

## REQUEST FOR QUOTATION - ONLINE BIDDING



BHARAT HEAVY ELECTRICALS LIMITED  
Electronics Division  
PB No. 2606, Mysore Road Bangalore - 560026  
INDIA

RFQ NUMBER:  
SAKE000123



MMI:PU:RF:003

Please submit your lowest quotation subject to our terms and conditions attached for the material mentioned below. "Quotation to be submitted in E Procurement portal only"

(for all correspondence)  
Purchase Executive : Santosh Kumar  
Phone : 8004939865  
Fax :  
E-mail: kumar.santosh@bhel.in

SI No.	Description	Qty	Unit	Delivery qty	Delivery Date
1	ED7433499202 Dual CPU Server-Grade Computer System * HSN/SAC : 8414  Dual CPU Server-Grade Computer System for DCS/SCADA application as per PS4042980.	118	ST	118	
2	ED7459999016 Single CPU Server-Grade Computer System * HSN/SAC : 8414  Single CPU Server-Grade Computer System for DCS/SCADA application as per PS4042980	87	ST	87	

Total Number of Items - 2

- 1.
- 2.

**NOTES:**

1. This RFQ is governed by:
    - a) INSTRUCTIONS TO BIDDERS/SELLERS and GENERAL CONDITIONS OF CONTRACT FOR PURCHASE available at <http://edn.bhel.com> (**RFQ-PO Terms & Conditions**)
    - b) Any other specific Terms and Conditions mentioned. of offers are required to furnish authorization letter for the same.
  2. Tender Result can be viewed in the website.
- \* The HSN/SAC no mentioned against the line items in the RFQ are indicative only.

For and On behalf of BHEL.

Santosh Kumar  
Control Equipment



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# PURCHASE SPECIFICATION FOR SERVER- GRADE COMPUTER SYSTEM FOR DCS/SCADA APPLICATION

PS4042980

REV No.: 00

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## Purchase Specification of Server-Grade Computer system for DCS/SCADA application

1. Single CPU, RAID 5 (Mat code: ED7459999016)
2. Dual CPU, RAID 5 (Mat code: ED7433499202)

TITLE	Dept Code	DRN.	NAME	SIGN	DATE
Purchase Specification for Server-Grade Computer System for DCS/SCADA application	404	PREPARED	SISIR	<input type="checkbox"/>	26.05.2026
		CHECKED	JAYAFAR ALI		26.05.2026
		APPROVED	BIRENDER NATH SHARMA		26.05.2026



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**PURCHASE SPECIFICATION FOR SERVER-  
GRADE COMPUTER SYSTEM FOR  
DCS/SCADA APPLICATION**

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REVISION HISTORY SHEET

REV NO.	DATE	NATURE OF CHANGE	REASON	PREPARED BY	APPROVED BY
00	26-05-2026	First issue	-----	SB	JA/ BNS

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## PURCHASE SPECIFICATION FOR SERVER- GRADE COMPUTER SYSTEM FOR DCS/SCADA APPLICATION

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(A) SERVER GRADE COMPUTER SYSTEM SINGLE CPU, RAID-5 (Mat code: ED7459999016)

