## HARDWARE INFRASTRUCTURE REQUIRED FOR IMPLEMETATION OF EXCISE E-GOVERNANCE APPLICATION (ASSAM)

C-TEL INFOSYSTEMS PVT LTD

## : - <u>Usage of Hardware for functioning of Excise e-governance application</u> <u>at Retailer</u>

S. No	Item Description	Specifications	Purpose	Units
1	Tabletop Device (Android POS Device)	<ul> <li>Product Form: Intelligent advertising machine</li> <li>Size: 420*176*20mm</li> <li>LCD Proportion of the screen: 16:9</li> <li>Screen Resolution: 800*1280</li> <li>Touch Module: G+G Capacitive touch screen</li> <li>Touch point: 10 points touch</li> <li>Core processor: MTL8783 LTE 8core</li> <li>CPU Type: ARM -53@1.3GHZ</li> <li>GPU Type: ARM Mali-T720</li> <li>Memory Capacity: LPDDR3 3GB</li> <li>Storage Capacity: eMMC 32GB</li> <li>Camera Front: 8.0M</li> <li>Speaker Built-in: 8R/2.0W*2</li> <li>Built-in battery: 7.4v-10000MA lithium battery</li> <li>WIFI Module: WIFI 802.11b/g/n</li> <li>External 4G antenna: 90 degrees of fold</li> <li>Bluetooth Module: Bluetooth4.0</li> <li>4G Internet: Supportive</li> <li>4G call: Supportive</li> <li>External Memory: 1x miniSD card up to 64GB</li> <li>NFC: Supportive</li> <li>Charging: Support USB*2</li> <li>Data Transfer: Support USB2.0*2</li> <li>Music Output: ∮ 3.5mm standard headphone jack</li> <li>Photo Viewer: BMP, JPG, GIF, PNG</li> <li>Video Format: Video H.264, H.265 / HEVC, MPEG-1/2/4</li> <li>HDMI Interface:  Video Output: Micro HDMI</li> <li>MIC: /-42dbm, 4015*1</li> <li>Power adapter: Power board supply 12V/2A/DC</li> <li>USB Cable: Standard Configuration Host</li> <li>Operating System: Android 7.0</li> <li>Audio Format: audio code (aac, amrnb, amrwb,g711-alaw,g711-mlaw,mp3,vorbis,alac,raw,flac,gsm)</li> <li>File Type *.mp3,*.wav,*.ogg,*.flac,*.mid,*.amr,*.aac,*.ts,*.mp4,*.m4a,*.3gp,*.mkv)</li> </ul>	Installation of Excise e-governance application - Modules and Features to achieve Control and Regulation at Retailer  Features List:  Raise Indent for Supply / Purchase Order to Wholesaler View Approved Order for Supply / Purchase Orders issued by Wholesalers Indent & Approval of Transport Pass Receive Consignment from Wholesaler Update Stock Inventory (IML, BEER, CS etc.) Dashboard (Stocks, Sales), Transaction History Scan Barcode for Sale of Bottles / Peg sales (if Bar) Bulk Sale Sale Return Record Transit / Storage Breakages Record Transit / Storage Shortages Reports Alerts & Notifications	1

1.A	IP68 Grade Server(Primary & Secondary)	<ul> <li>Intel i7 Octa Core</li> <li>8 GB RAM, 500 GB HDD, Fanless</li> <li>Operates in -20 to +90 degree Celsius.</li> <li>Dual LAN port, Inbuilt 4G / 5G SIM and Wi-fi Module</li> <li>OS: Ubuntu 20:04 desktop edition</li> </ul>	Installation of Excise e-governance application - Modules and Features to achieve Control and Regulation at Retailer  Features List:  Raise Indent for Supply / Purchase Order to Wholesaler View Approved Order for Supply / Purchase Orders issued by Wholesalers Indent & Approval of Transport Pass Receive Consignment from Wholesaler Update Stock Inventory (IML, BEER, CS etc.) Dashboard (Stocks, Sales), Transaction History Scan Barcode for Sale of Bottles / Peg sales (if Bar) Bulk Sale Sale Return Record Transit / Storage Breakages Record Transit / Storage Shortages Reports	1
2	1KVA UPS Connectivity	<ul> <li>Input Voltage Range: 140 V ~ 300 V AC</li> <li>Frequency: 50 Hz ± 10%</li> <li>Output Voltage: 230 V ± 10%</li> <li>Charging Time: 4-8 Hours recover to 90% capacity</li> <li>Operating Temperature: 0°C-40°C</li> </ul>		1

