



सीएसआईआर - केन्द्रीय काँच एवं सिरामिक अनुसंधान संस्थान
196, राजा एस सी मल्लिक रोड, कोलकाता - 700 032, भारत
CSIR - CENTRAL GLASS & CERAMIC RESEARCH INSTITUTE
196, Raja S C Mullick Road, Kolkata - 700 032, India



PURCHASE ORDER

M/s Mega Networks Pvt. Ltd. Unit #7, Bishen Udyog, Jain Temple Marg, Sarvoday Nagar, Mulund(W), Mumbai-400080 E-mail: info@meganet1.com	P.O. No.	P/NC/67/IT/SO/OTE/23-24(Re2)
	Date	09/06/2025
	Subject	Purchase Order

References:

- 1) CSIR-CGCRI Bid Document No. P/NC/67/IT/SO/OTE/23-24(Re2) [CPP Portal Tender ID: 2025_CSIR_222453_1 dated 17/01/2025].
- 2) Your Quotation offer Reference No. Nil dt. 01/02/2025.
- 3) All communications exchanged between you and CSIR-CGCRI till date.

Dear Sir,

I am directed to request you to kindly supply, install & commission the following equipment as per the enclosed terms & conditions:-

Sl. No	Part No.	Description	Qty	Unit price in INR	Total Price in INR
1	-	<u>Master and Storage Node</u> FusionStor Invento i6308 Series	1 No.	22,05,990.00	22,05,990.00
	-	Processor Details			
		Master node should have 16 AMD EPYC Milan CPU Cores or higher. The master node have minimum clock speed of 3.0 GHz or better. The processors Must have Native support of AVX2 instructions or better. Along with CPU specifications, the node should have the following configurations			
		Memory details 256GB DDR4 ECC RAM or higher (32 GB each)	08		
	-	960 GB Enterprise SATA SSD configured in RAID1	02		
	-	20TB 7.2K RPM Enterprise SATA Hard drive configured in RAID5 with one hot spare.	06		
	-	1 GB RAID Card supporting RAID Levels 0, 1,5,6 and 10	01		
	-	1G Ethernet Ports	02		
	-	10G Copper Ethernet Ports	01		
	-	IPMI 2.0 or equivalent with KVM and media over LAN features	01		
	-	Form factor - 2U or better full width server form factor with sliding rack mount kit and peripherals			
	-	80 Plus platinum or better redundant power supply with IEC C13 to IEC C14 cables			
2	-	<u>Computer Nodes</u> FusionStor Invento i6313 Series	3 Nos.	Inclusive	Inclusive
		Processor Details			

		Each compute nodes should have minimum 128 AMD EPYC Milan or higher CPU cores with a minimum clock speed of 2.45 GHz or better. The processors Must have Native support of AVX2 instructions or better. Each node should have a memory of minimum 2 GB/Core DDR4 ECC RAM or better in a fully balanced configuration with populating all DIMM slots to its fully available bandwidth. RAM speed should be the maximum memory speed supported by the quoted CPUs. The bidders should submit the linpack of a single node as a part of technical bid in CD/DVD and the bidders should run linpack across all nodes and submit the results as a part of commissioning. Along with the CPU ratings, the nodes should have the following configurations or better.			
	-	Memory Details			
		480 GB Enterprise M.2/SATA SSD for operating System	1		
	-	4 TB Enterprise SATA for local scratch	1		
	-	1 G Ethernet Ports	2		
	-	10 G Network adapter for the switch getting quoted on Sl. No 3 Networking/interconnect	1		
	-	IPMI 2.0 or equivalent with KVM and media over LAN features			
	-	Form factor - 2U or better full width server form factor with sliding rack mount kit and peripherals			
	-	80 Plus platinum or better dual power supply with required IEC C13 to IEC C14 cables			
3	-	Networking / Interconnect		Inclusive	Inclusive
	-	16 Ports fully non-blocking 1 G Copper Ethernet Switch with required Ethernet cables for management connectivity.	1		
	-	16 Ports fully non-blocking 10 G Ethernet Switch with required cables for compute nodes connectivity.	1		
4	-	Nvidia RTX A6000 based Intel Server		6,03,000.00	6,03,000.00
	-	Intel Xeon scalable 3 rd gen Silver 16 Cores, 2.4 GHz	1		
	-	128 GB ECC DDR4 3200MHz RAM or higher (32 GB each)	4		
	-	480 GB Enterprise M.2/SATA SSD for Operating System	1		
	-	4 TB Enterprise SATA HDD for data and local scratch	1		
	-	Nvidia RTX A6000 48 GB Quadro GPU or higher	1		
	-	1 G Ethernet ports	2		
	-	IPMI 2.0 or equivalent with KVM and media over LAN features	1		
	-	80 Plus platinum or better power supply with required IEC C13 to IEC C14 cables.			
	-	Form factor - Tower convertible 5U or better full width server form factor with sliding rack mount kit and peripherals			
5	-	Fully Automated System Provisioning		Inclusive	Inclusive
	-	Operating System - Rocky Linux latest stable version			
	-	Clustering Tool kit - XCAT open source			

