

Data Sheet for LAN System



Rev.	Description	Date	Prepared	Checked	Approved
B00	FIS	16.FEB.2022	N.M.Jahromi	F.REZAIE	N.SADRI
A01	IFA	05.DEC.2021	N.M.Jahromi	F.REZAIE	N.SADRI
A00	IFA	21.NOV.2021	N.M.Jahromi	F.REZAIE	N.SADRI

Bitumen Production and Bitumen & Heavy Petroleum Products Export (Storage) Terminal

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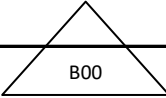
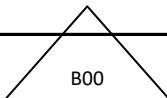
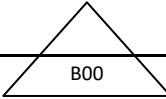
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1	X	X	X			26						51						76					
2	X	X	X			27						52						77					
3	X	X	X			28						53						78					
4	X	X				29						54						79					
5	X	X	X			30						55						80					
6	X	X	X			31						56						81					
7	X	X	X			32						57						82					
8		X				33						58						83					
9		X	X			34						59						84					
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GENERAL DATA	
Vendor's Name:	Design Temp. Deg.°C (Min / Max):-5.23°C/50.84°C
Tag No.(s):	Area Classification: As per related "Hazardous Area Classification Layouts"
App. Document.(s):	Elevation above sea level: 5~7m Above Sea level
Ref. Job Specification: BI103-EB-TC-SPC-0004	Barometric Pressure(Psia): 14.62
	Design relative humidity in winter: 95%

Item No.	DESCRIPTION	REQUIRED DESIGN DATA	VENDOR DATA	REMARK
1	Equipment List	Server		
2		Switch (Layer 3)		
3		Access Switch (Layer 2) 		
4		Firewall		
5		WAN Router		
6		VOIP Router		
7		Free Standing Cabinet 		
8		Wall Mount Cabinet		
9		Computers for Client		
10		Laptop		
11		LAN Socket and Outlet		
12		Other Passive Accessories 		

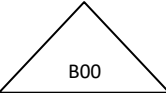


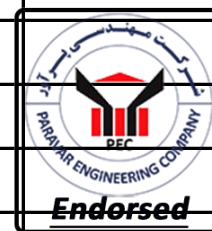
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Item No.	DESCRIPTION	REQUIRED DESIGN DATA	VENDOR DATA	REMARK
1. Server				
1.1	Brand	HP		
1.2	Model Number	HP Proliant DL380 G10		
1.3	Processor	2xIntel Xeon Gold 6246R (3.4GHz/16-core/205W)		
1.4	Processor Heatsink	(2)*High Performance Heatsink		
1.5	Processor Fan	(2)*High Performance Fan PN: 867810-B21		
1.6	Memory	(8)*HPE 32GB (1x32GB) Dual Rank x4 DDR4-2933 CAS-21-21-21 Registered PN: P00924-B21		
1.7	HDD	8xHPE 960GB SAS 12G Mixed Use SFF SC Value SAS MultiVendor SSD P37005-B21 Pack		
1.8	Network Controller	HPE Ethernet 10Gb 2-port 562FLRSFP+ Adapter PN: 727054-B21		
1.9	Transceiver	HP BladeSystem c-Class 10Gb SFP+ Short Range Transceiver PN:455883- B21		
1.10	MicroSD Memory	(1)*HPE 32GB microSD Flash Memory Card PN: 700139-B21		
1.11	Storage Controller	(1)*HPE Gen10 Smart Array P408i-a SR Gen10 2GB Cache/ 12G SAS Modular Controller PN: 804331-B21		
1.12	DVD-RW	(1)*HP 9.5mm SATA DVD-RW JackBlack Gen9/Gen10 Optical Drive PN: 726537-B21		
1.13	Power Supply	(2)*HPE 800W Gen10 Flex Slot Titanium Hot Plug Low PN: 865438-B21		
1.14	Bezel	(1)*HPE Gen10 2U Bezel Kit PN:867809-B21		
1.15	Other	Integrated Video Standard		
		HP Embedded 1Gb Ethernet 4-port 331i Adapter		
		Rack (2U), HP Easy Install Rails with CMA		
		HPE iLO 5 on system management memory		
		6 hot plug high performance fans, redundant		
		Rack (2U), HPE Easy Install Rails		



