



耆色園主辦可銘學校

Ho Ming Primary School (Sponsored by Sik Sik Yuen)

校址：新界元朗天水圍天柏路二號
電話：2445 0101
網址：www.homing.edu.hk

2 Tin Pak Road, Tin Shui Wai, Yuen Long, N.T.
傳真：2445 9247
電郵：info@homing.edu.hk



學校檔號：HMWIFIHARDWARE/2025-26/01

敬啟者：

招標

承投供應「學校網絡設備及設置」

(投標商不可在招標書封面上顯示該公司/機構的名稱)

現誠邀 貴公司/機構就本校招標承投供應「學校網絡設備及設置」，特此誠邀各承辦商按以下所列各項要求提交投標書。

1. 投標表格及其他交回之附件必須正本一式兩份，否則投標資格會被取消，並放置信封內封密。信封面應清楚註明：

承投供應「學校網絡設備及設置」項目投標書

投標書應寄往新界天水圍天柏路2號 耆色園主辦可銘學校 收啟，並須於2026年2月11日(星期三)中午十二時前送達上述地址，逾期的投標，概不受理。並請注意投標信封面不得寫上投標者的身分。投標者如在密封信封上披露身份，投標資格會被取消。投標書有效期為90天，由上述截標日期起計。如在該90天內仍未接獲回覆，則是次投標可視作落選論。另請注意，每位投標者只可對本項目遞交一次及一式兩份之標書，而投標者亦必須填妥投標表格第III部分、規格要求表格及配合附件服務承諾及要求內容，否則標書概不受理。

2. 各投標表格及附件內容，如需修改，必須用原子筆畫線刪去錯處，並在旁更正，及加上負責人簽名與公司印章，茲證明投標者核實修改內容。並請留意同一內容不能多於一次修改，如有需要，請投標者於標期內登入本校網頁：www.homing.edu.hk 下載相關的標書文件及表格重新填寫。投標者不可使用塗改液或改錯帶覆蓋內文，如有違規，投標書將被作廢。倘 貴公司未能或不擬投標，亦請盡快把投標表格寄回上述地址，並列明不擬投標的原因。
3. 承辦商如需實地視察及查詢標書內容，請於2026年1月28日(星期三)下午4時正到達本校G04A室出席標書簡介會，如有預約或疑問，可致電本校與資訊科技部許先生查詢(電話：2445 0101)。
4. 學校邀請招標承投所需物品/服務時，會以「整批」或「部分」形式考慮接受供應商的投標。本校有權選取任何一份或部份標書，而不限於最低價格者。在學校的招標過程中，競投人、其僱員及代理人不得向學校僱員、校董會/法團校董會成員，或負責考慮與本合約相關事宜的有關委員會的任何家長或學生代表提供利益(香港法例第201章《防止賄賂條例》所界定的「利益」)。競投人、其僱員及代理人向有關人士提供任何利益，根據《防止賄賂條例》可構成罪行，並可導致合約無效。學校亦可取消批出的合約，而競投人須為學校所蒙受的任何損失或損害負上法律責任。

耆色園主辦可銘學校
校長 譚鳳婷 謹啟

二零二六年一月二十一日

承投 供應「學校網絡設備及設置」
投標表格

學校名稱及地址： 嚮色園主辦可銘學校 新界天水圍天柏路2號

學校檔號： HMWIFIHARDWARE/2025-26/01

截止投標日期： 2026年2月11日(星期三) 中午十二時正或以前

第I部分

下方簽署人願意按照正式訂單上訂明的日期及所列的價格，包括勞工、材料及其他所有費用，以及校方所提出的細則，提供投標附表上所列項目的服務。下方簽署人知悉，所有未經特別註明的項目，均須按照該細則的規定提供服務；投標書由上述截止日期起計90天內仍屬有效；校方不一定採納索價最低的投標書或任何一份投標書，並有權在投標書的有效期內，採納某份投標書的全部或部分內容。下方簽署人亦保證其公司的商業登記及僱員補償保險均屬有效，而其公司所提供的服務不會損壞學校的校舍或導致學校運作上出現困難。

第II部分

再行確定書面報價單/投標書的有效期

有關本投標書表格的第I部分，現再確定本公司的投標書有效期由2026年2月11日起計為期90天。下方簽署人亦同意，投標書的有效期一經再行確定，其公司就該事項註明於投標表格內的預印條文，即不再適用。

