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KAVARATTI SMART CITY LIMITED (KSCL)
KAVARATTI – 682 555

F.No.48/Smart City/2022 Voll-II)

Dated:23.01.2024

Corrigendum 2

Sub: RFP for Selection of Master System Integrator for Integrated Command and Control Centre (ICCC) of Kavaratti Smart City Limited (KSCL) (including 5 years O&M).

Ref: F. No. Ref: F.No. 48/Smart City/2022 (Voll-II) dated 30.12.2023.

3.5 Pre-Qualification Criteria (page 37)

Existing

#	Eligibility Criteria	Supporting documents required
PQ6	Technical Capability (ICCC) The Bidder should have the project Experience of having successfully completed similar works during the last 7(seven) years ending last day of month previous to the one in which applications are invited should be either of the following: One project of value more than INR 48 Crore OR Two project of value more than INR 36 Crore +OR	<ul style="list-style-type: none">The bidder should submit the documental proof of copies of work orders /Certificate may be signed by Chief Technical officer (CTO) / Operation Head ICCC / Chief Executive Officer, Smart City.

#	Eligibility Criteria	Supporting documents required
	<p>Three project of value more than INR 24 Crore</p> <p>Note: Similar works means the bidder should complete establishment of at least one Integrated Command Control Centre (ICCC) in any of smart city, in India.</p>	

Revised

#	Eligibility Criteria	Supporting documents required
PQ6	<p>Technical Capability (ICCC) The Bidder should have the project Experience of having successfully completed similar works during the last 7(seven) years ending last day of month previous to the one in which applications are invited should be either of the following:</p> <p>One project of value more than INR 48 Crore</p> <p>OR</p> <p>Two project of value more than INR 36 Crore</p> <p>OR</p> <p>Three project of value more than INR 24 Crore</p> <p>Note: Similar works means the bidder should complete establishment of at least one Integrated Command Control Centre (ICCC)/ CCTV Command Center in any of smart city/Central Govt/State Govt/PSU in any of smart city, in India.</p>	<ul style="list-style-type: none"> • The bidder should submit the documental proof of copies of work orders /Agreement/Go-Live. • Certificate may be signed by Chief Technical officer (CTO) / Operation Head ICCC / Chief Executive Officer/Competent Authority

3.6.1 Technical Bid Evaluation Criteria (Page 40)

Existing

#	Particulars	Max Marks	Documents Required Supporting
TQ2.A	<p>Technical Capability (ICCC) The Bidder should have the project Experience of having successfully completed similar works during the last 7(seven) years ending last day of month previous to the one in which Bids are invited.</p> <p>a. Project experience above Rs: 48 Cr = 15 marks b. Project experience Rs 31 Cr to Rs <48 Cr = 10 marks c. Project experience Rs 24 Cr to Rs <30 Cr = 7 marks</p> <p>Note: Similar works means the bidder should complete establishment of Integrated Command Control Centre (ICCC) in any of smart city, in India.</p>	15	<ul style="list-style-type: none"> • Copy of work order • Completion certificate/Go-live Certificate(s) from the client or Certification by CA for Ongoing Projects
TQ2.B	<p>Technical Capability (CCTV) The Bidder should have the project experience of supply and implementation of a Single CCTV system Project integrated with ICCC with value of 10 Cr in government or semi- government or government autonomous bodies or public sector undertakings or other government organization in India in the last Seven (7) years.</p>	15	<ul style="list-style-type: none"> • Copy of work order • Completion certificate/Go-live Certificate(s) from the client or Certification by CA for Ongoing Projects

