

Bid Number: GEM/2020/B/690339

Dated: 29-06-2020

### **Bid Document**

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В	Bid Details				
Bid End Date/Time	09-07-2020 11:00:00				
Bid Opening Date/Time	2020-07-09 11:30:00				
Bid Life Cycle (From Publish Date)	90 (Days)				
Bid Offer Validity (From End Date)	30 (Days)				
Ministry/State Name	Ministry Of Science And Technology				
Department Name	Department Of Science And Technology (dst)				
Organisation Name	Indian Institute Of Astrophysics (iia)				
Office Name	Bengaluru				
Total Quantity	1				
Item Category	Server ( PAC Only )				
MSE Exemption for Years of Experience and Turnover	No				
Startup Exemption for Years of Experience and Turnover	No				
Document required from seller	OEM Authorization Certificate *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer				
Bid to RA enabled	No				
Inspection Required	No				

#### **EMD Detail**

Required	No
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### ePBG Detail

Required	No

## **Splitting**

Bid splitting not applied.

# Server ( 1 pieces ) ( Under PAC )

Make	dellemc
Model	dellemcpoweredger740

## **Technical Specifications**

# \* As per GeM Category Specification

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Processor	Processor Architecture	CISC(X86)	*
	Processor Make	Intel	Intel
	Number of Cores per Processor	20	20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 64 Or higher
	Processor Base Frequency (GHz)	2.1	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 3, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4 Or higher
	Processor Turbo Frequency (GHz)	3.9	*
	Total Cache (L1+L2+L3)(MB)	27.5	27.5 - 64.0 Or higher
	Processor Description/ Number	Intel Xeon Gold 6230	*
Chassis	Form Factor	Rack	*
	Size (RU)	2	*
Motherboard	Chipset compatible with CPU	Intel C621	*
	Expansion Slots Gen 3 (PCIe x1)	0	*
	Expansion Slots Gen 3 (PCIe x4)	0	*
	Expansion Slots Gen 3 (PCIe x8)	3	*
	Expansion Slots Gen 3 (PCIe x16)	1	*
	Maximum number of Sockets available on Server	2	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 Or higher
	Maximum number of Sockets populated with Processors available on Server	2	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 Or higher

Co Processor / GPU	Availability of Co Processor /GPU	No	Yes, No Or higher
	If Yes, Maximum Number of Slots available for Co- Processor/GPU	0	*
	If Yes, Maximum Number of slots populated with Co processor/GPU	0	*
	If Yes, Co Processor /GPU Description	NA	*
Memory	Type of RAM	DDR4 SDRAM with ECC	DDR4 SDRAM with ECC
	Total Number of DIMM Slots available	24	*
	Number of DIMM Slots populated with DDR SDRAM	2	*
	Number of DIMM Slots populated with DDR NVRAM	0	*
	DDR SDRAM Size(GB)	64	64.0 - 6144.0 Or higher
	DDR NVRAM Size (GB)	0	0.0 - 1600.0 Or higher
	DDR SDRAM upgradable upto using spare DIMM Slots (GB)	704	*
	DDR NVRAM upgradable upto using spare DIMM Slots (GB)	0	*
SSD Storage	Type of Interface for SSD	NA	NA
	Type of SATA SSD	NA	*
	SATA SSD Hot Swappable	NA	*
	Endurance for SATA SSD (DWPD - Drive Writes Per Day) (X)	0	*
	Total Number of Slots available for SATA SSD	0	*
	Number of Slot Populated with SATA SSD	0	*
	Capacity offered per SATA SSD (GB)	0	*
	Total Capacity	0	More than 0.0 Or

	Offered with SATA SSD (GB)		higher
	Type of SAS SSD	NA	*
	SAS SSD Hot Swappable	NA	*
	Endurance for SAS SSD (DWPD - Drive Writes Per Day) (X)	0	*
	Total Number of Slots available for SAS SSD	0	*
	Number of Slots populated with SAS SSD	0	*
	Capacity Offered per SAS SSD (GB)	0	*
	Total Capacity Offered with SAS SSD (GB)	0	More than 0.0 Or higher
	Type of NVMe SSD	NA	*
	NVMe SSD Hot Swappable	NA	*
	Endurance for NVMe SSD (DWPD - Drive Writes Per Day) (X)	0	*
	Total Number of Slots available for NVMe SSD	0	*
	Number of Slots populated with NVMe SSD	0	*
	Capacity Offered per NVMe SSD (GB)	0	*
	Total Capacity Offered with NVMe SSD (GB)	0	More than 0.0 Or higher
HDD Storage	Type of Interface for Hard Disk Drive	SAS	SAS
	Total number of Slots available for SATA Drive	0	*
	Number of Slots populated with SATA Drive	0	*
	Capacity offered per SATA Drive (GB)	0	*
	SATA drive speed (hot plug or better) (RPM)	NA	*