第III部分

維護國家安全

下方簽署人確認即使報價／招標文件中有任何相反的規定，學校保留以其公司曾經、正在或有理由相信其公司曾經或正在作出可能構成或導致發生危害國家安全罪行的行為或活動為由，取消其公司資格的權利，又或為維護國家安全，或為保障香港的公眾利益、公共道德、公共秩序或公共安全，而有必要剔除其公司。

下方簽署人確認若出現下列任何一種情況，學校可以立即終止合約：

- (i) 其公司曾經或正在作出可能構成或導致發生危害國家安全罪行或不利於國家安全的行為或活動；
- (ii) 繼續僱用其公司或繼續履行合約不利於國家安全；或
- (iii) 學校合理地認為上述任何一種情況即將出現。

日期： _____

姓名(請以正楷填寫)： _____

簽署人： _____

職銜： _____

上方簽署人已獲授權，代表：—

公司/機構印鑑

公司簽署投標書，該公司在香港註冊的

辦事處地址： _____

電話號碼： _____

傳真號碼： _____

招標附件 服務承諾及要求

1. 為確保服務質素，請注意下列各項：
 - (a) 若事先未獲法團校董會書面同意，承辦商不得分判、轉讓或出讓或處置合約或其任何部分或下述任何權利及義務。
 - (b) 若事先未獲法團校董會書面同意，承辦商不得就履行合約的任何部分，與任何人訂立任何分判合約。如承辦商認為有需要分判部分工作或服務，承辦商便必須提交建議的分判合約予法團校董會審批。法團校董會保留權利批准分判，以及決定合約的條款及條件。
 - (c) 若承辦商即使就履行合約的任何部分訂立分判合約，仍須承擔全部責任，不可免除下述任何義務，並須就次承辦商、其僱員及代理人的作為、失責或疏忽行為負責。
2. 投標者付予受其僱用以執行合約的本地工人的每月工資如低於香港政府所訂的最低工資，可導致合約無效。學校亦可取消批出的合約，而競投人須為學校所蒙受的任何損失或損害負上法律責任。
3. 承辦商若因服務所需安排工作人員提供服務，須為其工作購買合適保險。
4. 競投人、其僱員及代理人不得向學校僱員、法團校董會成員，或負責考慮與本合約相關事宜的有關委員會的任何家長或學生代表提供利益(香港法例第201章《防止賄賂條例》所界定的「利益」)。競投人、其僱員或代理人向有關人士提供任何利益，根據《防止賄賂條例》可構成罪行，並可導致合約無效。學校亦可取消批出的合約，而競投人須為學校所蒙受的任何損失或損害負上法律責任。
5. 根據本校政策，屬下教職員在未獲得學校法團校董會之特別批准前，不得在執行校務時索取或收受任何禮物、金錢或其他形式的利益，如有違反，會遭受紀律處分，而本校亦會考慮向廉署舉報，假若貴公司遇有本校教職員索取利益，請盡促通知本人。
6. 評審過程中，可能需要邀請投標者派員向本校教務委員會講解及闡釋投標書內所列內容，但評核仍以投標書內容為準。
7. 本校只接受以公司名義者投標，並須持有有效商業登記證。請附上該有效登記證副本作參考。
8. 本校將考慮投標者所提供之服務質素為重點，並保留選擇供應商/承辦商之最終決定權。任何投標表格及有關文件一概不會發還。
9. 投標者必須確保擬備標書的過程並無涉及與任何其他人士就價格、入標程序或任何標書條款等，作任何協議、安排、溝通、諒解、許諾或承諾。如任何投標者違反本條款，本校保留將該名投標者提交的標書作廢及追討損害賠償的權利。
10. 圍標本質上違反競爭條例，在《競爭條例》（第619章）下屬嚴重反競爭行為。從事圍標行為的投標者或須根據《競爭條例》承擔被判處罰款的法律責任及其他制裁。