#	Particulars	Max Marks	Documents Required Supporting
	<p>Such project should consist of Minimum 500 Cameras</p> <p>a. No of CCTV Camera greater than 1000 Nos = 15 marks</p> <p>b. No of CCTV Camera greater than 750 Nos and less than 1000 Nos = 10 marks</p> <p>c. No of CCTV Camera greater than 500 Nos and less than 750 Nos = 7 marks</p>		
TQ4.A	<p>A. Technical Leader cum Program Manager: 10 Marks</p> <p>a. Min Educational Qualification: BE / B. Tech or equivalent: 2 Marks</p> <p>b. 7 Years of Minimum Work Experience</p> <ul style="list-style-type: none"> Min 7 Years: 2 Marks 10 Years or more: 4 Marks <p>c. CCNA/ CCNP/ Linux / MCSE/ RHCE / Equivalent Certification : 4 Marks</p>	20	<ul style="list-style-type: none"> Candidate CV Relevant Certification Copy

Revised

#	Particulars	Max Marks	Documents Required Supporting
TQ2.A	<p>Technical Capability (ICCC)/ CCTV Command Center The Bidder should have the project Experience of having successfully completed similar works during the last 7(seven) years ending last day of month previous to the one in which Bids are invited.</p> <p>d. Project experience above Rs: 48 Cr = 15 marks e. Project experience Rs 31 Cr to Rs <48 Cr = 10 marks f. Project experience Rs 24 Cr to Rs <30 Cr = 7 marks</p> <p>Note: Similar works means the bidder should complete establishment of Integrated Command Control Centre (ICCC)/ CCTV Command Center in any of smart city/Central Government/State Govt/ PSU, in India.</p>	15	<ul style="list-style-type: none"> • Copy of work order • Completion certificate/Go-live Certificate(s) from the client or Certification by CA for Ongoing Projects
TQ2.B	<p>Technical Capability (CCTV) The Bidder should have the project experience of supply and implementation of a Single CCTV system Project integrated with ICCC/CCTV Command Center with value of 10 Cr in government or semi- government or government autonomous bodies or public sector undertakings or other</p>	15	<ul style="list-style-type: none"> • Copy of work order • Completion certificate/Go-live Certificate(s) from the client or Certification by CA for Ongoing Projects

#	Particulars	Max Marks	Documents Required Supporting
	<p>government organization in India in the last Seven (7) years. Such project should consist of Minimum 500 Cameras</p> <p>d. No of CCTV Camera greater than 1000 Nos = 15 marks</p> <p>e. No of CCTV Camera greater than 750 Nos and less than 1000 Nos = 10 marks</p> <p>f. No of CCTV Camera greater than 500 Nos and less than 750 Nos = 7 marks</p>		
TQ4.A	<p>B. Technical Leader cum Program Manager: 10 Marks</p> <p>a. Min Educational Qualification: BE / B. Tech or equivalent: 2 Marks</p> <p>b. 7 Years of Minimum Work Experience</p> <ul style="list-style-type: none"> Min 7 Years: 2 Marks 10 Years or more: 4 Marks <p>c. PMP/ Prince 2 / Equivalent Certification : 4 Marks</p>	20	<ul style="list-style-type: none"> Candidate CV Relevant Valid Certification Copy

3.14 Eligible Goods and Services, and OEM Criteria (Page 46)

Existing

- h) ICCC Platform Application Software OEM must be Minimum CMMI Level 3 or above Certified.
- o) The Camera OEM must have their own manufacturing setups and IPR for brand registration, OEM having production and brand via joint venture/third party factory tie-up or contractual manufacturing will not be considered.
- q) The Smart Rack OEM must have executed minimum 10 Integrated Smart Rack Data Centre projects during the last 3 years from the bid submission date. Completion Certificate signed by the concerned authorities to be submitted along with the bid.
- r) Critical Component's for Integrated Smart Racks Data Centre Solution (Rack, Cooling, UPS, rack PDU and monitoring system) should be from same & single OEM for Seamless Integration & better Service Supports.
- s) Smart Rack OEM or Manufacturer should have its own service centre in India.

