

A. TECHNICAL SPECIFICATIONS

No	Item	Description	Quantity
1.	Firewall	22x GE R 45 ports (including 2x WAN ports, 1x DMZ port, 1x Mgmt port, 2x HA ports, 15x switch ports with 4 SFP port shared media), 4 SFP ports, 2x 10 GE SFP+ Fortilinks, 480GB onboard storage (minimum), dual power supply Unified Threat Protection (UTP) (IPS, Advanced Malware Protection, Application Control, Web & Video Filtering, Antispam Service, and FortiCare Premium). One-year warranty from the OEM manufacturer.	1
2.	Enterprise SD-WAN router	<u>WAN Interface:</u> 1x Embedded LTEA-PRO Modem with Redundant SIM Slots 2x 10/100/1000M Ethernet 2x USB 2.0 Interface <u>LAN Interface:</u> 9x 10/100/1000M Ethernet <u>Router Throughput:</u> 2.5 Gbps <u>PepVPN Throughput (No Encryption):</u> 600 Mbps <u>PepVPN Throughput (256-bit AES):</u> 500 Mbps <u>Cellular Data Rate (Downlink/Uplink):</u> CAT-12: 600 Mbps/150 Mbps minimum CAT-18: 1.2 Gbps/150 Mbps minimum Recommended Users: 50 up to 500 <u>Cellular and GPS Antenna Connectors:</u> 2x SMA Antenna Connectors (for CAT-12) 4x SMA Antenna Connectors (for CAT-18) 1x SMA GPS Antenna Connector <u>Power Input:</u> Power Din DC: 12V – 30V <u>Power Consumption:</u> 30W (max.) Two-year warranty from the OEM manufacturer.	2
3.	Wireless Access Point	Compatible with item 2 Ethernet Port: 1 (GE) Wi-Fi Standard: Wi-Fi 6 MIMO: 2x2 MIMO 2.4 GHz: 574 Mbps minimum 5 GHz: 1200 Mbps minimum SSID Per Radio 16 PoE Input 802.3at PoE. Two-year warranty from the OEM manufacturer.	4

4.	Power injector	Compatible with item 3 ACW-107-us Poe or comparable 802.3at Power Over Ethernet injector Power Input: AC Input 100 - 240V <u>Interface:</u> 1 Gigabit Ethernet Input (Data Only) 1 Gigabit Ethernet Output (Data + Power)	4
5.	Wall mount Cabinet	Cabinet rack 8/9U with fan and power strip	1
6.	UPS 3KVA rack mounted	Legrand DAKER DK 3 KVA ONLINE Uninterruptible Power Supply or comparable Nominal power (VA): 3000 minimum Input voltage: 230 V Input frequency 50-60 Hz $\pm 5\%$ Autosensing Output voltage: 230V $\pm 1\%$ Battery series Type/Voltage 12V 9Ah. Uptime with 80% load (min) 8 Recharge time (to 100%) 4 hours maximum Communication Ports RS232 serial ports, USB Remote Management: available One-year warranty from the OEM manufacturer.	1
7.	Data cables	CAT6 UTP 23AWG COPPER Ethernet PVC Network Cable Reel BOX 305m	1

8.	Server	ProLiant DL380 Gen10 Plus or comparable Dual Intel® Xeon® Scalable 4310 processor or equivalent, 12 cores each min. RAM 128GB Dual Rank DDR4 minimum, Hard Drive 2x1.92TB SSD minimum, Network Controllers 1x 4Gb ports, Server mount kit, Power supply dual, 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit, Management iLO 5. OS: Windows Server 2019 STD Warranty 3-year parts, 3-year labor, 3-year onsite support with next business day response	2
9.	Network Switch	48 x PoE+ Gigabit Ethernet Ports 4 x Gigabit SFP Ports minimum 104 Gb/s Switching Capacity min. 800 MHz ARM Processor minimum 512MB RAM minimum Rack-Mountable Design at least 370W Power Budget Comprehensive Layer 2 & 3 Features Support for up to 4,094 VLANs simultaneously Warranty 1 year	2
10.	UPS 6kVA Rack mounted	Legrand DAKER DK 6 KVA ONLINE Uninterruptible Power Supply or comparable. Nominal power (VA): 6000 minimum Input voltage: 230 V Input Voltage Range: 170V - 288V on full load Input frequency 50-60 Hz ±5% Autosensing Output voltage: 230V ± 1% Battery series Type/Voltage 12V 9Ah. Uptime with 80% load (min) 8 Number of batteries: 20 Recharge time (to 100%) 4 hours maximum Communication Ports RS232 serial ports, USB Remote Management: available One-year warranty from the OEM manufacturer.	1
11.	PDU	Rack mount PDU online Power Distribution Unit 19" 1U 6-way sockets	2

12.	KVM	Compatible with item 8. KVM small form factor USB adapter for use with, KVM IP Console Switch.	1
13.	Copper Patch cords	3 Meter cat6 cables	12