9.5	▪ Wires pushed down over IDC instead of impact 110 style
9.6	▪ Removal of impacting to terminate improves return loss and cross-talk at termination points
9.7	▪ Less termination failures and better overall bandwidth for customer

	U/UTP Patch Cord Specification
1	**Application**
1.1	▪ Voice
1.2	▪ ISDN
1.3	▪ 10Base T(IEEE 802.3)
1.4	▪ Fast Ethernet(IEEE802.3)
1.5	▪ 100Vg-AnyLAN(IEEE 802.12)
1.6	▪ Token Ring(IEEE 802.5)
1.7	▪ TP-PMD(ANSI X3T9.5)
1.8	▪ 100Base-T Ethernet(IEEE 802.3u)
1.9	▪ 155/622 Mbps ATM
1.10	▪ 1000Base-T
1.11	▪ 550 MHz Broadband video
2	**Standards**
2.1	▪ UL, ETL Verified
2.2	▪ ANSI/TIA-568-C.2
2.3	▪ ISO/IEC 11801
2.4	▪ EN 50173
3	**Product Description**
3.1	▪ Meet all category 6 channel performance requirements specified in ANSI/TIA-568-C.2
3.2	▪ 110 type IDC termination
3.3	▪ Accept 22~26AWG, stranded or solid wire
3.4	▪ Modular jack meet FCC part 68
3.5	▪ Wiring: T568A/B
4	**Environmental Conditions**
4.1	▪ Temperature range: Storage: -40 to +70°C Operational: -10 to +60°C
4.2	▪ Relative humidity (operational): max. non-condensing 93% Electrical Characteristics
4.3	▪ Insulation resistance between any two conductors: 500 Mega-Ohms min.
4.4	▪ Dielectric with standing voltage: 1000V, RMS, 60HZ, 1 MIN.
4.5	▪ Current rating: 1.5 AMPS at 20°C
4.6	▪ DC resistance: Max. 0.1 Ohms
4.7	▪ Contact resistance: 20 Milli-Ohms max.
5	**Physical Characteristics**
5.1	▪ Housing: High-impact, Flame Retardant, UL94V-0 rated, spring wire/contact blades.
5.2	▪ Contact material: Phosphor bronze alloy
5.3	▪ Contact plating: 24 Karat hard gold (50 micro-inch plating thickness) over 100 micro-inch nickel.
6	**Mechanical Characteristics**
6.1	▪ Total mating force: 800 grams for a 8 wire leads minimum.

6.2	▪ *Retention: 30lbs min between the jack and plug.*	
6.3	▪ *Insertion/Extraction life: 750 cycles minimum.*	
6.4	▪ *Number of IDC terminations: 200 minimum*	
7	**Faceplate**	
7.1	▪ *These faceplates are made from high-impact ABS plastic to ensure years of durable usage*	
7.2	▪ *Accept all kinds of CAT 3, CAT 5e and CAT 6 UTP keystones to fit with different performance requirements2*	
7.3	▪ *Available in 1 port to 4 ports*	
	8-Port POE Switch + 2 SFP Ports (17 Units)	
1	Network Interface - *Proposed switch must have (8) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1 Gbps SFP Ethernet Ports*	
2	Management Interface - *Ethernet In-Band*	
3	Non-Blocking Throughput - *Must at least provide 10 Gbps*	
4	Switching Capacity - *Must at least provide 20 Gbps*	
5	Forwarding Rate - *Must at least provide 14.88 Mbps*	
6	Maximum Power Consumption - *The network switch must have a maximum power of at least 150W including PoE output and at least 20W excluding PoE output.*	
7	PoE Interfaces - *Must have 8 PoE ports which supports PoE+ IEEE 802.3af/at and 24VDC Passive PoE*	
8	Max. PoE Wattage - *At least 34.2 W per port*	
9	Max. Passive PoE - *At least 17W per port*	
10	Voltage Range 802.3at Mode - *Must have at least 50-57V*	
11	24V Passive PoE Voltage Range - *Must have at least 20-27V*	
12	Power Supply - *AC/DC, Internal, 150W DC*	
13	Operating Temperature - *-5 to 45° C (23 to 113° F)*	
14	Operating Humidity - *5 to 95% Noncondensing*	
15	ESD/EMP Protection - *Air: ±24 kV, Contact: ±24 kV*	
16	Shocks and vibration - *Must conform with ETSI300-019-1.4 Standard*	
17	Certifications - *CE, FCC, IC*	
18	Software Management - *The switch must have a wireless network management software solution that allows to manage multiple wireless networks using a web browser.*	
19	Brand/Standard - *The technology or brand must either be American or European for a more Global Standard compliance.*	
20	Local Support - *The brand must have local 2nd level support via its distributor that is compliant with global standard like ISO or Duns and Bradstreet to maintain a quality-of-service (QOS) delivery.*	

