

Subhead -20.1
Building Management System

| Item No. | Description of Items | Unit | Unit Rate in Dhaka & Mymensingh Zone (Tk) | Unit Rate in Chattogram & Sylhet Zone (Tk) | Unit Rate in Khulna,Barishal & Gopalganj (Tk) | Unit Rate in Rajshahi & Rangpur (Tk) |
|----------|----------------------|------|---|--|---|--------------------------------------|
|----------|----------------------|------|---|--|---|--------------------------------------|

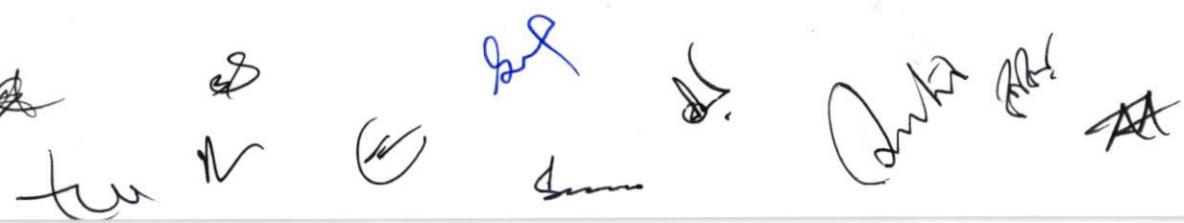
20.1.1 BMS

Supply, installation, testing and commissioning of Graphics/Web Based Software (with at least 3 user license) complete with enterprise software/ workstation software / BA Management station/ web service/ interface API /graphics software/ Energy management software/ Application/ Engineering tools etc. as declared by the manufacturer to make the system completely functional, enables the user to monitor plant or building service, make changes to the way the building is controlled from a graphical display. Supports minimum 2500 I/O. It enables connection to remote sites over TCP/IP using hostnames, view and manage graphics, alarms, schedules, trend logs, and reports. Compatible to BMS Server. Accepted / Approved by the Engineer-in-charge.

Each 1104344 1104344 1104344 1104344

20.1.2 Supply, installation, testing and commissioning of Automation server/ system controller of the following specifications-
 supports BACnet/IP or MODBUS RTU & TCP or LonWork or any open source protocol.
 3D graphics enabled,
 Ethernet Port ,USB, RS 485 ports (optional) ,
 Terminal Base, power supply 15~24 Volt DC or as required
 At least 16 inputs/outputs channel onboard/pre-installed.
 Expandable up to 300 physical data points (single or multiple units), with
 3rd Party integrator (if required).
 Must be i)BTL Listed ii) CE/UL/ CSA Certified.
 Accepted/Approved by the Engineer in Charge.

Each 211040 211040 211040 211040



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|----------|----------------------|------|---|--|---|--------------------------------------|
|----------|----------------------|------|---|--|---|--------------------------------------|

20.1.3.1 Supply, installation, testing and commissioning of 8 channel (minimum) universal I/O modules compatible to automation server/system controller including terminal base. Ideal for any mix of temperature, pressure, flow, status points, and similar point types in a building control system. Input supply voltage: 21~26 VDC. Operating temperature: 0 to 50°C, Maximum humidity 90 % RH non-condensing.
Must be i)BTL Listed ii) CE/UL/ CSA Certified.
Accepted/Approved by the Engineer in Charge.

| | | | | |
|------|-------|-------|-------|-------|
| Each | 49082 | 49082 | 49082 | 49082 |
|------|-------|-------|-------|-------|

20.1.3.2 Supply, installation, testing and commissioning of 16 channel universal input modules (single unit or multiple units) compatible to automation server/system controller including terminal base. Input supply voltage- 21-26 VDC. Operating temperature: 0 to 50 °C, Maximum humidity 90 % RH non-condensing.
Must be i)BTL Listed ii) CE/UL/ CSA Certified.
Accepted/Approved by the Engineer in Charge.

| | | | | |
|------|-------|-------|-------|-------|
| Each | 98164 | 98164 | 98164 | 98164 |
|------|-------|-------|-------|-------|

20.1.3.3 Supply, installation, testing and commissioning of 8 channel (single unit or multiple units) Universal output / digital/ analog output modules compatible to automation server/system controller including terminal base. Input supply voltage: 21~26 VDC. Operating temperature :0 to 50 °C , Maximum humidity 90 % RH non-condensing.
Must be i)BTL Listed ii) CE/UL/ CSA Certified.
Accepted/Approved by the Engineer in Charge.

