



**SBI INFRA MANAGEMENT SOLUTIONS PVT LTD
(WHOLLY OWNED SUBSIDIARY OF SBI)**

INVITES TENDERS IN TWO BID SYSTEM THROUGH E-TENDERING

FOR

**AIRCONDITIONING WORK AT FIRST FLOOR OF LHO BUILDING,
THIRUVANANTHAPURAM**

NIT: THI202004002

**Corrigendum-I clarifications for queries raised by prospective bidders through email is
clarified in the Annexure -I, Revised BOQ**

Last date for submission of Tender extended upto : 03.00 P.M. (IST) on 20/05/2020

Opening of Tenders: 03:30 P.M. (IST) on 20/05/2020

M/s. ENARC CONSULTANTS

Architects & Engineers

M.G. Road, Thrissur-1

KERALA

Ph: 2441901 & 2441905

Fax: 91-487-2442011

(Name & Address of Contractors)

**The Assistant General Manager
SBI Infra Management Solutions Pvt. Ltd
4th Floor, SBI LHO Building
Poojappura
Thiruvananthapuram- 695012
Contact: 0471-2192410/2192435
Mob: 9497714782**

Annexure-I
Corrigendum for the following points are to be read as under:

Tender condition	Clarification sought	Clarifications from SBIIMS
Date of submission – 27.04.20 at 3.00 PM & Date of tender opening – 27.04.20 at 3.30PM	The last date of tender submission mentioned is 27.04.20. Due to the current restrictions imposed by the Government, it is difficult to complete the formalities by that time. Hence request your good offices to extend the last date of submission further upto 27.05.20, until all the restrictions are relaxed and closed down operations of OEM offices and factories resume their operations	Due to prevailing situation of Covid-19, Date of submission and opening is extended as under: Date of submission – 20.05.20 at 3.00 PM & Date of tender opening – 20.05.20 at 3.30PM
Rs. 28,000/- (Rupees Twenty Eight Thousand Only) in the form of DD in favor of 'Assistant General Manager, P&E payable at Thiruvananthapuram.	Is there any EMD exemptions for MSME units like in central govt tenders for organizations like ISRO, NIIST etc	SBIIMS being pvt ltd company no EMD exemptions are granted
Item description 2.a Indoor units 18Tr ductable /AHU with AHU Kit	The item to be read as 18Tr AHU with AHU Kit or as 18Tr ductable unit is not available for all approved OEM brands in tender There is a design limitation of AHU connection with other unit combinations with	The item to be read as 18Tr ductable unit with combination of 6 Tr x 3nos or single 18Tr ductable with volume control damper for the three machines. The above combination also reduces the design limitation of AHU connection with other outdoor unit combinations

	high diversity connection will lead to non performing of Total VRF system	Please mention clearly the type of system offered by the tenderer
Item description 2.b Indoor units 5Tr cassette	Most of OEM does not have this model line up	The item to be read as 5Tr cassette unit or the item can be substituted by the 3Tr +2Tr combination and the rate quoted for the combination.
Item description B.2. Installation, Testing, commissioning of indoor units of the following capacities of Variable refrigerant volume air conditioner with all accessories a) 18Tr ductable /AHU with AHU Kit	nil	The item to be read as 18Tr ductable unit with combination of 6 Tr x 3nos or single 18Tr ductable and the tenderer has to quote the rate inclusive of Installation, Testing, commissioning of indoor units with volume control damper for each machines.
SI No Item description B.2.b Installation, Testing, commissioning of indoor units of the following capacities of Variable refrigerant volume air conditioner with all accessories for Indoor unit 5Tr Cassette unit	Most of OEM does not have this model line up	The item to be read as 5Tr cassette unit or the item can be substituted by the 3Tr +2Tr combination and the rate quoted for the combination must include the quantity for refnet joints along with the rates for Installation, Testing, commissioning of indoor units as it is considered as a single item
Item description 2.a Indoor units 18Tr ductable /AHU with AHU Kit	The item to be read as 18Tr AHU with AHU Kit or as 18Tr ductable unit is not available for all approved OEM brands in tender	If the vendor is quoting for 18TR AHU with AHU kit the vendor shall quote for the brands and specifications of AHU mentioned as per Annexure –II. The system should not cause any design limitation of AHU connection with other indoor unit combinations