3	2D-Wired Scanner	• Scan Pattern: Area Image (838 x 640-pixel	2D-wired scanners are integrated and	1
	ZD-Wired Scariner	array) <b>Motion Tolerance:</b> Up to 610 cm/s	connected with the Excise e-	1
		(240 in/s) for 13 mil UPC at optimal focus	governance application for scanning of	
		• Scan Angle:	Barcodes affixed on each bottle which	
		- HD Focus: Horizontal 41.4°; Vertical:	will be scanned and issued to the End	
		32.2°	Consumer.	
		- SR Focus: Horizontal: 42.4°; Vertical:	This will auto update the inventory and	
		33°	generate a receipt for every sale.	
		- ER Focus: Horizontal:		
		31.6°; Vertical: 24.4°		
		Symbol Contrast: 20% minimum		
		reflectance difference		
		• Pitch, Skew: 45°, 65°		
		Decode Capability: Reads standard		
		1D, PDF, 2D, Postal and OCR		
		symbologies		
		Environmental Sealing: IP41		
		Drop: Designed to withstand at least		
		1.8 m (6') drops to concrete.		
		Ratchet stand: Designed to		
		• (4') drops to concrete on each of the faces.		
		• Input Voltage: 4 VDC to 5.5 VDC		
		Operating Power: 2.3 W		
		(450mA @ 5 VDC)		
		• Standby Power: 0.45 W		
		(90mA @ 5 VDC)		
		Host System Interfaces:		
		USB, Keyboard Wedge,		
		RS232, IBM 46xx (RS485)		
4	Thermal Printer	Resolution: 8 dots/mm (203 DPI)	Thermal Printer will be Connected to	1
		• Printing method: Thermal Transfer &	the device for issuing bill or receipt for	
		Direct Thermal	every sale of liquor bottle sold to the	
		• Max. print speed: 127 mm (5")/second	end consumer	
		• Max. print width: 108 mm (4.25")		
		• Max. print length: 2,286 mm (90")		
		• Label roll capacity: 110 mm (4.33") OD		
		• Ribbon: 300 m long, max. OD 67 mm,		
		1"core (ink coated outside)		
		• <b>Ribbon width:</b> 40 mm ~ 110 mm (1.6" ~		
		4.3")		
		• Processor: 32-bit RISC CPU		
		• Memory: 4 MB Flash memory, 8 MB		
		SDRAM, SD card reader for Flash memory		
		expansion, up to 4 GB (user option)		
		• Interface: USB 2.0, RS-232, Bluetooth		
		(user option), External 802.11 b/g/n		
		wireless (user option)		
		Power:		
1		External universal switching power supply		

Network Equipment*			<ul> <li>Input: AC 100-240V, 2.5A, 50-60Hz</li> <li>Output: DC 24V, 2.5A, 60W</li> <li>Sensors: Gap transmissive sensor, Black mark reflective sensor, Ribbon end sensor</li> <li>Internal fonts: 8 alpha-numeric bitmap fonts, Monotype Image® true type font engine with one CG Triumvirate Bold Condensed scalable font</li> <li>Bar code: 1D bar code[Code 39, Code 93, Code 128UCC, Code 128 subset A, B, C, Codabar, Interleave 2 of 5, EAN-8, EAN-13, EAN-128, UPC-A, UPC-E, EAN and UPC 2 (5) digits add-on, MSI, PLESSEY, POSTNET, RSS-Stacked, GS1 DataBar, Code 11], 2D bar code [PDF-417, Maxicode, DataMatrix, QR Code, Aztec]</li> </ul>		
+SyrLicense  - Hardware Accelerated 10 GE SFP+ Slots: 2 - Hardware Accelerated GE SFP Slots: 8 - Hardware Accelerated GE RJ45 Ports: 20 - GE RJ45 Management / HA Ports: 2 - USB Ports (Client / Server): 1 / 2 - Onboard Storage: 240 GB - Included Transceivers: 2x SFP (SX 1 GE)  - Capacity: - IPv4 Firewall Throughput (1518 / 512 / 64 byte, UDP): 36 / 36 / 22 Gbps - IPv6 Firewall Throughput (1518 / 512 / 86 byte, UDP): 36 / 36 / 22 Gbps - Firewall Latency (64 byte, UDP): 3 μs - Firewall Throughput (Packet per Second): 33 Mpps - Concurrent Sessions (TCP): 5 Million - New Sessions/Second (TCP): 280,000 - Firewall Policies: ~10,000 - IPsec VPN Throughput: 2.2 Gbps - Concurrent SSL-VPN Users: 5,000 - IPS Throughput: 8 Gbps - CAPWAP Throughput: 5.5 Gbps					
6 Public IP Dedicated Public IP 8082, 5434, 2202 ports to open 1	5		- Hardware Accelerated 10 GE SFP+ Slots: 2 - Hardware Accelerated GE SFP Slots: 8 - Hardware Accelerated GE RJ45 Ports: 20 - GE RJ45 Management / HA Ports: 2 - USB Ports (Client / Server): 1 / 2 - Onboard Storage: 240 GB - Included Transceivers: 2x SFP (SX 1 GE)  • Capacity: - IPv4 Firewall Throughput (1518 / 512 / 64 byte, UDP): 36 / 36 / 22 Gbps - IPv6 Firewall Throughput (1518 / 512 / 86 byte, UDP): 36 / 36 / 22 Gbps - Firewall Latency (64 byte, UDP): 3 μs - Firewall Throughput (Packet per Second): 33 Mpps - Concurrent Sessions (TCP): 5 Million - New Sessions/Second (TCP): 280,000 - Firewall Policies: ~10,000 - IPsec VPN Throughput (512 byte): 20 Gbps - SSL-VPN Throughput: 2.2 Gbps - Concurrent SSL-VPN Users: 5,000 - IPS Throughput: 8 Gbps	installed with Excise e-governance application has a sensitive data of Excise revenue and other important data, A firewall is installed for network security which monitors and restricts incoming and outgoing network traffic and decides whether to allow or block specific traffic based on a defined set of	1
	6	Public IP	Dedicated Public IP	8082, 5434, 2202 ports to open	1

Note: Either serial no 1 or 1.A need to procure.