| | | | | |
|------|-------|-------|-------|-------|
| Each | 49082 | 49082 | 49082 | 49082 |
|------|-------|-------|-------|-------|

| Item No. | Description of Items | Unit | Unit Rate in Dhaka & Mymensingh Zone (Tk) | Unit Rate in Chattogram & Sylhet Zone (Tk) | Unit Rate in Khulna,Barishal & Gopalganj (Tk) | Unit Rate in Rajshahi & Rangpur (Tk) |
|-----------------|---|-------------|--|---|--|---|
| 20.1.3.4 | Supply, installation, testing and commissioning of 16 channel (single unit or multiple units) digital input modules compatible to automation server/system controller including terminal base. Input supply voltage- 21~26 VDC. Operating temperature: 0 to 50 °C ,Maximum humidity 90 % RH non-condensing. Must be i)BTL Listed ii) CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 98164 | 98164 | 98164 | 98164 |
| 20.1.4 | Supply and installation of two core shielded control cable of Tinned annealed copper with Aluminium Polyester shield, PVC jacket. Voltage withstanding capacity 300 volt at 60°C. 22 AWG. Accepted /approved by the Engineer-in-charge. | Meter | 147 | 147 | 147 | 147 |
| 20.1.5 | Supply & Installation of Ambient humidity/temperature sensors - designed to provide relative humidity measurement and temperature data. Supply voltage 24 V AC or 20-35 V DC Working Temperature range 0to+50°C , 0~95% relative humidity(non-condensing) . IP 65 or above- degree of protection with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/ Approved by the Engineer in Charge. | Each | 30676 | 30676 | 30676 | 30676 |
| 20.1.6 | Supply & Installation of Space/Room temperature sensor for assessing temperatures inside of private homes, offices, etc. Supply voltage 24 V AC or 20-35 V DC Working range 0...+40 C° , 0 to 90 %RH , IP 30 or above- degree of protection (Minimum) with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 24541 | 24541 | 24541 | 24541 |

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|----------|---|------|---|--|---|--------------------------------------|
| 20.1.7 | Supply & Installation of Duct Temperature Sensor with all accessories mounting in air handling systems for monitoring of air ducts . Sensor Length 200 mm~300 mm minimum, stainless steel/copper immersion tube, temperature range 0 to +100 °C , 0 to 90 %RH. IP degree of protection IP65 with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/ Approved by the Engineer in Charge. | Each | 4295 | 4295 | 4295 | 4295 |
| 20.1.8 | Supply & Installation of immersion temperature sensor complete with all accessories mounting in the pipe systems with separate sealed pocket Probe Length 100mm-150 mm, immersion tube: Stainless steel, IP degree of protection IP65. Temperature range 0 to+100°C, 0~95% R.H., with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 9816 | 9816 | 9816 | 9816 |
| 20.1.9 | Supply & Installation of Differential Pressure Switches with all accessories mounting in air handling systems for monitoring of air ducts, filters and fans. Pressure range : 20-5000 pa , as required for the system, Temperature 0°~60°C , Service life Mechanical > 10^6 switching cycle . Protection class IP54. Max.differential pressure 10 kPa with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 8259 | 8259 | 8259 | 8259 |

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|----------|--|------|---|--|---|--------------------------------------|
| 20.1.10 | Supply & Installation of pressure transmitter suitable for liquids to measure positive, negative pressures and pressure differentials in HVAC systems. Pressure working range 0-1000 Kpa, maximum pressure=2x nominal pressure. Output voltage: 0-10 V, Medium Temperature: 0 to +80°C , IP 65 or above degree of protection, Stainless steel medium with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 49082 | 49082 | 49082 | 49082 |
| 20.1.11 | Supply & Installation of Modulating Damper Actuator with all accessories mounting in air handling systems to control airflow on ducts. Supply voltage: 24 VAC /230 V AC 50Hz/ 24-48VDC .Modulating 0-10 VDC. Nominal torque 8 Nm or above. Running Time 150 sec. Protection class IP54. Noise level 45dB (A) maximum. Ambient operation temperature 0-50°C, Humidity 95%r.h. with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 23245 | 23245 | 23245 | 23245 |
| 20.1.12 | Supply and installation of microcontroller based fully programmable VAV controller with damper actuator of minimum 5 Nm. Supply voltage 24 VAC, 50Hz or 24 VDC communication via RS 485, 2~4 input/output modules. Operating temperature 0-50°C, Humidity 90% non-condensing. Accepted/Approved by the Engineer in Charge. | Each | 49082 | 49082 | 49082 | 49082 |

