-X	Cisco ASA 5525-X
Performance	1 Gbps	4 Gbps
Max Throughput	1 Gbps	4 Gbps
Concurrent Connections	2,000,000	2,000,000
VPN Connections	1,000	5,000
High Availability	Yes	Yes
Key Features	Next-gen firewall features, integrated VPN, advanced threat protection	High-performance firewall, advanced threat detection, identity awareness
Target Use	Small to medium-sized businesses	Large enterprises