Asst. General Manager (SBIIMS)

Annexure-II

SL.NO.	SPECIFICATION OF AHU
	Supply, testing & commissioning of Double skin construction draw thru type AHU/CSU
	<p>Casing: - CSU shall be modular type with pentapost frame. Unit shall be Double skin with 40+/- 2 mm thick PUF / PIR type CFC free insulation of 40 kg density sandwiched between the panels. The insulation shall be injected such that the density remains constant throughout the panels. Double skin wall panels shall be fixed to 3mm thick, hollow extruded aluminium profile with polyamide thermal break profile joined by 3D extruded aluminium chamfered corners, forming the structural frame work to house all internal components. The panels shall be of 0.6mm thick GSS sheet pre painted finish on the outer side and GSS 275 GSM finish on the inner side of the unit. Panels should have complete with marine light, cable entry, drain connection at both ends. 18G SS drain tray Must be inside the unit. CSU frame work shall be of extruded aluminium profile with three way corner frame sections. Casing of the unit shall comply to eurovent EN 1886 with casing strength D1 type, Casing leakage L1, Filter bypass leakage F8, Thermal bridging factor TB2 and air handling performance as per EN 13053. The air leakage through ahu casing shall not exceed specified limits while tested as per class B of DW 143 standard. Height of the AHU should not exceed 4 ft.(1200mm).</p>
	<p>Fan: The fan shall be verticle type with single/twin fan arrangement. The fans shall be direct driven Plug type fan with Variable frequency drive. Maximum Fan diameter be 630 for optimised efficiency & performance .The fans section shall have centrifugal backward curved blower duly supported on Al. frame through rubber-in-shear or spring vibration mountings and raised at a height to match the opening of the front discharge supply air opening. If the discharge is top than the blower shall be supported using brackets/Al. frame with rubber-in-shear or spring vibration mountings without the need for elevation. The impeller and shaft of the fan shall be both statically and dynamically balanced. The motor shall be IE2 or above type totally enclosed and fan cooled type with class F insulation and IP 55 Protection. Minimum fan efficiency should not be less than 70%, Motor efficiency not less than 92%.The motor shall be of energy efficient type with high and flat efficiency curve for 50 to 100% load. Motor shall be especially designed for quiet operation and motor speed shall not exceed 1440 RPM. Drive to fan shall be provided through direct drive arrangement based on the type of blower selected. The fan motor HP shall be 25-15% more than BHP. Fan operations acceptable upto 65/70 Hz only Note:Single fan only for 2000cfm Unit above that multipule fans are must.</p>
	<p>Coil : Single sets of copper type DX cooling coil, 4 Row deep, VRF connectivity , Aluminium fins, Cooling coil tube thickness shall be 26 G with 10-12 FPI, coil size shall be selected for a maximum face velocity of 500 FPM. Coils shall have automatic air vents, the vent outlets beings piped to the drain pan with a copper pipe. drain cock with valve. Coil shall be Copper header and Ms adopter. Water pressure drop in coil shall not exceed 3m of WC and performance of the coil in accordance as per EN 1216 standard with maximum tolerance of 5%. AHRI/Eurovent approved coil selection software selection to be provided and Eurovent certified.</p>
	<p>Filters: Each unit shall be provided with a factory assembled filter section containing washable synthetic type air pre filters media, mounted on Aluminum Frame. Filter bank framework shall be fully sealed and constructed from GSS. The efficiency of the filters shall be 90% down to particle size of 20 microns as per IS 7613, and ASHRAE 52.1.</p>
	Units with Coil-4 Row Deep
a	Actual Capacity at design conditions=18 TR,7200 CFM, Minimum 8mm ESP should required

List of approved AHU - VTS, CITIZEN, ZECO

Asst. General Manager (SBIIMS)