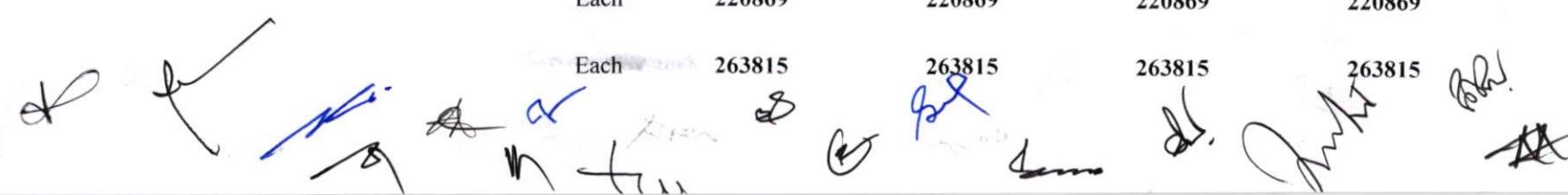

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|----------|--|------|---|--|---|--------------------------------------|
| 20.1.13 | Supplying, installation, testing, commissioning of application specific controller suitable for room control as a standalone field controller. Minimum no. Universal I/O is 8 with at least 2 nos solid state relay output, with display .Ambient temperature, storage 0 to +60 °C Maximum humidity 90 % RH non-condensing. Supply voltage 24 VAC / 24VDC..Protection class IP20 with relevant International standards. Compatible to Building Management System. Accepted/Approved by the Engineer in Charge. | Each | 98164 | 98164 | 98164 | 98164 |
| 20.1.14 | Supply, installation, testing , commissioning of CO or CO ₂ sensor as required to detect CO/CO ₂ gas in the air . CO ₂ detect range:0-2000 ppm, CO detect range 0-300 ppm. Accuracy ±5 %. Rated power supply: 24VAC, 24 VDC. Output voltage: 0-10V DC. Protection class IP54. Operating Temperature 14 to 122°F (0-50°C) Humidity 0-90% non-condensing. Coverage area: 5000-7000 sft.for CO and up to 1000 sft for CO ₂ sensor with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 36811 | 36811 | 36811 | 36811 |
| 20.1.15 | supply, installation , testing , commissioning of combo sensor to measure CO ₂ , Temperature, Humidity . CO ₂ detect range:0-2000 ppm, Temperature detection range: 0-50°C, Humidity Detection range : 0-100% RH non-condensing Accuracy ±5 %. Rated power supply:24VAC, 24 VDC. Output voltage : 0-10V DC. Protection class IP30. Operating Temperature 14 to 122oF (0 to 50°C) Humidity 0-90% non-condensing. Coverage area: 1000 sft. with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 53220 | 53220 | 53220 | 53220 |