招標附件

Technical Detail of Equipment & detail of Services

1. Wi-Fi Network

- 1.1. The Wireless LAN (WLAN) System of the Wi-Fi network shall support simultaneous dual-operation-mode that is FAT Access Point (AP) and Thin Access Point are both supported together with WLAN Controller. WLAN Controller shall be capable of fully centralized provisioning, configuration and monitoring all APs functionalities; all APs can keep operate once the Access Controller out-of-service.
- 1.2. The thin client WLAN Access Point (AP) shall be a high performance wireless network access device, which shall be connected with the Power over Ethernet (PoE) Access Switches via Structured Cabling System. Appropriate type of connection cables between WLAN APs and the antenna shall be provided
- 1.3. The WLAN APs shall be compatible with IEEE 802.11b standard or above, support dual band of 2.4GHz and 5GHz
- 1.4. The Contractor shall design the WLAN System to provide the coverage for the required wireless coverage place. The received signal strength measurement from the Wi-Fi Service at the Wi-Fi client device (such as tablet PC or notebook computer) is no worse than -68 dBm. The Contractor shall provide certificate or test report to illustrate that the Wi-Fi client device for testing satisfies the power emission requirement.
- 1.5. The WLAN AP shall support DHCP, PoE, VLANs, WPA2, IEEE 802.11b and certificate authentication.
- 1.6. The WLAN System shall support automatic channel selection, protocol filtering, multicast/broadcast storm filtering and load balancing.
- 1.7. The WLAN system shall allow single or multiple devices per user account to be authenticated using 802.1x and Hong Kong Education City single sign-on service.
- 1.8. Each WLAN AP shall be able to support at least concurrent 40 users connecting to the network simultaneously. In no circumstance shall the speed of data transmission symmetrically fall below the data rate requirement at any place or any corner or any highly congested area within the areas being covered. In case the transmission speed is below the said data rates, the Contractor shall be responsible for all remedial measures to rectify or configure fine-tuning of antenna or even increase the quantity of the WLAN AP at Contractor's own costs in order to meet the data rate requirement as mentioned in the Specification. A complete set of catalogues with brand and model shall be submitted and highlighted for reference. The catalogues shall show all the features and technical specifications of the products and systems.
- 1.9. The system shall provide bandwidth control per connection.
- 1.10. The WLAN shall allow different authentications by using Service Set Identifiers (SSIDs).
- 1.11. The SSIDs shall be able to be set hidden from searching by Wi-Fi devices. The devices have to manually set SSID to make connection.
- 1.12. Individual APs shall be allowed to be assigned by more than one SSIDs.
- 1.13. The SSIDs shall be isolated by VLANs, so different users under different SSIDs could be bind to corresponding firewall secure policy control and integration purpose.
- 1.14. Antennas of APs shall support 802.11b.
- 1.15. The DHCP server shall support at least 30 queries/sec.
- 1.16. The WLAN system shall suspend the session of the user once the session control is expired and the suspension time shall be configured by the school.
- 1.17. The Contractor shall in provision of the service comply with non-interference requirements of and shall not Cause interference prohibited under the Telecommunication Ordinance (Cap 106) or any other laws or regulation of Hong Kong.
- 1.18. The WLAN System shall provide termination of idle sessions and control of the duration features.
- 1.19. The WLAN System shall support client roaming across Access Points.
- 1.20. The WLAN system shall cover all the target areas specified under this tender.
- 1.21. The quotation shall include the cost to provide sufficient quantity and its cabling work required, including but not limited to supply and install the Fibre optics, Cat 6 cable, Conduit, cable patch panel, cable faceplate, Cable patch cord.
- 1.22. The Contractor shall provide complete set of WLAN Systems which consist of Wireless Access Point, Connection Cable, Authentication System, Wireless LAN Controller, PoE Switch, horizontal UTP Cat 6 cable/OM3 Fiber, patch cable UTP Cat 6 / OM3 Fiber Optics, any required license and all associated accessories.
- 1.23. All access points (AP) shall be certified by OFCA and copy of certificates issued by OFCA shall be attached to the proposals.
- 1.24. The Contractor shall ensure that there is no interference between WLAN Access Points due to limited non-overlapping channels assignment when the WLAN AP is installed. The Contractor shall be responsible at his own costs for providing solution to eliminate the interferences including but not limited to reassignment of the non-overlapping channels, adding extra APs with lower transmission power and/or replacement of the WLAN AP.
- 1.25. The WLAN System shall support Web GUI management.
- 1.26. FTP service shall not be allowed in the Wi-Fi network (to avoid exchanging credential and files in plain text without any encryption).
- 1.27. The WLAN System shall support IPV6 addressing method.

- 1.28. The WLAN system deployed shall be non-Asian brand, but not limited to well-known brand in the market.
- 1.29. The contractor shall be authorized by the WLAN vendor to bid for this project to avoid any faked or low quality products are deployed. A vendor certificate shall be provided during the tender submission.
- 1.30. The contractor shall have at least 5 x certified engineers on the proposed WLAN brand for at least 6 months.
- 1.31. Those certified engineers shall be permanent staff of the contractors for at least 6 months in order to ensure the service quality on deployment and after-sales services can be maintained. The Contractor shall submit those supporting documents during tender submission.
- 1.32. The cabling deployed in the Wi-Fi network shall be non-Asian brand, but not limited to well-known brand (e.g. Systimax, AMP, Krone, Brandrex, 3M & etc...).
- 1.33. The contractor shall be authorized by the cabling vendor to bid for this project to avoid any faked or low quality products are deployed. A vendor certificate shall be provided during the tender submission.