Revised

- h) Clause Stands Deleted
- o) The Camera OEM must have their own manufacturing setups and IPR for brand registration, OEM having production and brand via third party factory tie-up or contractual manufacturing will not be considered. OEM should give the undertaking in their letterhead that they have never been reported / rejected by any of the Government security organisation in India.
- q) Clause Stands Deleted
- r) Clause Stands Deleted
- s) Clause Stands Deleted

11.2 Command & Control Centre Platform (Page 81)

Existing

S. No.	Parameter	Minimum Requirement
251	ICCC OEM Criteria	• ICCC Platform OEM should have ISO 9000; ISO 20000/ISO27001.

Revised

S. No.	Parameter	Minimum Requirement
251	ICCC OEM Criteria	• ICCC Platform OEM should have ISO 9000/ISO 9001; ISO 20000/ISO27001.

11.13 ToR Switch (Page 132)

Existing

S. No	Minimum Requirement
14	Switch should comply to following Temperature performance parameters:
a	Operating Temperature - min 0 to 45 °C

Revised

S. No	Minimum Requirement
14	Switch should comply to following Temperature performance parameters:
a	Operating Temperature - min 0 to 40°C

11.14 PoE Access Switch (Page 133)

Existing

Sl. No.	Minimum Specifications
2	Rack mountable and should provide stacking of minimum 2 switches with minimum 80 Gbps of dedicated stacking/ equivalent bandwidth
22	Switch should have internal redundant power supply.

Revised

Sl. No.	Minimum Specifications
2	Rack mountable and should provide stacking / or similar technology to connect minimum 2 switches of dedicated bandwidth
22	Switch should have internal power supply.

11.17 Server for ICCC (Page 150)

Existing

S. No.	Parameter	Minimum Specification
12	RAS features	The offered server should have below RAS (Reliability, availability, and serviceability) features: 1. Advanced ECC, Adaptive Double Device Data Correction (ADDDC) or equivalent 2. Proactive Memory Scrubbing 3. Failed or failing component (Memory DIMM / IO Slot / CPU Core) deconfiguration at boot 4. Memory interconnect self-healing 5. Multiple Rank / DRAM bank sparing

Revised

S. No.	Parameter	Minimum Specification
12	RAS features	The offered server should have below RAS (Reliability, availability, and serviceability) features: 1. Advanced ECC 2. Failed or failing component (Memory DIMM / IO Slot / CPU Core) deconfiguration at boot

11.18 Storage for ICCC (Page 151)

Existing

S. No.	Parameter	Minimum Specifications
1	Capacity & Scalability	<p>1. Offered Storage array shall be supplied minimum with 2.2PB usable Capacity using encrypted drives (minimum 200TB SSD and minimum 2 PB NL-SAS) and shall be configured in Raid 6. Vendor shall not use more than 10D+2P while sizing the array.</p> <p>2. Offered array shall support at-least 550 drives.</p> <p>4. Offered Storage shall be able to protect at-least 2 drives failure simultaneously within a given raid group.</p> <p>5. Offered storage shall support both SSD and HDD. HDD shall support both SAS and NL SAS drives.</p>
2	Data Availability	<p>1. Offered storage shall be an enterprise storage array & 100% data availability guaranteed architecture. Shall be published as enterprise array on the vendor web site.</p> <p>2. 100% data availability guaranty shall be clearly mentioned on vendor web site for the offered model. If vendors are not supporting the 100% data availability as per their web site then vendor shall quote additional Controller and 10% additional capacity as cold spare along with array for mitigating the failure situations.</p>
4	Storage Encryption	1. Vendor shall offer only the encrypted drives