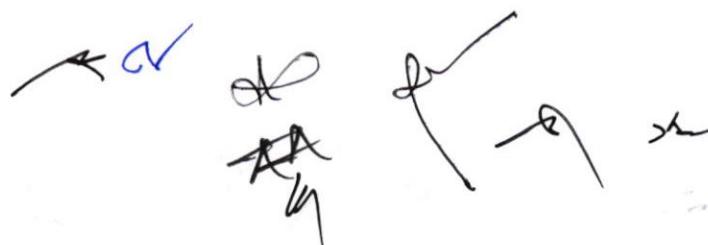
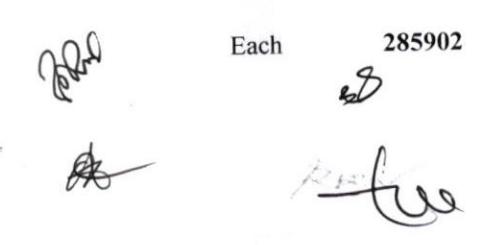
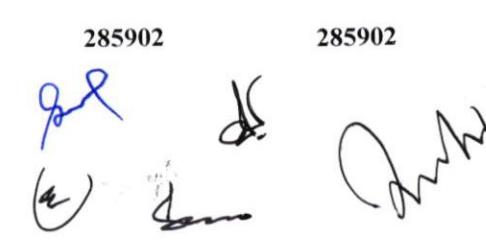
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|----------|---|------|---|--|---|--------------------------------------|
| 20.1.16 | Supply, installation , testing , commissioning of PIR motion sensor to detect motion Detection range :6-10m. Detection angle: 360°. Mounting Height: 2-3 m. Accuracy ±5 %. Rated power supply:220~240VAC, 50 Hz with Manual override and delay time 5sec -10 min. Protection class IP20 with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 6729 | 6729 | 6729 | 6729 |
| 20.1.17 | Supply, installation , testing , commissioning of Duct smoke sensor of following specifications- supply voltage 24V/115/230VAC , 50 Hz or 24VDC .Air velocity 0.50-20 m/s. Ambient Temperature 14 to 122°F (0 to 50°C) Humidity 10-80% non-condensing. Protection class IP54 . with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 33644 | 33644 | 33644 | 33644 |
| 20.1.18 | Supply, installation , testing , commissioning of Energy meter to monitor deferent electrical parameters such as voltage, current , frequency, power , power factor etc. on the inbuilt display and through BMS system.. Operating Temperature -10 to 50°C, Humidity 5-90% non-condensing. Protection class IP54 ,with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 26995 | 26995 | 26995 | 26995 |
| 20.1.19 | Supply, Installation, Testing, Commissioning of Dual Technology Occupancy Sensor employs both passive infrared (PIR) and ultrasonic technology to accurately detect occupancy and automatically turn on lighting. 2000 sq. ft. coverage area 360 degree field of view Adjustable Sensitivity (from 60 to 100%), With Manual Bypass with relevant International standards. Compatible to Building Management System. CE/UL/CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 30676 | 30676 | 30676 | 30676 |

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|----------|--|------|---|--|---|--------------------------------------|
| 20.1.20 | Supply, installation, testing, commissioning of water flow meter with the following specifications-.Pressure Limits 400 psi (27.6 bar) @ 100° F (37.8°C), Design flow 2-20 ft/s .Temperature limit 70'C. Protection class IP66 with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 203690 | 203690 | 203690 | 203690 |
| 20.1.21 | Supply, installation, testing, commissioning of water flow switch with the following specifications-.Pressure Limits 10 bar .Temperature limit 70'C. Protection class IP65 . with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 14725 | 14725 | 14725 | 14725 |
| 20.1.22 | Supply, installation, testing, commissioning of level switch with the following specifications-.Pressure Limits 100 psi .Temperature limit 100°C with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 12235 | 12235 | 12235 | 12235 |
| 20.1.23 | Supply, installation, testing, commissioning of network thermostat with the following specifications-input voltage 220~230VAC 50 Hz or 24VAC 50 Hz , output voltage 3 nos for fan and 1 for valve : 220VAC or 24 VAC ,50 Hz, as per requirement of FCU. Operation temperature 0 ~ 49 °C (32 to 120°F),Relative humidity 5 ~ 90 % with built in temperature sensor and LCD Display .Protection class IP20 with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 34357 | 34357 | 34357 | 34357 |

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|-----------------------------|--|-------------|--|---|--|---|
| 20.1.24 | Supply, installation, testing and commissioning of variable speed drive with integrated EMC / EMI filter of following capacities suitable for controlling motors of fans and pumps of HVAC system. Communication protocol: MODBUS/ BACnet. Supply voltage: 200-240 VAC 50 Hz or 380~480 VAC 50 Hz. Output voltage: 0-100% of supply voltage. Maximum output frequency 400 Hz. Protection against overheating , overcurrent, ground fault , phase loss. Ambient air temperature for operation: 50°C. IP20 protection class. with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | | | | | |
| 20.1.24. For 1.5 kW | | | | | | |
| 1 | | Each | 51536 | 51536 | 51536 | 51536 |
| 20.1.24. For 2.2 kW | | | | | | |
| 2 | | Each | 56444 | 56444 | 56444 | 56444 |
| 20.1.24. For 4.0 kW | | | | | | |
| 3 | | Each | 67488 | 67488 | 67488 | 67488 |
| 20.1.24. For 5.5 kW | | | | | | |
| 4 | | Each | 100618 | 100618 | 100618 | 100618 |
| 20.1.24. For 7.5 kW | | | | | | |
| 5 | | Each | 111661 | 111661 | 111661 | 111661 |
| 20.1.24. For 11.0 kW | | | | | | |
| 6 | | Each | 143565 | 143565 | 143565 | 143565 |
| 20.1.24. For 15.0 kW | | | | | | |
| 7 | | Each | 154608 | 154608 | 154608 | 154608 |
| 20.1.24. For 18.5 kW | | | | | | |
| 8 | | Each | 202463 | 202463 | 202463 | 202463 |
| 20.1.24. For 22.0 kW | | | | | | |
| 9 | | Each | 220869 | 220869 | 220869 | 220869 |
| 20.1.24. For 30.0 kW | | | | | | |
| 10 | | Each | 263815 | 263815 | 263815 | 263815 |