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Item No.	DESCRIPTION	REQUIRED DESIGN DATA	VENDOR DATA	REMARK
2. Switch (Layer 3)				
2.1	Brand	Cisco		
2.2	Model Number	Cisco WS-C3850-24XS-E or Cisco WS-C4500X-24X-ES or Cisco Replacement (CISCO 3850-48T + C3850-NM-2-10G Module) or CISCO Replacement		
2.3	Labling	Required		
2.4	Mounting/Mounting Accessories	Rack/Required		
2.5	Managable	Required		
2.6	Features and standards	QOS, IEEE802.1Q, TCP, UDP		
2.7	Network layer support	Layer 3		
2.8	Config status	Secure managable with command prompt		
2.9	Power Supply/Power Consumption	230VAC/TA		
2.10	Operating Temperature	0°c to +40°c		
2.11	Modules	24x10G Single Mode FO, duplex connectors, G652 SFP+ Standard CAT6		
2.12	Flash memory	at least 4GB		
2.13	DRAM	4 GB		
2.14	Forwarding Rate	454.55 Mpps		
2.15	Power redundancy	1+1		
3. Access Switch (Layer 2)				
3.1	Brand	Cisco		
3.2	Model Number	WS-2960X-24PD-L or Cisco Replacement WS-2960X-48FPD-L or Cisco Replacement		
3.3	Labling	Required		
3.4	Mounting/Mounting Accessories	Rack/Required		
3.5	Config status	Secure managable with command prompt		
3.6	POE Mode	Required, POE+		
3.7	Features and standards	QOS, IEEE802.1Q (VLAN enable)		
3.8	Network layer support	Layer 2		
3.9	Power Supply/Power Consumption	230VAC/TA		
3.10	Operating Temperature	0°c to +40°c		
3.11	Connector	2x10G Single Mode FO, duplex connectors, G652 SFP+ 24x10/100/1000 Base-T		
3.12	Flash memory	At least 64 MB		
3.13	DRAM	256 MB		
3.14	Forwarding Rate	50 Gbps		
3.15	RSTP as per IEEE802.1w	Required		
3.16	Link Aggregation as per IEEE802.3ad	Required		



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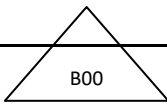
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4. Firewall

4.1	Manufacturer	Fortinet		
4.2	Model Number	Fortigate 200F+ C/W full license		
4.3	Type	rack mount		
4.4	Labling	Required		
4.5	Ethernet Port	4x10G SFP+, G652 8x1G SFP, G652 18GE RJ45 (including 1 x MGMT port, 1 X HA port, 16 x switch ports)		
4.6	Redundant Power Supply	Dual AC Power supply		
4.7	Console port	required		
4.8	IPS throughput	5Gbps		
4.9	Concurrent Sessions	3Milion		
4.10	High-Availibility Support	Active-Active, Active-Passive, Clustering		

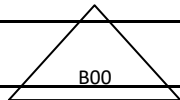
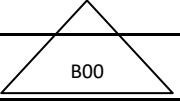
5. WAN Router

5.1	Manufacturer	Cisco		
5.2	Model Number	ISR4331/K9		2 sets for redundancy
5.3	License Package	PLR License		2 sets for redundancy
5.4	Type	rack mount		
5.5	Labling	Required		

6. VOIP Router

6.1	Manufacturer	Cisco		
6.2	Model Number	2951		
6.3	License Package	Required		
6.4	Type	rack mount		
6.5	Labling	Required		
6.6	Module Type 1	1xVIC2-4FXO 2xVIC3-4FXS 1xVWIC3-4MFT-E1/T1 PWDM3-64		
6.7	Module Type 2	4xVIC3-4FXS		
				

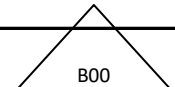
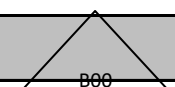
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Item No.	DESCRIPTION	REQUIRED DESIGN DATA	VENDOR DATA	REMARK
7. Free Standing Cabinet				
7.1	Manufacturer	TIAM		
7.2	Model Number	iRack TRS-1142p and iRACK 20U TRS-6020		
7.3	Type	Free Standing		
7.4	Labling	Required		
7.5	Size(mm)	600(W) x 1070 (D) x 2100 (H) and 600(W) x 600 (D) x 100 (H)		
7.6	Rack units/Size	42 U/19" and 20 U		
7.7	Colour	Black		
7.8	Material	Steel Sheet ≥ 1.5mm		
7.9	Rails	Movable		
7.10	Cable entry	Top for data cables/Bottom for Power cables		
7.11	Temperature Indicator and alarm, Fan+thermostat, dust filter, light	Required		
7.12	Dust Filter	Required		
7.13	At least 4 fans	Required		
7.14	Blank panel for empty units	Required		
7.15	Cable Management	Required(TIAM brand)		
7.16	Door	Front: Lockable perforated Back: Lockable Perforated Side: lockable		
7.17	PDU, Earthing, Fuse	Required, Clean and PE bus bar.		PDU16:TIAM TPD-116F(one for each rack) PDU16:TIAM TPD-614F(only for server rack)
7.18	Bottom Gland Plate	Required. C/W required glands.		
7.19	KVM+all required accessories and drawer	TIAM, TCD-916i+		only for server cabinet
7.20	PE & IE bar for earthing	Required		
8. Wall Mount Cabinet				
8.1	Manufacturer	TIAM		
8.2	Model Number	TRB-6012		
8.3	Type	Wall Mount		
8.4	Labling	Required		
8.5	Size(mm)	565 (W) x 600 (D) x 623 (H)		
8.6	Rack units	12 U		
8.7	Colour	Black		
8.8	Cable entry	Top for data cables/Top for Power cables		
8.9	Temperature Indicator and alarm, Fan+thermostat, dust filter, light	Required		
8.10	Blank panel for empty units	Required		
8.11	Cable Management	Required(TIAM brand)		
8.12	PDU	TIAM, TPD-106S		
8.13	PE & IE bar for earthing	Required		