S. No.	Parameter	Minimum Specifications
		<p>with appropriate encryption licenses and shall meet FIPS 140-2 – Level 2 security requirements. Vendor shall not offer any controller based or Software based encryption.</p> <p>2. Offered FIPS 140-2 Validated encryption drives shall support both KMIP 1.3 and KMIP 1.4 for key management solutions. Vendor shall offer at-least internal Key manager engine for key management.</p>
5	No. of Controllers	<p>1. Offered Storage shall be supplied with at-least Dual controller and shall be scalable to at-least Quad controllers. Vendor shall ensure that all controllers, with and without scalability, shall be connected to a common back-plane and shall not use any loosely connected architecture like through SAN Switches, Ethernet Switches, InfiniBand switches etc.</p> <p>2. If vendor doesn't support common backplane architecture then every pair of controller shall be complied with all RFP requirements along with 100% data availability guarantee.</p>
6	Cache and CPU Processing Power	<p>1. Offered Storage array should have at-least 512GB protected DRAM cache and shall be scalable to at-least 1TB without replacing the existing controllers.</p> <p>2. Complete offered cache shall be both Global and coherent.</p> <p>3. DRAM Cache shall be completely dynamic for read and write ratios and operations and vendor shall not offer any additional card / module / drive for write cache operations.</p> <p>4. Offered storage shall be based upon latest generation Intel CPUs, minimum skylake series, and shall be supplied with at-least 40 numbers of CPU cores.</p>

S. No.	Parameter	Minimum Specifications
7	Processing Power - Parallel processing engine	<p>1. Offered Storage shall have dedicated, separated parallel processing engines, apart from CPU cores for effectively handling Raid-Rebuilding and data striping, thin re-claim etc.</p> <p>2. Storage array shall be supplied with at-least 8 dedicated above processing engines either in the form of ASICs or other equivalent technologies and shall be scalable to at-least 16 such engines without replacing the existing controllers.</p> <p>3. If vendor doesn't support above critical feature, then additional 16 CPU Cores shall be supplied.</p>
8	Architecture & Processing Power	<p>1. Controllers shall be true symmetric active-active so that a single logical unit can be shared across all offered controllers in symmetrical fashion, while supporting all the major functionalities like Thin Provisioning etc.</p> <p>2. Offered storage array shall have native virtualization support so that Raid can be carved out from a logical space instead of dedicating separate physical disks for each application.</p>
10	Cloud Enabled Monitoring and Analytics	<p>a. Providing Firmware upgrade and patch upgrade recommendations proactively along with release notes and with awareness of the peripheral infrastructure connected to the array.</p> <p>b. Dashboard shall clearly highlight whether there is any issue with array with respect to best practices and shall recommend the required action, if any.</p> <p>c. Providing extremely granular per-minute historical capacity and performance trend analysis by default, without the need to enable extra logging, install any appliances (physical or</p>

S. No.	Parameter	Minimum Specifications
		<p>virtual), or install any software.</p> <p>d. Vendor cloud enabled monitoring and analytics engine shall be completely integrated with their support team so that it can provide history of support cases logged with Support team under different column like Critical, Normal and low severity along with closed cases. Cloud monitoring tool shall be able to provide the complete month-wise breakup.</p> <p>e. Shall be able to provide the executive Dashboard covering various critical and must aspects of Total Capacity, overall health / wellness score of array. De-duplication and compression ratio, over-all front-end performance etc.</p>
11	Site Assessment	<p>1. Vendor shall do comprehensive Cloud based assessment, at-least for VMware environment on a quarterly basis and shall factor the required services for it.</p> <p>2. Assessment shall provide the detailed analysis of VMware Hosts – CPU & Memory utilization, Storage analysis and relevant findings of contention, Culprit and Victim VMs in the environment attached to offered storage. Offered assessment shall do complete analysis of licensing as well.</p>
12	Data Protection	<p>1. In case of power failure, storage subsystem shall have de-staged mode so that un-committed information can be protected. De-staging shall happen to vault drives and vault drives shall be encrypted.</p> <p>2. Vendor shall not use any Vault drive as data drives for capacity calculation. Offered Vault drives shall not be the part of supplied disk enclosures.</p>