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|-------------|---|------|---|--|---|--------------------------------------|
| 20.1.24. 11 | For 37.0 kW | Each | 319033 | 319033 | 319033 | 319033 |
| 20.1.24. 12 | For 45.0 kW | Each | 354617 | 354617 | 354617 | 354617 |
| 20.1.24. 13 | For 55.0 kW | Each | 417196 | 417196 | 417196 | 417196 |
| 20.1.24. 14 | For 75.0 kW | Each | 595119 | 595119 | 595119 | 595119 |
| 20.1.24. 15 | For 90.0 kW | Each | 714142 | 714142 | 714142 | 714142 |
| 20.1.25 | Providing and fixing of DDC enclosure of required size suitable for single DDC complete with relay base, channel, cooling fan ,locking arrangement .Accepted/Approved by the Engineer in Charge. | Each | 14725 | 14725 | 14725 | 14725 |
| 20.1.26 | Supplying, installation, testing & commissioning of 0-10 Volt dimmable lighting control system with built-in or separately provided programmable controller of minimum 4 channel I/O module / 0-10 V output module to supply 0-10 V continuous supply to Ballast/ driver with accessories .Supports BACnet /MODBUS/CBUS with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 122094 | 122094 | 122094 | 122094 |
| 20.1.27 | Supplying, installation, testing & commissioning of DALI lighting control system with built-in or separately provided controller and DALI Lighting module ,supports 64 control device with accessories .Supports BACnet /MODBUS/CBUS with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 285902 | 285902 | 285902 | 285902 |


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|----------|---|------|---|--|---|--------------------------------------|
| 20.1.28 | Supplying, installation, testing & commissioning of light sensor to convert a lux measurement into an electric signal , voltage signal of 0-10 V .Measuring range at least 0-300 lux with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 47855 | 47855 | 47855 | 47855 |
| 20.1.29 | Supply and installation of power supply for DDC of the following specification- Output Voltage 24V/12 volt Output Power 30W +_10% Output Current 1.25A-2.5 A Input Voltage Range 90-264Vac Universal AC input voltage and full power up to 55°C Efficiency > 87.0% @ 115Vac & 230Vac Overvoltage / Overcurrent / Over Temperature Protections with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 17179 | 17179 | 17179 | 17179 |
| 20.1.30 | Providing and fixing 12 Channel 10A Relay Module .supply voltage15 to 36 V DC ,Network type AC/DC Device composition Socket-outlet Connector type Screw terminals Supply Frequency 47-53Hz and 57-63Hz Bus Supply Voltage 15-36VDC @ 0mA .Load Rating per Channel 10A AC3 Contact Type Voltage free, normally open, magnetically latched .Switch Operations Greater than 60,000 operations .Inrush Current 120A (20msec)with relevant International standards. Compatible to Building Management System. CE/UL/ CSA Certified. Accepted/Approved by the Engineer in Charge. | Each | 55217 | 55217 | 55217 | 55217 |

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|----------|---|------|---|--|---|--------------------------------------|
| 20.1.31 | Programming, Testing, Commissioning and Balancing of the entire BMS system including graphical design and presentation, tagging and identification as per direction of Engineer in Charge. | Each | 552172 | 552172 | 552172 | 552172 |
| 20.1.32 | Access Control Central Controller Based Supply, Installation, Testing & Commissioning of central controller supporting up to 2 doors locally and at least 32 readers in total using expansion i/o modules, integration software with license (if required) of the following specification or equivalent- Input voltage:12-24 Vdc +/- 20% ,micro SD supported, Ethernet Communication:10BaseT/100Base-TX . Inputs: At least for exit button and door contact, Outputs: minimum 3 , relay type. Necessary power supply unit, enclosure included. Operating temperature: 0°C - +55°C. Regulatory: CE,UL,FCC. Accepted /approved by the Engineer-in-charge. | Each | 115220 | 115220 | 115220 | 115220 |
| 20.1.32. | Supply, Installation, Testing & Commissioning of single door access control module to be connected with central controller of the following specification or equivalent- Input voltage:12-24 Vdc +/- 20% , Inputs: At least for exit button and door contact, Outputs: minimum 3 , relay type. Necessary power supply unit, enclosure included. Operating temperature: 0°C to +55°C. Regulatory: CE,UL,FCC. Accepted /approved by the Engineer-in-charge. | Each | 98164 | 98164 | 98164 | 98164 |