	-	Scheduler – SLURM/Open PBS (Queues/partitions needs to be configured according to user requirements)			
	-	Monitoring/Admin tools - Ganglia, Nagios, LDAP, PDSH, PDCP, automated emails, usage report generations, etc.,			
6	-	Desktop		Inclusive	Inclusive
	-	All in one Desktop, 13th Gen Intel Core i7 (or higher), 16GB DDR4 RAM, MX550 2 GB GDDR6, 1TB SSD, 27" FHD WVA Touch, Win11+MS Office 21	1	-	-
	-	27" HD LED Monitor with USB Keyboard and Mouse	1		
Total price in INR					28,08,990.00
Add: GST@18%					5,05,618.00
F.O.R. CGCRI Kolkata price in INR					33,14,608.00

The Specifications of the goods and other services shall strictly conform to those laid down in your offer No. Nil dated 01/02/2025 and all communications exchanged between you and CSIR-CGCRI till date. Further you are also requested to note the following:

S. No	Parameters	Description
1	Installation, commissioning and integration:	<p>Supplier should install and accommodate the entire solution in a 42 U rack available and existing at CSIR-CGCRI. The supplier shall install and configure all required hardware and software suites, including but not limited to racking and stacking, Cluster networking, Configuring all nodes, Execution and submission of jobs, Installation of compilers (with flags for optimization) and applications, Configuration of environment variables and license utility configuration. Entire installation should be done at the local site where the existing 42U rack is available. Remote control of network will not be given till the commissioning of the HPC. All the hardware and software deployment will be in supplier's scope of work.</p> <p>The entire computer nodes must be factory integrated, tested, validated and certified in the supplier site before supply. No on-site or local assembling of the system at CSIR-CGCRI site is allowed. Only rack-mounting, OS and application installation is allowed on-site.</p>
2	Software upgrade and software support:	During warranty, if OS/software upgrade is needed due to functionality requirements, the supplier should reinstall/Upgrade the OS and clustering tools and benchmark the cluster and re-commission the system at any point of time. Open source HPC software required by the user and full software support needs to be provided till the end of warranty period.
3	Cabling	All LAN cabling should be done at or near the 42 U rack as per the length required using CAT6. All cabling should be done to provide efficient air circulation and should not block any air circulation behind the servers. Different colors of cable for computing and management should be used.

