

**RINGKASAN SEBUTHARGA
SUMMARY OF QUOTATION**

Tajuk / Title **SUPPLY AND INSTALLATION OF AIR HANDLING UNIT (AHU) FOR CLT BUILDING, UNIVERSITI BRUNEI DARUSSALAM**

Bil. Sebutharga **UBD/Q/168/2024 - [G]**
Quotation No.

Bil. No.	Keterangan / Description	Unit Unit	Kadar Rate	Kuantiti Quantity	Jumlah /Amount (\$) (€)
	The contractor shall do site visit before quoting the price of the Equipment and the Specification.				
	<u>CLT Room 1.12 & 1.14</u>				
1.0	Dismantle and Removal of Unserviceable Equipment				
	Supply manpower, tools, transportation and carnage for complete dismantling of all unserviceable existing equipment and other associated works. This includes delivery of dismantled item to site designated by S.O. in operation/functional order and remove from site the followings:				
a)	Existing air handling units, brackets and all associated accessories.	lots		5	
b)	Existing Chilled Water piping complete with brackets and all associated accessories.	lots		5	
1.1	Supply, delivery and install				
	Supply, delivery and install new (ABCi and Eurovent EN1886 Approved type units only) factory assembled Double Skin 50 mm Approved type air handling unit shall comprised manufacturer's built in fan, motor, pulley and belt, coiling coil with stainless steel drain pan, air filter primary, anti-vibration isolators. factory built missing box and dampers on supply and return air outlet of both AHUs				
	The total cooling capacity shall be as follows rows deep coil with face velocity not to exceed 2.4 m/s. The price quoted shall be included with the sound attenuator if required to achieve the respective AHU's Sound Level c/w all dismantling of existing units, wiring, piping, plinth and wiring and associated works,				
	The AHU technical data provided below is for reference. Tenderer to ensure the airflow, fan static and cooling capacity of proposed unit not less than and adjusted to achieve the desired temperature 20 ~23 deg C and relative humidity (RH) 55 to 60% in the area.				
1.11	1.12 : 10% fresh air, 122 kW, 8R, CMS 5.3 @350Pa Ext SP, E3 Motor (On coil 23/17 deg C water Temp 7/12 deg C)	no		1	
1.12	1.14 : 10% fresh air, 111 kW, 8R, CMS 5 , @350Pa Ext SP E3 Motor (On coil 23/17 deg C water Temp 7/12 deg C)	no		1	
(PAGE 1) TOTAL AMOUNT:					
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Bil. No.	Keterangan / Description	Unit Unit	Kadar Rate	Kuantiti Quantity	Jumlah /Amount (\$) (€)
2.0	Pipe Works and Fitting Chilled Water Pipe				
a)	Supply above ground chilled water pipe shall be factory pre-insulated black steel pipe to BS 1387 class C heavy grade seamed pipe with outer jacket of 0.6mm thick spiral locked seamed galvanized sheet, inclusive of all fittings, hangers, supports, straight joint, elbow bends, tee, reducers, valve fittings accessories. Size to the unit under replacement including re-routing, modification to suit to new AHU's	lot		1	
b)	Isolation valve c/w insulation and jacketing:	nos		2	
c)	Flexible connection c/w insulation and jacketing:	nos		4	
d)	100mm Pressure gauge c/w gauge cock.	nos		4	
e)	Automatic air vent	nos		4	
f)	100mm Temperature gauge c/w gauge cock.	nos		4	
g)	Pipe bracket in chiller yard using 100mm I-Beam and angle iron bracing support for chilled water piping system c/w anti-corrosive painting.	lots		2	
h)	To clean and flush the new existing chilled water piping system using approved type chemical solution .	lots		2	
i)	To paint/re-paint the whole chilled water piping system in AHU room with approved type paint-1 layer undercoat antirust paint and 2 layers gloss paint.	lot		1	
3.0	Electrical Services Works and Control System				
	Supply and install suitable rating of the power and control cables in accordance to the approved relevant standard from air-conditioning switch board to relevant equipment, i.e. chillers, pumps, valve, actuator, accessories on hot dipped galvanized epoxy power coated cable tray/cable tray cable gland, cable lugs, fittings as required.				
a)	Power and control wiring for chiller on cable ladder. (Approximate 20 -30mtrs)	lots		2	
b)	Power and Control wiring using multicore amour cable from A/C panel to AHUs etc.	lots		2	
c)	Supply and replace new AHU control panel with suitable VSD c/w with all required controls including dismantling the existing control panels , the panel must be included all required on site accessories etc				
c.1	Room 1.12	no		1	
c.2	Room 1.14	no		1	
c.3	Room G.1	no		1	
(PAGE 2) TOTAL AMOUNT:					
Bring forward to page 3					

Bil. No.	Keterangan / Description	Unit Unit	Kadar Rate	Kuantiti Quantity	Jumlah /Amount (\$) (€)
4.0	Miscellaneous works				
a)	Demolish/Enlarge and make good of existing and construct new concrete plinth of grade 20 for AHU's.	lots		2	
b)	Hacking and construction of wall opening inclusive of making good and touching up paint work.	lots		2	
c)	Carry out air balancing work for whole air conditioning system.	lots		2	
d)	Vibration isolator for AHU (Quantity and size to the units).	lots		2	
e)	To provide suitable mode of transport for the existing AHU including to send to store/scrap yard as per S.O. instructions.	lot		1	
f)	To supply and install new 3 way control valve with actuator c/w wiring etc.	nos		2	
5.0	Duct Works				
a)	To supply GI supply air duct with PU form to connect new AHU's in the AHU room as per DW/144 to and required supporting brackets and flexible connections	lot		1	
b)	To supply and replace all flexible duct connection , dampers size and length as per excising installation on site	lot		1	
c)	Remove and clean all the excising grills/ diffusers and install back including painting and make good	lot		1	
6.0	To supply and install Digital control system for aforesaid 3 AHU's including all required sensor with actuator c/w digital thermostat, duct temperature sensors, smoke detector, standalone digital controller, RH sensor and wiring etc. including the following monitoring features	lots		2	
	i) Digital stand alone controller				
	ii) Temperature monitoring				
7.0	Testing and Commissioning				
a)	To carry out water balancing of whole chilled water system and submits report to the S.O.	lot		1	
b)	To check and carry out all necessary air balancing to AHU to ensure corrects working order and submits report to the S.O.	lot		1	
c)	Testing and commissioning of the above complete installation inclusive of all necessary rectification works to ensure the effectiveness of the air-conditioning system.	lot		1	
	Note : comprehensive warranty including parts and labour for whole warranty period of 12 months.				
Total Amount :					

Validity Offer : **6 (six) months (from the date of quotation)**

Defect Liability period: **6 (six) months**

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(Official Chop / Signature)

Liquidated and Ascertained Damages (LAD): **25.00/ day**
For each day the works remain incomplete
(If none stated, then the Contract Administrator
may certify a reasonable sum as compensation
3 MONTHS

Contract / Address

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(Official Chop / Signature)

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Tel. (off)
H/phone
Fax. No

**** Class : I and above**

**** Category: B01, M01 & E01**