2. Access Controller

- 2.1 The Access Controller shall be deployed to provide high performance for manage the WiFi connection
- 2.2 The Access Controller shall consist of 10*GE port, 2*10GE SFP+ ports with AC/DC adapter
- 2.3 The Access Controller shall upgrade for APs connection upto 512

3. PoE Access Switch

- 3.1. The Access Switches shall be deployed to provide high performance interconnectivity between the Core Switches and the WLAN APs on typical floor.
- 3.2. The Access Switch shall consist of 24 x 10/100/1000Base-T Ethernet ports, with minimum of 1 x 1000Base-T / 1000Base-SX SFP Gigabit Ethernet uplink ports connected with the Core Switch.
- 3.3. The Access Switch shall be used for connecting the WLAN APs. The Contractor shall determine the Maximum power loading of the devices to be connected with the PoE Access Switches. The Contractor shall provide additional PoE Access Switch(es) if the total power loading summed up from the PoE devices exceeds the maximum power loading capacity of the PoE Access Switch.
- 3.4. The Access Switches shall support VLAN configuration.
- 3.5. The Access Switches shall be at wired speed.
- 3.6. The Access Switches shall be provided sufficient port density to meet all the required links.
- 3.7. The Access Switches shall support PoE and shall conform to IEEE 802.af / IEEE 802.3af standard, which delivers power over single copper UTP cable for WLAN AP.
- 3.8. The Access Switches shall support Internet Group Management Protocol (IGMP) snooping and multicast and unicast storm control, IEEE 802.1D Spanning-Tree Protocol.
- 3.9. The Access Switches shall support Virtual local area network (VLANs) including support for IEEE 802.1Q and IEEE 802.1p.
- 3.10. The Access Switches shall support WebGUI Management, Access Control Lists (ACLs), DHCP Relay and SNMP.

4. Service Requirements

- 4.1. The Contractor shall be responsible for the total project management and shall assign a person to act as the single contact point to the School regarding all related activities of the contract. This single contact point cannot be transferred to a sub-contractor unless explicitly agreed by the School. Contractor should formally inform the School in writing if there is a change of contact point.
- 4.2. The project manager of this project shall be the permanent staff of the contractor for at least 6 months. The contractor shall prove that the project manager is the permanent staff by providing supporting documents during tender submission.
- 4.3. The project manager shall attend the project meeting before completion of the project.
- 4.4. The Contractor shall provide rack/cabinet or use existing school rack if there is available rack space. All switches/firewall shall be properly installed into wall mounted cabinet or rack.
- 4.5. Cables shall be labeled with connected port and its device id.
- 4.6. All the equipment shall be labeled with an identifiable id.
- 4.7. The placement of cables, cabinets, racks and appliances shall be shown on the network diagram.
- 4.8. Switches and/or other appliances shall be properly installed into cabinet/rack with appropriate ventilation.
- 4.9. 13A power cord(s) shall be bundled with appliance(s).
- 4.10. Cable shall be properly set up onto appropriate cable management guide.
- 4.11. Contractor should make sure that the actual environment is suitable for the installation and operation of equipment with School agreement in advance, and make necessary suggestions, if any.

5. Service Level Requirements

- 5.1. The Contractor shall provide incident/problem report to the School within 5 working days after each incident and the resolution taken.

- 5.2. The Contractor shall derive mechanism, including forms and reference tables for measuring and recording the Service Level Measures, to ease the administration and monitoring by the School.
- 5.3. Advance notice by at least 2 weeks shall be given to the School prior to all scheduled maintenance. At most 4 scheduled maintenances per year are excluded from the calculation of Service Levels. No more than 1 hour service interruption or an agreed time slot is accepted for each scheduled maintenance.

6. Helpdesk Service

- 6.1. The Helpdesk Service shall maintain dedicated hotline, including phone, email and fax, for enquiries and complaints.
- 6.2. The Helpdesk Service shall answer enquiries and complaints originated from the School concerning the Service.
- 6.3. The Helpdesk Service shall operate from Mon to Sat 8:00 am to 6:00 pm.
- 6.4. The Helpdesk Service shall maintain call logs on enquiries and complaints. The information shall be included but Not be limited to date, time, description of issues, contact information, and follow-up actions. The Contractor Shall observe and comply with Personal Data (Privacy) Ordinance in handling all information relating to these enquiries and complaints.
- 6.5. The Contractor shall provide the following information concerning the Helpdesk service related to the implementation of the Service:
 - ◆ Detailed information of the helpdesk office, such as address, phone number, fax number.
- 6.6. The Contractor shall provide helpdesk staff with the necessary tools, including but not limited to hardware and software, related training for supporting the Service.
- 6.7. The Contractor shall not make use of the Helpdesk Service to transmit any message or conduct any activity to the School, which is not connected with the provision of the Service. The School shall have the full discretion to determine whether any such message or activity is in breach of this provision. The Contractor shall forthwith stop transmitting such message or conducting such activity and refrain from doing it further once the School has notified the Contractor in writing or verbally of its determination.