S. No.	Parameter	Minimum Specifications
15	Quality of service	<p>1. Offered storage array shall support quality of service for critical applications so that appropriate and required response time can be defined for application logical units at storage. It shall be possible to define different service / response time for different application logical units.</p> <p>2. Quality of service engine shall allow to define minimum and maximum cap for required IOPS / bandwidth for a given logical units of application running at storage array.</p> <p>3. It shall be possible to change the quality-of-service Response time (In both milliseconds as well as Sub-milliseconds), IOPS, bandwidth specification at real time.</p>
17	Firmware Upgrade	Offered storage shall support online non-disruptive firmware upgrade for both Controller and disk drives without any reboot of controller.
18	Storage Management	<p>Offered Storage array management console shall be able to manage at-least 8 arrays from a single console. Management console shall provide following functionalities:</p> <p>a. Common Dashboard for all managed arrays through a single management console.</p> <p>b. Data migration through same console for all supported heterogeneous arrays</p> <p>c. On-premise performance analysis, workload planning etc. through a single console.</p> <p>d. End to end connected topology view in pictorial format within management console, from Hypervisor to Storage arrays. At-least one of the hypervisor among VMware of Hyper-V shall be qualified.</p>

S. No.	Parameter	Minimum Specifications
		e. In case, vendor need any additional service like clustering / federation for managing multiple arrays from a single console – then all required accessories like dual Ethernet switches, cables shall be provided upfront for at-least 8 arrays.
20	Integration - Container	<p>Offered Storage array shall be integrated with Red-hat OpenShift, Kubernetes and other industry K8 based container platform through CSI driver set. Vendor shall support at-least following functionalities through their CSI / CSP integration :</p> <p>a. Shall support both Static and Dynamic provisioning</p> <p>b. Shall be able to expand, re-size the persistent volumes given to stateful set applications.</p> <p>c. Shall be able to create and delete the snapshots.</p> <p>d. Shall support CSI Raw block volume as well as CSI Volume cloning.</p> <p>e. Support for both Fiber channel as well as iSCSI.</p>
21	Snapshot / Point in time copy & No. of Volumes	<p>1. The storage array should have support for controller-based snapshots (At-least 1024 copies for a given volume).</p> <p>2. Offered Storage array shall support more than 32000 base volume on the storage array without snapshot and clone.</p>

Revised

S. No.	Parameter	Minimum Specifications
1	Capacity & Scalability	<p>1. Offered Storage array shall be supplied minimum with 2.2PB usable Capacity (encrypted),(minimum 200TB SSD and minimum 2 PB NL-SAS) and shall be configured in Raid 6 or better. Vendor shall not use more than 10D+2P while sizing the array, however larger raid groups can be considered if more than two drive failure is supported without data unavailability and data loss.</p> <p>2. Offered array shall support at-least 1400 drives.</p> <p>4. Offered Storage shall be able to protect at-least 2 drives failure simultaneously within a given raid group.</p> <p>5. Offered storage shall support both SSD and HDD. HDD shall support both SAS and NL SAS drives.</p>
2	Data Availability	<p>1. Offered storage shall be an enterprise storage array &99.9999% availability architecture. Shall be published as enterprise array on the vendor web site.</p> <p>2. 99.9999% availability shall be clearly mentioned on vendor web site for the offered model. If vendors are not supporting the 99.9999% availability as per their web site then vendor shall quote additional Controller and 10% additional capacity as cold spare along with array for mitigating the failure situations.</p>
4	Storage Encryption	<p>1. Vendor shall offer only the encrypted drives with appropriate encryption licenses and shall meet FIPS 140-2 – Level 2 security requirements. Vendor can offer any controller based or Software based encryption.</p>