	Total Storage Capacity offered with SATA Drive (GB)	0	More than 0.0 Or higher
	Total number of slots available for SAS drive	16	*
	Number of Slots populated with SAS Drive	8	*
	Capacity offered per SAS Drive (GB)	2400	*
	SAS drive Speed (Hot plug or better) (RPM)	10K	*
	Total Storage Capacity offered with SAS Drive (GB)	19200	More than 19200.0 On higher
	Total number of slots available for NL SAS drive	0	*
	Number of Slots populated with NL SAS Drive	0	*
	Capacity offered per NL SAS Drive	0	*
	NL SAS drive speed (hot plug or better) (RPM)	NA	*
	Total Storage Capacity offered with NL SAS Drive (GB)	0	More than 0.0 Or higher
RAID	RAID level	6	*
	No of RAID Controller Ports	8	8 Or higher
	Speed of RAID Controller Ports (Gbps)	12	12 Or higher
	RAID Controller Cache (GB)	2	*
Ports & Interfaces	Network Card Supported	1G,10G	*
	Number of Networking Interface Cards (LAN)	1	2, 3, 4, 5, 6, 7, 8, 1 On higher
	Whether Network Interface Card Embedded	Yes	*
	Total Number of Ethernet Ports	2x10G RJ 45,2x1G	2x10G RJ 45, 2x1G

required in Server		
Networking Interface Card Features	Asset Feature Tracking,Security Management	*
Server Network Ports should Support SR-IOV Feature	No	*
Server network ports should support DPDK and it should deliver zero packet loss as per RFC 2544 and deliver 100% line rate for all the packet sizes over 64 Bytes, Vendor to submit latest DPDK test report for the same	No	*
Number of Single port FC HBA card	0	0, 1, 2, 3, 4 Or higher
Number of Dual port FC HBA card	0	0, 1, 2, 3, 4 Or higher
Number of Quad port FC HBA card	0	0, 1, 2, 3, 4 Or higher
FC HBA Speed (Gbps)	NA	8, 16, 32, NA Or higher
vHBA Card Features Supported	No	*
Number of Converged Network Adaptor (CNA)	0	0, 1, 2, 3, 4 Or higher
Number of Ports per CNA card	NA	Dual Port, Quad Port, NA Or higher
CNA Port Speed (Gbps)	0	10, 25, 40, 50, 100, 200, 0 Or higher
Length of LC-LC Cable per SFP+ Port (meter)	0	5, 10, 15, 0 Or higher
Length of LC-LC Cable per HBA Port (meter)	0	5, 10, 15, 0 Or higher
Length of LC-LC Cable per CNA Port (meter)	0	5, 10, 15, 0 Or higher
Length of Twinax Breakout Cables per Port (meter)	0	*
Video Controller (support VGA or above resolution)	Yes	*

	Keyboard Port	No	*
	Mouse Port	No	*
	DVD ROM (Internal/Exrternal)	Yes	*
	USB Ports (version 2point0/3point0)	4	*
	Total number of Spare Bays Available for Future Upgradation (Internal)	8	*
	Total number of Spare Bays Available for Future Upgradation (Hot Plugable)	0	*
Certifications	Certifications/Compli ance (OS)	Windows,Red Hat Linux,Suse Linux,Ubuntu	Windows, Red Hat Linux, Suse Linux, Ubuntu
	Certification/Complianc e (Virtualization/Cloud Platform)	VM ware,HyperV,Oracle Virtualization,Red Hat Virtualization,Xen,KVM	*
Features	Management Features-1	Remoter power On/ Shutdown of server,,Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port,,Should have virtual Media support with all required licenses.,Remote KVM,Server Health Logging,Out of Band Management	Remoter power On/ Shutdown of server,, Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port,, Should have virtual Media support with all required licenses., Remote KVM, Server Health Logging, Out of Band Management
	Management Features-2	Management of multiple Servers from single console with single source of truth for multiple sites., Automated infrastructure management for patch upgrades, version upgrades ,etc., Simplified management with analytics driven actionable intelligence., System tagging giving admin flexibility to provide metadata tags to each	*