7. User Acceptance Test

- 7.1. The Contractor shall conduct tests with the School before the service is officially accepted and subscription started. Tests shall include User Acceptance Test for reliability and performance of the hardware and software, and also the monitoring, operation support and all other aspects related to the Service Level Agreement of the Service. At least 14 school working days of trial period is expected for service monitoring after testing.
- 7.2. The contractor will be required to perform test making reference to the User Acceptance Test.
 - They include the types of testing to be performed, the requirements to be tested, the testing environment, testing tools and pass/fail criteria as reference to the Contractor.
- 7.3. The Contractor shall upon request by the School arrange briefings to the School and/or Responsible Parties of the School, with briefing materials, prior to the User Acceptance Test when required.
- 7.4. The Contractor shall provide detailed acceptance test plan and a step by step testing procedure with expected Results against the requirements set out in this specification.
- 7.5. The Contractor shall provide, configure and set up the proper software and hardware for the School to carry out the User Acceptance Test.
- 7.6. The Contractor shall be required to carry out tests to demonstrate that the equipment and system meet the specification and other contractual requirements. The Contractor shall also be responsible for the timely preparation and compilation of all test schedules, test procedures and test reports.
- 7.7. The Contractor shall follow the agreed standards as laid down in this specification for the testing methods and procedures.
- 7.8. The Contractor shall submit a schedule of site performance and commissioning tests at least 3 working days prior to the commencement of the scheduled commissioning date.
- 7.9. Special tools, test equipment, test objects and simulators required for the demonstration of either bench or commissioning tests shall be made available by the Contractor at no extra charge to the School.
- 7.10. All test equipment used by the Contractor shall be properly and periodically calibrated. Measuring standards used in calibration shall be traceable to international or national measurement standards, or to an industry recognized manufacturer's reference, subject to approval of the School.
- 7.11. Calibration procedures and results shall be documented and signed by certifying body where applicable. The Contractor may be requested to show evidence of calibration of test equipment by submission of copies of these calibration records prior to conduction of any tests.
- 7.12. The Contractor shall submit the User Acceptance Test report within 3 working days. The acceptance of the installation will only be granted after receiving a satisfactorily UAT report from the Contractor.
- 7.13. All equipment to be installed may be subject to inspection and bench testing. The Contractor shall meet the cost of deliveries for bench test. Notwithstanding, the Contractor shall have carried out the tests in accordance with the requirements and procedures stipulated in this specification and submitted the associated test reports for inspection.

8. Termination of Service

- 8.1. The School reserves the right to terminate all or part of the Service at any time with written notice of 10 working days in advance if:
- ◆ The Contractor fails to meet the target service levels under Service Level Requirements for two consecutive months, or three months in total within the committed subscription period;
 - ◆ The School suspects that unauthorized activity has occurred or is occurring in relation to the Service;
 - ◆ The provision of the Service will cause the School to be in breach of any applicable law;
- 8.2. The Contractor shall provide to the School and implement the Exit Plan in accordance with:
- ◆ The Contractor shall provide to the School an Exit Plan with feasible arrangements before the committed subscription contract date;
 - ◆ If the School considers the Exit Plan as not satisfactory, it will notify the Contractor with comments. The Contractor shall revise the Exit Plan by taking into consideration of the School's comments and provide to the School with five (5) working days after the date of receiving the School's comments. If the Exit Plan has been considered as not satisfactory for three or more times, the School shall have the right to terminate this Contract by giving 10 days' notice in writing;
 - ◆ Detailed exit procedures, disengagement timetable and actions to be taken by both the Contractor and the School for smooth termination of all or any part of the Service;
 - ◆ The Exit Plan shall aim at enabling the School or its authorized parties to perform in substitution for the Contractor and to eliminate or minimize any disruption or deterioration of the Service. The Exit Plan shall contain, but not limited to the following information:
 - ◇ Detailed exit procedures, disengagement timetable and actions to be taken by both the Contractor and the School for smooth termination of all or any part of the Service;
 - ◇ Any information that is necessary for the School or a new service provider to continue the provision of the Service;
 - ◇ Details of the Contractor's personnel and other resources that will assist the School or the School's authorized parties during the handover;
 - ◇ All provisions of facilities such as trunks, conduits, cables, LAN ports and power points, shall be considered as fixture of the School venues and shall become the property of the School. The Contractor shall remove or keep those provisions according to the instruction of the School. Contractor can remove the network equipment such as switch, routers, and access points.
 - ◆ The Contractor shall be responsible for the implementation and execution of the Exit Plan and shall ensure that the exit plan is carried out in a timely and orderly manner.