S. No.	Parameter	Minimum Specifications
5	No. of Controllers	1. Offered Storage shall be supplied with at-least Dual controller.
6	Cache and CPU ProcessingPower	<p>1. Offered Storage array should have at-least 512GB protected DRAM cache and shall be scalable to at-least 1TB in a scale up/scale out architecture.Offered storage must support additional 2TB of NVMe/SSD based cache.</p> <p>2. Complete offered cache shall be both Global /federated and coherent.</p> <p>3. Offered storage shall be based upon latest generation Intel CPUs and shall be supplied with at-least 64 numbers of CPU cores.</p>
7	Processing Power - Parallel processing engine	Clause Stands Deleted
8	Architecture & Processing Power	<p>1. Controllers shall be true symmetric/asymmetric active-active so that a single logical unit can be shared across all offered controllers in symmetrical / asymmetricalfashion, while supporting all the major functionalities like Thin Provisioning etc.</p> <p>2. Offered storage array shall have native virtualization support so that Raid can be carved out from a logical space instead of dedicating separate physical disks for each application.</p> <p>3. Offered storage must be configured with single unified operating system that offers file and block protocols natively. General purpose OS must not be offered.</p>
10	Cloud Enabled Monitoring andAnalytics	Offered storage must support optional cloud-based management tool which must allow capacity and performance monitoring.
11	Site Assessment	Clause stands Deleted
12	Data Protection	1. In case of power failure, storage subsystem shall have de-staged mode so that un-committed information can be protected. De-staging shall happen to vault drives and vault drives shall be

S. No.	Parameter	Minimum Specifications
		<p>encrypted.</p> <p>2. Vendor shall not use any Vault drive(if required for the architecture) as data drives for capacity calculation. Offered Vault drives shall not be the part of supplied disk enclosures.</p>
15	Quality of service	<p>1. Offered storage array shall support quality of service for critical applications so that appropriate and required response time can be defined for application logical units at storage. It shall be possible to define different service / response time for different application logical units.</p> <p>2. Quality of service engine shall allow to define minimum and maximum cap for required IOPS / bandwidth for a given logical units of application running at storage array.</p>
17	Firmware Upgrade	Offered storage shall support online non-disruptive firmware upgrade for both Controller and disk drives without any reboot of controller/Storage.
18	Storage Management	<p>Offered Storage array management console shall be able to manage at-least 8 arrays from a single console. Management console shall provide following functionalities:</p> <p>a. Common Dashboard for all managed arrays through a single management console.</p> <p>b. Data migration through same console for all supported heterogeneous arrays</p> <p>c. On-premise performance analysis, workload planning etc. through a single console.</p> <p>e. In case, vendor need any additional service like clustering / federation for managing multiple arrays from a single console – then all required accessories like dual Ethernet switches, cables shall be provided upfront for at-least 8 arrays.</p>

S. No.	Parameter	Minimum Specifications
20	Integration - Container	<p>Offered Storage array shall be integrated with Red-hat OpenShift, Kubernetes and other industry K8 based container platform through CSI driver set. Vendor shall support at-least following functionalities through their CSI / CSP integration :</p> <ul style="list-style-type: none"> a. Shall support both Static and Dynamic provisioning b. Shall be able to expand, re-size the persistent volumes given to stateful set applications. c. Shall be able to create and delete the snapshots. d. Shall support CSI Raw block volume as well as CSI Volume cloning. e. Support for both NFS as well as iSCSI.
21	Snapshot / Point in time copy & No. of Volumes	<ul style="list-style-type: none"> 1. The storage array should have support for controller-based snapshots (At-least 1000 copies for a given volume). 2. Offered Storage array shall support more than 24000 base volume on the storage array without snapshot and clone.

11.19 Type 1: Dome Camera (Page 162)

Existing

Sl. No.	Parameter	Minimum Specifications
2	Image Sensor	1/2.8-inch CMOS or better
5	Audio Compression	G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/MP3, should support Environment Noise Filtering
11	Lens Type	Fixed focal lens 2.8 / 4 mm
20	Edge Storage	Micro SD/ micro SDHC/ micro SDXC slot supporting memory card for min. 256 GB.
23	Video content Analytics	Intrusion detection, Motion Detection, Video tampering, Scene change detection, Unattended baggage detection, Object removal detection, Region entrance detection, Region exiting detection. (Bidder may propose Edge based or Server based Analytics. Hardware and Software for server based Analytics is bidders responsibility.)