System to enable users to filter and sort systems based on userassigned attributes, Hardware Profile based deployment to multiple Servers simultaneously, Policy template for deployment of single policy to multiple Servers simultaneously,Platfro m inventory and helath status, Server utilization statistics collection (including firmware updates and diagnostic tools), Should provide an alert in case the system is not part of **OEM** hardware complatibilty test, Solution should be open and programmable providing Rest API, SDK for programming lanugaes like Python, power shell scripts etc.,Should have customizable dashboard to show overall faults/health/inventory for all managed infrastructure the solution should provide option to create unique dashboards for individual users.the user should be flexibility to select name for dshasboards and widgets (viz. health, utilization etc), Single pane of glass for auto Provisioning across Multi vendor & multi hypervisor platform, Self service portal deployment for automated provisioning,Real-time out-of-band hardware

		performance monitoring & alerting	
	Security Features-1	Secure Boot(Firmware and Bios Level Security), Provision to lock the system on breach, Hardware root of trust/Dual Root of Trust, Server should provide policy based security, Server intrusion detection,	Secure Boot(Firmware and Bios Level Security), Provision to lock the system on breach, Hardware root of trust/Dual Root of Trust, Server should provide policy based security, Server should provide server intrusion detection,
	Security Features-2	Provision for Cryptographic firmware updates, Capability to stop execution of Application/Hyperviser/ Operating System on predefined security breach, Secure /Automatic BIOS recovery, Network Card secure firmware boot, In case of any security breach system should provide the lock down feature	*
	Server scalability to be achived within the box & without adding nodes	Yes	*
	support for high availability clustering and virtualization	Yes	*
Generic	Redundant Power Supply	Yes	*
	Hot Swappable (Redundant Power Supply)	Yes	*
	Power Supply Efficiency	Platinum	Platinum, Titanium Or higher
	Redundant Fan	Yes	*
	Hot Swappable (Redundant Fan)	Yes	*
	Server Main Supply	230 +/- 10%Vac	*
Benchmark	SPEC int_rate_base 2017 for the product (must be available on SPEC dot ORG before evaluation)	0	More than 0.0 Or higher
	SPEC fp_rate_2017	0	More than 0.0 Or

	for the product (must be available on SPEC dot ORG before evaluation)		higher
	SPEC int_speed_base 2017 for the product (must be available on SPEC dot ORG before evaluation)	0	*
	SPEC fp_speed_2017 for the product (must be available on SPEC dot ORG before evaluation)	0	*
Miscellaneous	Maximum power consumption of the system (Watts)	750	*
	BIS Registration under CRS of MeitY	Yes	*
	BIS Registration Number Under CRS of MeitY and its validity	R-61000388	*
	Other Certifications Available	UL,FCC	*
	RoHS Compliance	Yes	*
	Availability of the type test report from Central Government / NABL / ILAC acredited laboratory covering verification of all features & functional parameters & environmental tests sequence	No	*
	a) Dry heat:test - for 16 hrs at 45 deg C as per IS: 9000/pt-3/sec-5/1977 b) Cold test - for 4 hrs at 0 deg C as per IS: 9000/pt-2/sec-4/1977 c) Damp Heat Cyclic Test - for 2 cycles of 24 hrs at 40 deg C & 95% RH as per IS: 9000/pt-5/sec-1/1981	NA	*
	The server has been checked for all the parameters before conditioning, After completion of the	NA	*

	environmental tests sequence, with a recovery period of 1 to 2 hrs, the server found to be functional		
	Test Report Number & date	NA	*
	Name & Address of Lab	NA	*
Scope of Supply	Installation and Commissioning shall be included in the scope of supply	Yes	*
Warranty	On Site OEM Warranty (Year)	3	3, 4, 5, 7 Or higher

<sup>\*</sup> Specifications highlighted in bold are the Golden Parameters.

#### **Additional Specification Documents**

#### **Consignees/Reporting Officer and Quantity**

S.No.	Consignee/Reporti ng Officer	Address	Quantity	Delivery Days
1	Vishnu Vardhan KP	560034,Indian Institute of Astrophysics 2nd block, Koramangala, Bangalore contact For order / contract details :080 22541234 For Receipt and acceptance : 080 22541340 For Bill processing : 080 22541283 For details of disbursement of payment : 080 22541239	1	30

# **Bid Specific Additional Terms and Conditions**

- 1. Scope of supply (Bid price to include all cost components) : Supply Installation Testing and Commissioning of Goods
- 2. The buyer organization is an institution eligible for concessional rates of GST as notified by the Government of India. The goods for which bids have been invited fall under classification of GST concession and the conditions for eligibility of concession are met by the institution. A certificate to this effect will be issued by Buyer to the Seller after award of the Contract. Sellers are requested to submit their bids after accounting for the Concessional rate of GST. Applicable Concessional rate of GST: 5%

Notification No.and date: 47/2017 dated 14/11/2017

This Bid is also governed by the General Terms and Conditions

---Thank You---

<sup>\*</sup> Bidders may note that In respect of non-golden Parameters, the specifications 'Values' chosen by Buyer will generally be preferred over 'Bid requirement ( allowed Values) by the Buyer.