9. Wi-Fi Project Reference

- 9.1. The Contractor shall list out 3 Wi-Fi reference cases with compliment letters.
- 9.2. The compliment letters shall be provided during the tender submission
- 9.3. To prove that the Contractor has the capability on Wi-Fi system design and maintenance, The Contractor shall list out 5 reference cases in non-subscription model which uses the same wireless solution vendor as the proposed brand in last 3 years while the cases in a single year shall not be less than 5.
- 9.4. The project references shall be provided during tender submission.

10. Sub-Contracts

- 10.1. The Tenderer shall be the prime Contractor for all the services of this contract. The Tenderer shall be the single point of contact for all contractual matters.
- 10.2. The Tenderer shall be liable for the performance or breach of any provisions of the contract by Sub-Contractors.
- 10.3. The Tenderer shall provide details of the sub-contract service for the Wi-Fi operation and maintenance of the Sub-Contractors in the format listed in Part 6. The hierarchy of the sub-contracting shall also be clearly stated below. If there are no Sub-Contractors, please enter nil.
- 10.4. No Sub-Contractor(s) specified in Item 6 shall be replaced unless prior written consent has been given by the School.
- 10.5. The Tenderer shall ensure that the quality of the service rendered by the Tenderer shall not be affected due to any change of Sub-Contractors;
- 10.6. The Tenderer shall not be relieved from any of its obligations hereunder by entering into any sub-contract for the performance of any part of this contract. If request by the School, the Tenderer shall describe which part of the service shall be performed by the Sub-Contractor(s) in the sub-contract(s) between the tenderer and its Sub-Contractor(s).

11. Schedule of Work

The Contractor shall provide the service according to the following schedule.

Phase	Items	Starting Date	Subscription Period	Service fee
I	Build up of Wi-Fi network	N.A.	N.A.	0

12. Deliverables

12.1. The Contractor is required to provide the following deliverables for the WiFi network design:

- ◆ Master Activity Plan
- ◆ Network Configuration Report and Network Diagram
- ◆ Network Test Plan and Network Test Result Report
- ◆ Operation Manual for End User
- ◆ User Acceptance Test Plan
- ◆ Exit Plan

課室分佈表

WIFI建設的分佈

附件1

七樓	712 室		711 室		711A 室	709 室	708 室	707 室	706 室	705 室	704 室		703 室	702 室	701 室	715 室				
	WIFI AP		WIFI AP		音樂貯存室	傷殘人士洗手間	男廁	女廁	HUB 房	電掣房	WIFI AP		WIFI AP	WIFI AP	WIFI AP					
六樓	614 室	613 室	612 室	611 室		611A 室	609 室	608 室	607 室	606 室	605 室	604 室		603 室	602 室	601 室	615 室			
	學生輔導社工室	輔導員接見室	學生輔導中心	WIFI AP		常識預備室	傷殘人士洗手間	男廁	女廁	HUB 房	電掣房	WIFI AP		WIFI AP	WIFI AP	WIFI AP				
五樓	512 室			511		509 室	508 室	507 室	506 室	505 室	504 室		503 室	502 室	501 室	515 室				
	電腦教學室 WIFI AP x 2			伺服器室 WIFI AP		傷殘人士洗手間	男廁	女廁	HUB 房	電掣房	WIFI AP		WIFI AP	WIFI AP	WIFI AP					
四樓	414 室		412 室		411 411B	409 室	408 室	407 室	406 室	405 室	404 室		403 室	402 室	401 室	415 室				
	空中花園		多元活動中心		教學資源室	傷殘人士洗手間	男廁	女廁	HUB 房	電掣房	教職員室 WIFI AP x 2									
三樓	312 室		311 室		311A 室	309 室	308 室	307 室	306 室	305 室	304 室		303 室	302 室	301 室	315 室				
	WIFI AP		WIFI AP		視藝貯存室	傷殘人士洗手間	男廁	女廁	HUB 房	電掣房	WIFI AP		WIFI AP	WIFI AP	WIFI AP					
二樓	211 室				211A 室	209 室	208 室	207 室	206 室	205 室	204 室		203 室	202 室	201 室	215 室				
	圖書館				圖書貯存室	傷殘人士洗手間	男廁	女廁	HUB 房	電掣房			WIFI AP	WIFI AP	WIFI AP	儲物室				
一樓	127 室		120 室	119 室	118 室	117 室	115-116 室	114 室	113 室	112 室	111 室	109 室	108 室	107 室	106 室	105 室	104 室	103 室	102 室	101 室
	禮堂 WIFI AP		校長室	校務處	醫療室	油印房	會客室	貯物室	茶水間	男職員洗手間	女職員洗手間	傷殘人士洗手間	男廁	女廁	HUB 房	電掣房	WIFI AP	WIFI AP	WIFI AP	WIFI AP
地下		G13 室			G13 室	G12 室	G11 室	G05 室		G04B 室			G04A 室		G03 室	G02 室	G01 室			
	籃球場	雨天操場			文化廣場	職工休息室	水泵房	TBE 房	士多房		體適能訓練中心			學生活動室 WIFI AP		傷殘人士洗手間	男廁	女廁	更亭	

