

10	Cement	bags	45
11	Sand	cu mtr	1.5
12	Gravel	cu mtr	3
	SERVICE ENTRANCE CONDUIT		
13	PVC Pipe 1 1/2"	pcs	91
14	PVC Elbow 1 1/2"	pcs	15
15	PVC Coupling 1 1/2"	pcs	20
16	PVC Connector w/Locknut 1 1/2"	pcs	40
17	Pull Box 12"x12"x4"	pcs	10
18	Plastic Junction Box 4"x4"	pcs	12
19	G. I. Wire #16	kgs	10
20	Metal Clamp 1 1/2" 2 hole	pcs	100
21	Tox & Screw #6	pcs	200
	GROUNDING SYSTEM		
22	Grounding Rod 5/8 x 5'	pcs	7
23	Grounding Clamp 5/8"	pcs	7
24	Grounding Wire 3.5mm2 (Green)	bxs	2
25	Terminal Lugs 3.5mm2	pcs	7

6/20

8-PORT POE SWITCH + 2 SFP PORTS (31 units)

Item	Requirement	Description	Compliance
1	Network Interface	Proposed switch must have (8) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1 Gbps SFP Ethernet Ports	Comply
2	Management Interface	Ethernet In-Band	Comply
3	Non-Blocking Throughput	Must at least provide 10 Gbps	Comply
4	Switching Capacity	Must at least provide 20 Gbps	Comply
5	Forwarding Rate	Must at least provide 14.88 Mbps	Comply
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.	Comply
7	PoE Interfaces	Must have 8 PoE ports which supports PoE+ IEEE 802.3af/at and 24VDC Passive PoE	Comply
8	Max. PoE Wattage	At least 34.2 W per port	Comply
9	Max. Passive PoE	At least 17W per port	Comply
10	Voltage Range 802.3at Mode	Must have at least 50-57V	Comply
11	24V Passive PoE Voltage Range	Must have at least 20-27V	Comply
12	Power Supply	AC/DC, Internal, 250W	Comply
13	Operating Temperature	-5 to 45° C (23 to 113° F)	Comply
14	Operating Humidity	5 to 95% Noncondensing	Comply
15	ESD/EMP Protection	Air: ±24 kV, Contact: ±24 kV	Comply
16	Shocks and vibration	Must conform with ETSI300-019-1.4 Standard	Comply
17	Certifications	CE, FCC, IC	Comply
18	Software Management	The switch must have a wireless network management software solution that allows to manage multiple wireless networks using a web browser.	Comply
19	Brand/Standard	The technology or brand must either be American or European for a more Global Standard compliance.	Comply
20	Local Support	The brand must have local 2 nd 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.	Comply

God

16-PORT POE SWITCH + 2 SFP PORTS (5 units)

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

Go

24-PORT POE SWITCH + 2 SFP PORTS (3 units)

Item	Requirement	Description	Compliance
1	Network Interface	Proposed switch must have (24) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1 Gbps SFP Ethernet Ports	Comply
2	Management Interface	(1) RJ45 Serial Port Out-of-Band, Ethernet In-Band	Comply
3	Non-Blocking Throughput	Must at least provide 26 Gbps	Comply
4	Switching Capacity	Must at least provide 52 Gbps	Comply
5	Forwarding Rate	Must at least provide 38.69 Mbps	Comply
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.	Comply
7	PoE Interfaces	Must have 24 PoE ports which supports PoE+ IEEE 802.3af/at and 24VDC Passive PoE	Comply
8	Max. PoE Wattage	At least 34.2 W per port	Comply
9	Max. Passive PoE	At least 17W per port	Comply
10	Voltage Range 802.3at Mode	Must have at least 50-57V	Comply
11	24V Passive PoE Voltage Range	Must have at least 20-27V	Comply
12	Power Supply	AC/DC, Internal, 250W	Comply
13	Operating Temperature	-5 to 40° C (23 to 104° F)	Comply
14	Operating Humidity	5 to 95% Noncondensing	Comply
15	ESD/EMP Protection	Air: ±24 kV, Contact: ±24 kV	Comply
16	Mounting	Rackmount	Comply
17	Shocks and vibration	Must conform with ETSI300-019-1.4 Standard	Comply
18	Certifications	CE, FCC, IC	Comply
19	Software Management	The switch must have a wireless network management software solution that allows to manage multiple wireless networks using a web browser.	Comply
20	Brand/Standard	The technology or brand must either be American or European for a more Global Standard compliance.	Comply
21	Local Support	The brand must have local 2 nd 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.	Comply