Category	Requirement	Suppliers Remarks (Yes/No)
Make	DELL / HP	
Type	Server - Tower	
Power Supply	Redundant, Hot swappable Power Supplies. Input: 100 to 240 VAC; 50~60 Hz. Redundant Fan Kit, Power Cords (suitable for Indian type sockets) for both Power Supplies to be provided.	
Restart/BIOS	Must have power failure protection BIOS must be UEFI compliant and support Secure Boot	
Processor	Intel® Xeon® processor latest or higher <ul style="list-style-type: none"> <li>• 8 hardware cores with Hyper-threading (16 threads total)</li> <li>• Hardware-based AES encryption (Intel AES, AES-NI instructions)</li> <li>• Virtualization support (Intel® VT-x) (Chipset, BIOS, and software) must also support virtualization</li> <li>• 2.6GHz or faster clock speed</li> <li>• 64-bit processor compatible with x64 instruction set with support for:</li> <li>• NX and DEP</li> <li>• CMPXCHG16b, LAHF/SAHF, and PrefetchW</li> <li>• Second level address translation (EPT or NPT)</li> </ul>	
Hard drive	Minimum OF 3 Nos. x 600GB, SAS Hot Plug Hard Disks	
SAS Controller	Manufacturer supplied SAS RAID Controller with 2GB cache memory for "Write Back Option" or equivalent.	
RAM	32 GB minimum ( <b>dual channel:16 GB per channel</b> ), ECC DDR5 RAM OR better, expandable to minimum 128 GB	
DVD-RW	(8 X min.) DVD+/-RW ROM Dual layer, SATA, Internal	
Expansion Slots	Minimum 3 nos. PCIe /PCI-X ( <i>excluding the slot used by SAS controller</i> )	
Display	OEM recommended NVidia A400 or latest PCI-Express Dual Output Graphics card with full 16X support, with minimum 4 GB RAM, supporting 1920 x 1200 resolution with true colors with mDP to DP adapters – 2 nos. The adapter should support graphics standard Direct X9 or later with a WDDM driver.	
Ethernet Ports	2 Nos. Dual Port <b>Intel / Broadcom</b> Gigabyte NIC's, plug in on PCIe Express slots in addition to onboard RJ45 port. Intel/ <b>Broadcom</b> Ethernet cards must use same drivers. <b>Teaming facility required across Dual Port Intel / Broadcom Gigabyte NIC's using OEM drivers/software.</b>	
Serial Port	1 No. Standard Serial Port (or USB to Serial converter)	
USB Port	Minimum of Four (4) USB port + minimum 1 no Internal USB port	
RAID	Hardware based RAID controller and associated hardware/software for RAID 5 implementation to be provided. RAID 5 to be configured.	
OS	Compatible to Microsoft Server STD 2025 CSP LTSC (OS will be provided by BHEL) at BHEL works. Driver/Recovery CD to be provided for 2025 OS.	
KB/Mouse	Standard keyboard and optical scroll mouse with mouse pad.	
Drivers	All controllers to be supplied with drivers suitable for Windows 2022/2025 Server, along with installation / set up utilities and System Management software.	
Chassis lock	Chassis lock to be provided.	
WARRANTY	Three years on-site comprehensive warranty	
TPM	TPM version 2.0 TPM functions must be implemented in hardware as a discrete TPM (dTPM).	

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**B. SERVER GRADE COMPUTER SYSTEM: DUAL CPU, RAID 5 (Mat code: ED7433499202)**

Category	Requirement	Suppliers Remarks (Yes/No)
Make	DELL / HP	
Type	Server - Tower	
Power Supply	Redundant, Hot swappable Power Supplies. Input: 100 to 240 VAC; 50~60 Hz. Redundant Fan Kit, Power Cords (suitable for Indian type sockets) for both Power Supplies to be provided.	
Restart/BIOS	Must have power failure protection BIOS must be UEFI compliant and support Secure Boot	
Processor	Intel® Xeon® Scalable processor Intel Silver latest <b>or higher x 2 CPU</b> <ul style="list-style-type: none"> <li>• 8 hardware cores with Hyper-threading (16 threads total)</li> <li>• Hardware-based AES encryption (Intel AES, AES-NI instructions)</li> <li>• Virtualization support (Intel® VT-x) (Chipset, BIOS, and software) must also support virtualization</li> <li>• 2.6GHz or faster clock speed</li> <li>• 64-bit processor compatible with x64 instruction set with support for:</li> <li>• NX and DEP</li> <li>• CMPXCHG16b, LAHF/SAHF, and PrefetchW</li> <li>• Second level address translation (EPT or NPT)</li> </ul>	
Hard drive	Minimum OF 3 Nos. x 600GB, SAS Hot Plug Hard Disks	
SAS Controller	Manufacturer supplied SAS RAID Controller with 2GB cache memory for "Write Back Option" or equivalent.	
RAM	64 GB minimum ( 4x16 GB ) ECC DDR5 RAM OR better, expandable to minimum 128 GB	
DVD-RW	(8 X min.) DVD+/-RW ROM Dual layer, SATA, Internal	
Expansion Slots	Minimum 3 nos. PCIe /PCI-X (excluding the slot used by SAS controller)	
Display	OEM recommended NVidia A400 or latest PCI-Express Dual Output Graphics card with full 16X support, with minimum 4 GB RAM, supporting 1920 x 1200 resolution with true colors with mDP to DP adapters – 2 nos. The adapter should support graphics standard Direct X9 or later with a WDDM driver.	
Ethernet Ports	2 Nos. Dual Port <b>Intel/ Broadcom</b> Gigabyte NIC's, plug in on PCIe Express slots in addition to onboard RJ45 port. Intel / <b>Broadcom</b> Ethernet cards must use same drivers. <b>Teaming facility required across Dual Port Intel / Broadcom Gigabyte NIC's using OEM drivers/software.</b>	
Serial Port	1 No. Standard Serial Port (or USB to Serial converter)	
USB Port	Minimum of Four (4) USB port + minimum 1 no Internal USB port	
RAID	Hardware based RAID controller and associated hardware/software for RAID 5 implementation to be provided. RAID 5 to be configured.	
OS	Compatible to Microsoft Server STD 2025 CSP LTSC (OS will be provided by BHEL) at BHEL works. Driver/Recovery CD to be provided for 2025 OS.	
KB/Mouse	Standard keyboard and optical scroll mouse with mouse pad.	
Drivers	All controllers to be supplied with drivers suitable for Windows 2022 / 2025 Server, along with installation / set up utilities and System Management software.	
Chassis lock	Chassis lock to be provided.	
WARRANTY	Three years on-site comprehensive warranty	
TPM	TPM version 2.0 TPM functions must be implemented in hardware as a discrete TPM (dTPM).	