承投供應「學校 Wi-Fi 設置」規範要求

PART A – NETWORKING REQUIREMENTS SPECIFICATION

1. Introduction

The Contractor is invited to

- Build up & upgrade of the Wi-Fi network in **Ho Ming Primary School (Sponsored by Sik Sik Yuen)** (The School); and
- Provide the maintenance of the Wi-Fi equipment.

2. Background

The School will **enhance / top up** the IT infrastructure so as to set up the necessary Wi-Fi environment in the school premises for supporting e-learning in class. Regarding the enhancement of Wi-Fi infrastructure.

3. User Requirements

This section specifies the user requirements of the School of the Wi-Fi network. The Contractor shall be capable of supporting the requirements set out below.

3.1 Standard Provision

- Build up the new Wifi 7 AP at mentioned location with existing structure Lan cable;
 - For the location detail, please refer to the Annex 1
- **Wi-Fi Internet Connectivity** – use Wi-Fi 7 or above in required location which new deployed Wifi and provide the maintenance for existing AP. The minimum number of AP should be provided with 30.
- **Number of Concurrent Connection** – commensurate with the maximum number of students, say 40 tablets, in a class with at least 1Mbps upload / download bandwidth per connection.
- **Number of classrooms using Wi-Fi concurrently.**
- **Authentication Method** – use 802.1x standard based authentication or follow school existing authentication method.
- **Service Level Agreement** – ensure 8x5xNBD (Next business day service level) for maintenance, helpdesk support with support hours from Mon to Fri 8:00 am to 6:00 pm.

3.2 Add-on Service

- **Wi-Fi coverage** – to include special rooms and open areas
- **Authentication Method** – Authentication method shall includes WPA2 Enterprise, WPA3, OAuth 2.0 and well as MAC address filtering and user account system being used by school, etc.
- **WLAN system access control** – specific request on MAC address filtering.
- **MAC Address Monitoring** – The lists of filtering and filtered MAC addresses are to be monitored by the School.
- **Integration of networks** – system would be able to integrated with existing network with secure design.
- **Redundancy** – increase the availability of the Wi-Fi service.

3.3. Hardware Requirement

3.3.1 Wifi Controller

- Support to manage up to 512 Aps.
- Provides 2 x 10GE optical interfaces and 10 x GE electrical interfaces, supporting up to 10 Gbit/s forwarding performance.
- Load balancing during smart roaming: The load balancing algorithm can work during smart roaming for load balancing detection among APs on the network after STA roaming to adjust the STA load on each AP, improving network stability.
- Intelligent DFA technology: The dynamic frequency assignment (DFA) algorithm is used to automatically detect adjacent-channel and co-channel interference, and identify any 2.4 GHz redundant radio.
- Intelligent conflict optimization technology: The dynamic enhanced distributed channel access (EDCA) and airtime scheduling algorithms are used to schedule the channel occupation time and service priority of each user.

- One page integrates the summary and real-time statistics. KPIs are displayed in graphs, including user performance, radio performance, and AP performance, enabling users to extract useful information from the massive amounts of monitored data, while also knowing the device and network status instantly.