		16-Port PoE Switch + 2 SFP Ports (4 Units)	
1	Network Interface - *Proposed switch must have (16) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1 Gbps SFP Ethernet Ports*	
2	Management Interface - *Ethernet In-Band*	
3	Non-Blocking Throughput - *Must at least provide 18 Gbps*	
4	Switching Capacity - *Must at least provide 36 Gbps*	
5	Forwarding Rate - *Must at least provide 26.78 Mbps*	
6	Maximum Power Consumption - *The network switch must have a maximum power of at least 150W including PoE output and at least 28W excluding PoE output.*	
7	PoE Interfaces - *Must have 16 PoE ports which supports PoE+ IEEE 802.3af/at and 24VDC Passive PoE*	
8	Max. PoE Wattage - *At least 34.2 W per port*	
9	Max. Passive PoE - *At least 17W per port*	
10	Voltage Range 802.3at Mode - *Must have at least 50-57V*	
11	24V Passive PoE Voltage Range - *Must have at least 20-27V*	
12	Power Supply - *AC/DC, Internal, 150W DC*	
13	Operating Temperature - *-5 to 40° C (23 to 104° F)*	
14	Operating Humidity - *5 to 95% Noncondensing*	
15	ESD/EMP Protection - *Air: ±24 kV, Contact: ±24 kV*	
16	Mounting - *Rack-Mountable or Wall-Mountable*	
17	Shocks and vibration - *Must conform with ETSI300-019-1.4 Standard*	
18	Certifications - *CE, FCC, IC*	
19	Software Management - *The switch must have a wireless network management software solution that allows to manage multiple wireless networks using a web browser.*	
20	Brand/Standard - *The technology or brand must either be American or European for a more Global Standard compliance.*	
21	Local Support - *The brand must have local 2nd level support via its distributor that is compliant with global standard like ISO or Duns and Bradstreet to maintain a quality-of-service (QOS) delivery.*	
		16-Port PoE Switch + 2 SFP Ports Layer 3 (1 Unit)	
1	Network Interface - *Proposed switch must have (16) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1 Gbps SFP Ethernet Ports*	
2	Management Interface - *(1) RJ45 Serial Port, Ethernet In/Out Band*	
3	Non-Blocking Throughput - *Must at least provide 18 Gbps*	

4	Switching Capacity - *Must at least provide 36 Gbps*			
5	Forwarding Rate - *Must at least provide 26.78 Mbps*			
6	Maximum Power Consumption - *The network switch must have a maximum power of at least 150W including PoE output and at least 28W excluding PoE output.*			
7	Max. PoE Wattage - *At least 34.2 W per port*			
8	Max. Passive PoE - *At least 17W per port*			
9	Voltage Range 802.3at Mode - *Must have at least 50-57V*			
10	24V Passive PoE Voltage Range - *Must have at least 20-27V*			
11	Power Supply - *AC/DC, Internal, 150W DC*			
12	Operating Temperature - *-5 to 40° C (23 to 104° F)*			
13	Operating Humidity - *5 to 95% Noncondensing*			
14	ESD/EMP Protection - *Air: ±24 kV, Contact: ±24 kV*			
15	Mounting - *Rack-Mountable or Wall-Mountable*			
16	Shocks and vibration - *Must conform with ETSI300-019-1.4 Standard*			
17	Certifications - *CE, FCC, IC*			
18	Brand/Standard - *The technology or brand must either be American or European for a more Global Standard compliance.*			
19	Local Support - *The brand must have local 2nd level support via its distributor that is compliant with global standard like ISO or Duns and Bradstreet to maintain a quality-of-service (QOS) delivery.*			
	24-Port PoE Switch + 2 SFP Ports (2 Units)			
1	Network Interface - *Proposed switch must have (24) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1 Gbps SFP Ethernet Ports*			
2	Management Interface - *(1) RJ45 Serial Port Out-of-Band, Ethernet In-Band*			
3	Non-Blocking Throughput - *Must at least provide 26 Gbps*			
4	Switching Capacity - *Must at least provide 52 Gbps*			
5	Forwarding Rate - *Must at least provide 38.69 Mbps*			
6	Maximum Power Consumption - *The network switch must have a maximum power of at least 250W including PoE output and at least 30W excluding PoE output.*			
7	Max. PoE Wattage - *At least 34.2 W per port*			
8	Max. Passive PoE - *At least 17W per port*			
9	Voltage Range 802.3at Mode - *Must have at least 50-57V*			
10	24V Passive PoE Voltage Range - *Must have at least 20-27V*			
11	Power Supply - *AC/DC, Internal, 250W DC*			