Network Communication Section-07

Task 3

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DEVICES	FEATURES	BRANDS	PRICE/PCS	QUANTITY	TOTAL AMOUNT
Switches	-2 x 10 Gigabit -Ethernet with SFP+ uplinks -24 POE+ ports -Fixed 640 WAC default AC power supply -390W available PoE	Cisco Catalyst 3650 - 24 PDM	10,000MYR	2	20,000 MYR
Generator	-Input Voltage: 230V -Output voltage note: 230V -Output power capacity (VA): 5000 VA -Output power capacity (Watts): 4.5k Watts -Emergency Power Off (EPO): Y	APC Smart-UPS SRT 5000VA 230V	15,000MYR	3	45,000MYR
Switches	-2 x 40 Gigabit -Ethernet with QSFP+ Uplinks -48 UPOE ports	Cisco Catalyst 3650-48 FQ	19,000MYR	2	38,000MYR

	-1100 WAC default -AC power supply Supports Catalyst -Multigigabit technology				
Switches	-48 × 1G port models -4 × 10G SFP+ uplinks -Stack up to 8 units 160 Gbps of physical stacking	Cisco Meraki MS350 Series	13,000 MYR	3	39,000 MYR
Cable UTP Cat5e	-High Performance Data communication Cable -Suitable for 350MHz High- Speed Data Applications -Suitable for Gigabit Ethernet, Fast Ethernet and 155Mbps TP- PMD/CDDI -AWG24 Solid Annealed Bare Copper Conductor	Belden Grey LSZH Cat5e Cable SF/UTP	4MYR/meter	1200 meters	4,800MYR

Routers	-10 GE SFP+, PoE GE/SFP, GE/SFP -Integrated WAN ports -10-Gbps+ performance -7-Gbps encrypted throughput	Cisco ISR 4461 (integrated services routers)	31,208.68 MYR	2	62,417.36 MYR
Routers	-Power supply: AC,PoE -Rack units:1 RU -Redundant power: No -RJ 45 based ports: 2	Cisco ISR 1921 (integrated services routers)	6,913 MYR	2	13,824 MYR
Access Point	-Four radios: 2.4 GHz (4x4), 5 GHz (4x4), Cisco RF ASIC and BLE/IoT -Cisco Flexible Radio Assignment and Cisco CleanAir Technology -Internal and external antenna -Wi-Fi 6 certified Embedded wireless controller	Cisco catalyst 9120	6,933 MYR	4	27,732 MYR

Optical Fiber Cable	- it's able to run 40/100GB up to 150 meters utilizing a MPO connector - developed specifically for VCSEL laser transmission and allows 10 Gig/s link distances of up to 550m compared to 300M with OM3 - Bandwidth: 4700MHz*km - Can handle 2000 meters fast ethernet	OM4 patch cord ST FC OM4 fiber optic multimode ST-FC OM4 duplex	75 MYR/10 meters	50 Pcs (500 meters)	3,750 MYR
TOTAL AMOUNT					254,523.36 MYR

- Are you surprised by the prices? How were you surprised?

Well, this is the first time for us making this project. we didn't have any specific expectations on the price really, so as long as it does not exceed our budget, we wouldn't get surprised. But it does kind of exceed our expectations, at first, we expected the price for the devices would be just around 100.000RM to 120.000RM which turn out to be more than that. But still not that surprised, we might be getting more surprised if the price went up to 1.000.000 just for the devices, we don't know if it's possible to reach that kind of price.

- Have you ever considered cost as a factor for choosing networking devices?

Yes, we considered cost as a factor of choosing everything, not just networking devices, everybody has their own budget and different budgets means different kinds of devices, different building materials etc. for our team to get a huge budget like 1.500.000 RM we felt luckily because we could get the best of the best for the device, design and materials.

- What are the major differences between the same devices from different brands? For example, Cisco and Huawei Routers.

When we compare two devices but from different brands we cant just say this one is better or not, but instead we have to look to our budget and the usage of that devise that we need, so of course we will find what we want either in Cisco or Huawei its just that we have to chose what we feel comfortable with and what we used to work with, in our case we all used to have cisco devices in our life, so when we had to chose a brand for our devices we chose Cisco without second thoughts.

- Does LAN devices chosen accomplish needs/requirements?

Yes, we do believe that all the devices we gathered are more than enough for our project and its meet all the requirements that were given to us.