4	Future expansion	The supplier needs to keep provision for future expansion or upgrade of the cluster like adding additional nodes, GPUs to the existing setup.
5	Model number and operational guideline	<p>Provide all model numbers of master nodes, compute nodes, hybrid nodes, storage nodes, Network switch model, Accelerator card details (if any), maximum number of port in IB/OPA switch (if any) and how many ports populated. The OEM part code of all the equipment / devices proposed should be provided with the technical bid.</p> <p>Supplier should provide the detailed operational guideline clearly explaining how to use the cluster.</p> <p>During maintenance supplier must notify the user in advance and ensure proper handling of the user's data.</p>
6	Acceptance test:	<p>Part of testing, the supplier should run the user provided codes and provide the satisfactory results of the same. Apart from this, the supplier has to run and submit Linpack, Lapack, Scalapack benchmark results to the CSIR-CGCRI.</p> <p>Part of the acceptance test, the CSIR-CGCRI team will check all the software and will cross-check benchmarking and all other tests based on our input files in the fully offered solution for at least 4 days.</p>
7	Training:	On-site training after installation and commissioning: 4 persons or higher at CGCRI, including - tasks such as user/node management, installation/upgrade, queuing system management, job submission (single, parallel and multithread jobs in m multiple cpu), and file system management with documentation.
8	Service support:	One trained personnel should be available to help remotely (9.00 AM to 6.00 PM, 5 Days a week) or onsite for technical support for administration/maintenance (both software and hardware levels) of HPC during warranty period.
9	Comprehensive Warranty:	5 years covering onsite comprehensive advance Hardware replacement and software support. All warranty and support must be serviced directly by the OEM or should be from an authorized System Integrator Partner who is authorized to Support the product quoted. There should have a Single Point of Contact (SPOC) between CSIR-CGCRI and the supplier who is responsible for all issues between them. Faulty parts should be replaced by NBD (Next Business Day) during warranty period.

Your GEM ID as certified by you is **5F7A180000092028**.

This Contract/Purchase Order shall be governed by:-

(1) General Conditions of Contract and Special Conditions of Contract as detailed in the Bid Document.

Attention of the supplier is also invited to the terms and conditions mentioned in this Purchase Order.

The Order Acknowledgement must be submitted immediately and in any case, within 14 days from the date of placement of this Purchase Order failing which, the order will be deemed as cancelled.

You are requested to return the duplicate copy of this Purchase Order, duly signed and stamped, as a token of your acceptance to this order.

Yours faithfully,


(Bodhisattwa Dhar)

Stores & Purchase Officer

For & on behalf of the Council of Scientific & Industrial Research

Enclosures:

1. Terms & Conditions.
2. Format for Performance Bank Guarantee.
3. Format for Acceptance Certificate.

बोधिस्वत्त धर / Bodhisattwa Dhar

भण्डार एवं क्रय अधिकारी / Stores & Purchase Officer
सीएसआईआर-केन्द्रीय काँच एवं सिरामिक अनुसंधान संस्थान
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196, राजा एस. सी. मल्लिक रोड / 196, Raja S.C. Mullick Road
कोलकाता / Kolkata-700 032

Explanations:-

The following words and expressions used in this Purchase Order shall have the meanings hereby assigned to them:

Purchaser	means CSIR-CENTRAL GLASS & CERAMIC RESEARCH INSTITUTE, 196 RAJA S.C. MULLICK ROAD, KOLKATA 700 032, INDIA.
Manufacturer	means M/s. Fusionstor Technologies Pvt. Ltd., Mumbai, India.
Supplier	means M/s. Mega Networks Pvt. Ltd., Mumbai, India

1.	Delivery Term	F.O.R. CSIR-CGCRI, Kolkata.
2.	Purchase Order Value / Contract Price	INR 33,14,608.00 [INR Thirty Three Lakhs Fourteen Thousand Six Hundred & Eight Only].
3.	Payment	<p>The payment shall be made in Indian Rupees, as follows:</p> <p>Phase I: 80% of Basic Price plus 100% GST shall be released by RTGS on receipt of all the ordered goods in good condition and inspection at site(final destination). At the time of taking delivery of the ordered goods, Purchaser reserves the right to ask for a joint inspection in presence of Suppliers representatives for verification.</p> <p>Phase II: Balance 20% payment shall be released by RTGS within 30 days of acceptance of supply of all ordered items by CGCRI including completion of installation of the supplied items and completion of all contractual obligations to the entire satisfaction of the buyer against Tax Invoice and subject to the submission of Performance Bank Guarantee.</p> <p>Note: All payments due under the Contract shall be paid after deduction of statutory levies at source (like ESIC, Income Tax, etc.), wherever applicable.</p>
4.	Performance Security	Within 21 days of issue of this Purchase Order, Supplier shall furnish a Performance Security for 3 % of the order value / invoice value. Other aspects of the Performance Security clause are detailed at GCC Clause 2.13 read with the relevant SCC.
5.	Goods & Service Tax (GST)	GST @ 18% on all items is included in Purchase Order value. CSIR-CGCRI GST No.: 19AAATC2716R1ZC
6.	Pre Dispatch Inspection (PDI)	Not applicable.
7.	Delivery period [For supply and installation of the ordered goods]	The Supplier shall complete entire services including delivery, installation, commission & training of the ordered equipment within 100 days from the date of issue of Purchase Order.
8.	Warranty	05 (five) years comprehensive warranty from the date of Installation & Commissioning and completion of all contractual obligations to the entire satisfaction of the buyer.
9.	Insurance	The Insurance in respect of goods to cover all risks upto final destination (CSIR-CGCRI, Kolkata) shall be borne by Supplier at its own costs.
10.	Installation & Commissioning	To be done by Supplier's engineers at delivery site within the delivery period mentioned above at Serial No. 7.