Revised

Sl. No.	Parameter	Minimum Specifications
2	Image Sensor	1/2.8-inch CMOS or better OR 1/3-inch CMOS or better
5	Audio Compression	G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/MP3/AAC/G.711a,
11	Lens Type	Fixed focal lens 2.8 /3.6/ 4 mm
20	Edge Storage	Micro SD/ micro SDHC/ micro SDXC slot supporting memory card for min. 256 GB. (Bidder Shall Supply the memory card along with Camera)
23	Video content Analytics	Intrusion detection, Motion Detection, Video tampering, Scene change detection, , Region entrance detection, Region exiting detection. (Bidder may propose Edge based or Server based Analytics. Hardware and Software for server based Analytics is bidders responsibility.)

11.20 Type 2: Bullet Camera (Page 164)

Existing

Sl. No.	Parameter	Minimum Specifications
5	Audio Compression	G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/MP3, should support Environment Noise Filtering
23	Edge Storage	Micro SD/micro SDHC/micro SDXC slot supporting memory card for min. 256 GB.

Revised

Sl. No.	Parameter	Minimum Specifications
5	Audio Compression	G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/MP3/AAC/G.711a
23	Edge Storage	MicroSD/microSDHC/microSDXC slot supporting memory card for min. 256 GB. (Bidder Shall Supply the memory card along with Camera)

11.21 Type 3: PTZ Camera (Page 165)

Existing

Sl. No.	Features	Description
5	Audio Compression	G.711alaw /G.711ulaw/ G.722.1/ G.726, MP2L2/ PCM
20	Edge Storage	Built-in memory card slot, support microSD/SDHC/SDXC card, up to 256 GB
40	Power Supply	Hi-PoE & 24 VAC

Revised

Sl. No.	Features	Description
5	Audio Compression	G.711alaw /G.711ulaw/ G.722.1/ G.726, MP2L2/ PCM/AAC/G.711a
20	Edge Storage	Built-in memory card slot, support microSD/SDHC/SDXC card, up to 256 GB (Bidder Shall Supply the memory card along with Camera)
40	Power Supply	Hi-PoE/PoE+ & 24 VAC/VDC

11.22 Type 4: Long Range PTZ Camera (Page 168)

Existing

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
8	Temperature Measurement	3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line)	
14	Storage	Support SD card storage Slot Micro SD/Micro SDHC/Micro SDXC card up to 256GB	
16	Simultaneous Live View	20	

Revised

Sl. No.	Parameter	Minimum Specifications	Compliance (Yes / No)
8	Temperature Measurement	3 temperature measurement rule types, 20 rules in total	
14	Storage	Support SD card storage Slot Micro SD/Micro SDHC/Micro SDXC card up to 256GB	
16	Simultaneous Live View	10	

11.28 65" Screen (Page 176)

Existing

Sl. No.	Parameter	Specification
6	CPU	Quad-Core ARM Cortex-A55
7	GPU	ARM Mali-G31 MP2
11	Video Input	4xHDMI2.0, 1xDP1.2a, 1xUSB-A 3.0, 1xUSB-A 2.0, 1xUSB-A 2.0 (Internal), 1xUSB-C 3.0
12	Video Output	1x HDMI2.0
21	Dimensions (WxDxH)	1456 x 96 x 834 mm

Revised

Sl. No.	Parameter	Specification
6	CPU	Quad-Core ARM Cortex-A55/or As Per OEM Standards
7	GPU	ARM Mali-G31 MP2/ Or As per OEM Standards
11	Video Input	2 xHDMI2.0, 1xDP1.2, 2xUSB-2.0
12	Video Output	Clause Stands Deleted
21	Dimensions (WxDxH)	As Per OEM Standards

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CHIEF TECHNICAL OFFICER,
KAVARATTI SMART CITY LIMITED