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# PURCHASE SPECIFICATION FOR SERVER- GRADE COMPUTER SYSTEM FOR DCS/SCADA APPLICATION

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**(D) NOTE**

1. Initial installation will be at our works in BHEL/EDN, Bangalore for testing along with customer. Subsequently material will be sent to site.
2. Any deviations with respect to the above specification should be brought out in the offer otherwise offer may be rejected
3. RAID 5 shall be pre-configured by vendor.
4. Checklist with the PSPEC should be filled in all respects and all options answered and duly signed by supplier. This is mandatory and offer will be rejected on non-submission.
5. **The vendors need to supply the complete unit prebuilt from the factory of OEM and all the components of the workstation need to have OEM Part codes**

**(E) DOCUMENTS TO BE GIVEN ALONG WITH QUOTATION**

1. Technical data sheet for servers. This is **MANDATORY**
2. Filled checklists given in this specification duly signed by supplier - **MANDATORY**
3. Single point contact detail to be furnished for after sales service support under Warranty.
4. Deviations, if any, to our specification to be clearly mentioned and reason thereof

NOTE - Technical data sheet of quoted Models and Filled checklists **ARE MANDATORY. Offer liable for Technical REJECTION** if not accompanied by them.

**(F) DOCUMENTS TO BE GIVEN ALONG WITH EQUIPMENT**

1. Manuals / CD's for computer to be supplied.

**(G) TEST CERTIFICATE**

1. Test Certificates for the System to be provided on installation.

**(H) ACCEPTANCE CRITERIA:**

1. Compliance to Specification / checklist

**(I) WARRANTY**

The servers will be shipped to various Project sites in India and Abroad. Three Years Comprehensive Onsite warranty for all equipment supplied is to be provided.

**(j) Malicious Code Certificate:**

The seller should upload following certificate in the bid:-

(a) This is to certify that the Hardware and the Software being offered, as part of the contract, does not contain Embedded Malicious code that would activate procedures to :-

- (i) Inhibit the desires and designed function of the equipment.
- (ii) Cause physical damage to the user or equipment during the exploitation.
- (iii) Tap information resident or transient in the equipment/network.

(b) The firm will be considered to be in breach of the procurement contract, in case physical damage, loss of information or infringements related to copyright and Intellectual Property Right (IPRs) are caused due to activation of any such malicious code in embedded software.

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**Pre-Qualification Criteria (Minimum Eligibility Criteria) to participate in the tender for  
Workstation Computers and Server-Grade Computers**

The bidders intending to participate shall meet the following criteria and such of those bidders shall be pre-qualified for this tender.

Sl.No	Criteria	Documentary Evidence	Vendor compliance/ remarks
1.	<b>Upload Manufacturer authorization:</b> The bidder should be Original Equipment Manufacturer OEM (HP /DELL) or authorized partner of OEM; Wherever Authorized Distributors are submitting the bid, Manufacturers Authorization Form (MAF)/Certificate with OEM details such as name, designation, address, e-mail Id and Phone No. required to be furnished along with the bid.	Manufacturer Authorization Form (MAF)	
2	<b>Performance Criteria:</b> The Bidder {themselves or through reseller(s)}, should have executed project for supply of same or similar Category Products during preceding 3 financial years (i.e. current year and three previous financial years) as on opening of bid, as per following criteria:  (i) Single order of at least 15% of estimated bid quantity; or (ii) Two orders of at least 10% each of estimated bid quantity; or (iii) Three orders of at least 5% each of estimated bid quantity.	For fulfilling the performance criteria any one of the following documents may be considered as valid proof for meeting the experience criteria: a. Purchase Order copy along with Invoice(s) with self-certification by the bidder that supplies against the invoices have been executed. b. Execution certificate by client with order value/quantity. c. Any other document in support of order execution like Third Party Inspection release note, etc.	
3	Bidders shall quote only those products in the bid which are not obsolete in the market and has at least 3 years residual market life i.e. the offered product shall not be declared end-of-life by the OEM before this period.	OEM declaration for the same	
4	In the tender either the bidder on behalf of the Principal / OEM or Principal / OEM itself can bid but both cannot bid simultaneously for the same make/model of the item in the same tender.	NA	

1.	If a bidder submits bid on behalf of the Principal/OEM, the same bidder shall not submit bid on behalf of another Principal /OEM in the same tender for the same item/product.	NA	
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