Network Based Access Control
(No Central Controller required)

| Item No. | Description of Items | Unit | Unit Rate in Dhaka & Mymensingh Zone (Tk) | Unit Rate in Chattogram & Sylhet Zone (Tk) | Unit Rate in Khulna,Barishal & Gopalganj (Tk) | Unit Rate in Rajshahi & Rangpur (Tk) |
|----------|----------------------|------|---|--|---|--------------------------------------|
|----------|----------------------|------|---|--|---|--------------------------------------|

- 20.1.32.** Supply, Installation, Testing & Commissioning of single door networkable access control unit has on-board TCP/IP to allow direct connection to a computer network including software with license (if required) of the following specification or equivalent-

Input voltage:12-24 Vdc +/- 20% ,micro SD supported,

Ethernet Communication:10BaseT/100Base-TX .

Inputs: At least for exit button and door contact,

Outputs: minimum 3 , relay type.

Necessary power supply unit, enclosure included.

Operating temperature: 0°C to +55°C.

Regulatory: CE,UL,FCC.

Accepted /approved by the Engineer-in-charge.

Each

82826

82826

82826

82826

Accessories

- 20.1.32.** Supply and installation of Proximity Card reader of following specification or equivalent-

Typical card range: 6 cm minimum

Operating Voltage: 5-16 Vdc

Operating temperature:-35°C to +66°C

Environmental Rating: Inddor/Outdoor

Transmit Frequency:13.56 MHz or 125kHz

Certifications:CE,UL,FCC.

Accepted /approved by the Engineer-in-charge.

Each

22700

22700

22700

22700

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|------------|--|------|---|--|---|--------------------------------------|
| 20.1.32. 5 | <p>Supply and installation of Biometric reader of following specification or equivalent-</p> <p>Biometric: Fingerprint Sensor Type: Optical Sensor RF Option: 13.56 MHz credential compatible Template: ISO 19794-2 / ANSI 378 Operating Voltage: 12 Vdc Operating temperature:-10°C - +50°C Provision to use both or either fingerprint or card as per system requirement . Certifications: CE, FCC, RoHS Accepted /approved by the Engineer-in-charge.</p> | Each | 42947 | 42947 | 42947 | 42947 |
| 20.1.32. 6 | <p>Supply of proximity card of 13.56 MHz or 125 KHz Transmit frequency with both side printable feature, accepted/ approved by the Engineer-in-charge.</p> | Each | 614 | 614 | 614 | 614 |
| 20.1.32. 7 | <p>Supply and installation of Electromagnetic door lock of following specification or equivalent-</p> <p>600lbs holding force Dual voltage 12 & 24 Vdc Current drawn 500mA / 250mA MOV surge protection Push-off button on armature for instant release Dimension :- Magnet : 250(L) X 40(W) X 26(D) mm +-10% Armature Plate : 170(L) X 38(W) X 11(D) mm +-10% Operating Temperature : 0~55° C (32~131° F) Operating Humidity : 0~95% (non condensing) Accepted /approved by the Engineer-in-charge.</p> | Each | 11657 | 11657 | 11657 | 11657 |

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|------------|--|------|---|--|---|--------------------------------------|
| 20.1.32. 8 | Supply and installation of Exit button of following specification or equivalent- controlled by door controller- unlock the door when it is pressed Operating Voltage : 10-14 Vdc or 125-250 Vac Operating Temperature : -20°C - +55°C Accepted /approved by the Engineer-in-charge. | Each | 4908 | 4908 | 4908 | 4908 |
| 20.1.32. 9 | Supply and installation of break glass unit for emergency door release of following specification or equivalent- Double pole double throw contacts (NO,NC,COM) Resettable with key Status indicator Embedded or surface mounting options Accepted /approved by the Engineer-in-charge. | Each | 6135 | 6135 | 6135 | 6135 |