11	Training	Onsite training for 01 (one) working day for 04 (four) persons of CSIR-CGCRI during installation period.
12	LD Clause	The penalty shall @ (0.5%) point five percent per week or subject to a maximum of @ (10%) ten percent of Order Value for late delivery and towards delay in Installation & Commissioning including all contractual obligations beyond contractual deadlines.

Yours faithfully,

W 9/6/25

(Bodhisattwa Dhar)

Stores & Purchase Officer

For & on behalf of the Council of Scientific & Industrial Research

बोधिसत्त्व धर / Bodhisattwa Dhar

भण्डार एवं क्रय अधिकारी / Stores & Purchase Officer

सीएसआईआर-केन्द्रीय काँच एवं सिरामिक अनुसंधान संस्थान

CSIR-CENTRAL GLASS & CERAMIC RESEARCH INSTITUTE

196, राजा एस. सी. मल्लिक रोड / 196, Raja S.C. Mullick Road

कोलकाता / Kolkata-700 032

PERFORMANCE SECURITY FORM

MODEL BANK GUARANTEE FORMAT FOR PERFORMANCE SECURITY

To,

.....

WHEREAS (name and address of the supplier) (hereinafter called "the supplier") has undertaken, in pursuance of contract No. dated to supply (description of goods and services) (herein after called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of (amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the day of, 20.....
(Signature of the authorized officer of the Bank)

.....

Name and designation of the officer

.....

Seal, Name & Address of the Issuing Branch of the Bank

Note: Whenever, the bidder chooses to submit the Performance Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Registered Post (A.D.) an unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.

ACCEPTANCE CERTIFICATE FORM

(On company letterhead)

No. _____

Dated: _____

M/s. _____

Sub: Certificate of commissioning of equipment

01. This is to certify that the equipment as detailed below has/have been received in good condition along with all the standard and special accessories (subject to remarks in Para 2). The same has been installed and commissioned.

- (a) Contract No. _____ Date _____
- (b) Description of the equipment _____
- (c) Name of the consignee _____
- (d) Scheduled date of delivery of the consignment to the Lab./Instts. _____
- (e) Actual date of receipt of consignment by the Lab./Instts. _____
- (f) Scheduled date for completion of installation/commissioning _____
- (g) Training Starting Date _____
- (h) Training Completion Date _____
- (i) Names of People Trained _____
- (j) Actual date of completion of installation/commissioning _____
- (k) Penalty for late delivery (at Lab./Instts. level) ₹ _____
- (l) Penalty for late installation (at Lab./Instts. level) ₹ _____

Details of accessories/items not yet supplied and recoveries to be made on that account:

Sl. No.	Description	Amount to be recovered

02. The acceptance test has been done to our entire satisfaction. The supplier has fulfilled his contractual obligations satisfactorily

or

The supplier has failed to fulfill his contractual obligations with regard to the following:

- (a)
- (b)
- (c)
- (d)

The amount of recovery on account of failure of the supplier to meet his contractual obligations is as indicated at Sr. No. 3.

For Supplier

Signature
Name
Designation.....
Name of the firm.....

Date

For Purchaser

Signature.....
Name.....
Designation.....
Name of the Lab/Instt.....

Date.....