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Item No.	DESCRIPTION	REQUIRED DESIGN DATA	VENDOR DATA	REMARK
9. Computers for Client				
9.1	Type	PC		
9.2	Mainboard	Gigabyte H510MS2H		
9.3	CPU	Intel® Core™ i3-10100 3.6GHz ,6M Cache		
9.4	RAM	GSKILL AEGIS 8GB 3200 DDR4		
9.5	Hard Disk Drive	Samsung 980 NVMe M.2 500GB		
9.6	Case	Green Pars EVO		
9.7	Power Supply/Power Consumption	GP-330A-EU+ 80 Plus Bronze Power Supply/ VTA		
9.8	Accessories	Keyboard, Mouse (A4Tech KR-8520D)		
9.9	Monitor	Samsung S22R350FHM		
10. Laptop				
10.1	Brand	Lenovo ThinkPAD E15 or T14		
10.2	CPU	Intel Core i7 10th/11th Generation		
10.3	RAM	16GB, DDR4		
10.4	Storage	SSD NVMe M.2, 500GB		
10.5	Graphic Adapter	Nvidia GeForce 4GB		
10.6	Display	15.6 inch 16:9, 1920 x 1080 pixel 141 PPI, 60 Hz		
10.7	I/O Connectors	1 USB 2.0,1 USB 3.0 / 3.1 / 3.2, 1 HDMI, Audio Connections: 3.5mm, USB-C		
10.8	Operating System	Windows 10		
10.9	etc	Bag , Wireless Mouse		



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11. LAN Socket and Outlet								
11.1	Manufacturer	Unicom						
11.2	Model Number	VTA						
11.3	Type	RJ45, SFTP/UTP					as per specified in MTO	
11.4	Mounting	Flush, Surface, Floor Mounted					as per specified in MTO	
11.5	Keystone	Unicom UTP CAT6 For Lan and Tel						
11.6	Face Plate Shutter Built in for Network Keystone 2port for Telephones	Unicom Brand						
11.7	Module type	Double Module						
11.8	UPS Power Outlet	Required as per related MTO						
11.9	UPS Power Outlet	Required as per related MTO						
11.1	Box and installation accessories	Required for floor mounted type						
12. Other Passive Accessories								
12.1	Keystone	Unicom						
12.2	Unloaded UTP Network Patch Panel	Unicom, 24Port Cage or 48 Ports Cage - 24 x RJ45 UTP CAT6 Keystone or 48 x RJ45 UTP CAT6 Keystone -Rack Mount -Earthing and Grounding -Strong metal work						
12.3	Unloaded SFTP Shielded Network Patch Panel	Unicom Brand -24 Ports Cage -24 x RJ45 SFTP CAT6 Keystone -Rack Mount -Earthing and Grounding -Strong metal work						
12.4	Optical Patch Panel	Unicom Brand -12 Optical Ports Cage or 24 Optical Ports Cage -19 Inches Rack Mount -Earthing and Grounding -Strong metal work						
12.5	Fiber Optic Splice Tray (For Fiber Optic Patch Panel)	Unicom Brand						
12.6	SFP Modules	Cisco Brand -Ethernet 10GBase-LR -LC Single-Mode -10 Gbps transfer rate -IEEE 802.3ae -SFP+ -1310 nm optical wave length						
12.7	FO Patch Panel+Casset and installing accessories	iRACK TPF-124						
12.8	Network UTP Patch Cord	Unicom, UTP CAT6 Patch Cord 1m & 3m & 5						
12.9	Network SFTP Patch Cord	Unicom Brand, SFTP CAT6 Patch Cord (5m & 3m & 1m)						
12.10	Network Outdoor Keystone	SFTP CAT6 Outdoor Keystone (For Tower G35/G45)						
12.11	Fiber Optic Patch Cord	Unicom Brand, LC-LC, Single Mode						
12.12	Pigtail	Unicom						
12.13	Fiber Optic Adapter/Coupler	Unicom -LC-LC Duplex -Single-Mode						
12.14	Voice Patch Panel	-50/25 Ports as per related MTO						
12.15	Box and installation accessories	Required						
12.16	Video Conference Camera	Logitech GROUP Conference Camera With Expansion Mics						
12.17	Printer	HP Laserjet M426fdw and HP Color Laserjet Enterprise M553DN						
12.18	Multifunctional set, Copy	Sharp 6023-NV						