3.3.2 Wifi AP (Classroom AP)

- Provides services simultaneously on both the 2.4 GHz (2x2) and 5 GHz (2x2) frequency bands, at a rate of up to 689 Mbps at 2.4 GHz, 2.88 Gbps at 5 GHz, and 3.57 Gbps for the device
- Has built-in smart antennas that automatically adjust the coverage direction and signal strength based on the intelligent switchover algorithm.
- USB port can be used for external IoT expansion (supporting protocols such as ZigBee, and RFID).
- Supports Fit and cloud management working modes, and enables cloud management platform to manage and operate APs and services on the APs, reducing network O&M costs.

3.3.3 Network Equipment

The contractor should provide new PoE switch to support the school network

24 Port Access PoE Switchs

- Versatile composition: 24 gigabit Ethernet ports and 4 SFP+ uplink ports, offering flexibility in network deployment.
- Advanced functions: It supports L2+ switching features, such as VLAN, QinQ, and Link Aggregation, ensuring efficient data transmission and network optimization.
- Robust performance: With a switching capacity of up to 128 Gbps and a forwarding rate of 95.24 Mpps, this switch delivers reliable and high-speed network performance.
- Enhanced security: Equipped with extensive security features like Access Control List (ACL) and 802.1X authentication, it protects the network from unauthorized access and attacks.

4. Invitation for Quotations

4.1 Quotations are invited for the execution of the whole of the Services as described in this document. Quotations for part but not all of the Services will not be considered.

5. Selection and Payment

School is looking for a contractor based on the following criteria

- Proposed pricing
- Proposed solution
- Equipment and services level
- Case reference
- Other useful information

PART B : Standard Provision

Specifications of Standard Provision of School Wi-Fi Setup

a) Basic / Minimum Specification

Item	General Description (For details, please refer to Annex 1)	Applicable (Yes / No)	If not, please provide detail
1	<i>Wi-Fi Standard and Coverage</i> <ul style="list-style-type: none"> use IEEE 802.1x network or above in classrooms and special rooms at school 		

	23 Standard Classrooms	7 Non-standard Classrooms	6 Special Rooms (For details, please refer to Annex 1)
7/F : 6/F : 5/F : 4/F : 3/F : 2/F : 1/F : G/F :	701-704 601-604 501-504 ---- 301-304 201-203 101-104	711, 712 611, 612 512 (AP x 2) 311, 312	 511 (Server Room) 401-404 (Staff Rm) 127 (Hall), 120 (Office) G04A

Item	General Description (For details, please refer to Annex 1)	Applicable (Yes / No)	If not, please provide detail
2	<i>Number of Concurrent Connection per classroom</i> <ul style="list-style-type: none"> Commensurate with maximum 40 devices in a classroom with at least 1 Mbps upload / download band width per connection. The contractor shall provide a PoC to prove that the required bandwidth can be supported for 40 devices at the same time before tender award 		
3	<i>SSID & Authentication Method</i> <ul style="list-style-type: none"> Support Multiple and hidden SSID co-exist through an AP Different SSID can have different authentication method Authentication method shall include WPA2 Enterprise, WPA3, OAuth 2.0 and well as MAC address filtering and user account system being used by school, etc use 802.1x standard based authentication or follow school existing authentication method.. 		
4	<i>Relationship with Existing Network Infrastructure and Facilities</i> <ul style="list-style-type: none"> system would be able to integrated with exiting network with secure design if school existing trunks / conduits do not have enough space, new trunks / conduits are required to install for the connection if school existing floor cabinets (racks) do not have enough space, new racks are 		

	required to install for the network connecting devices and related equipments <ul style="list-style-type: none"> All new trunks, conduits and cabinets are required to compromise with school before actual installation /mounting 		
5	<i>Service Level Agreement</i> <ul style="list-style-type: none"> ensure at least 99.7% availability of the Wi-Fi services support 8x5xNBD on-site support with hardware replacement services support four-hour response time, helpdesk support support hours from Mon to Sat 8:00 am to 6:00 pm 		
6	<i>Contract End Arrangement</i> <ul style="list-style-type: none"> All provisions of trunks, conduits, cables, LAN ports and power points shall be considered as fixture of the School and shall become the property of the School, the Contractor shall remove or keep those provisions according to the instruction of the School Contractor can remove the Broadband service equipment such as modem and routers 		
7	<i>Training</i> <ul style="list-style-type: none"> Provide the admin training after PoC 		
8	<i>Payment Terms</i> <ul style="list-style-type: none"> 60 days after project completed 		

Part C : Pricing Scheme

Pricing Scheme

School is looking for a financial scheme for

Part	Unit price	Sub Total
Equipment cost for APs For 35 Classrooms and Special Room (For detailed locations, please refer to Annex 1)		
Equipment cost for controller		
Equipment cost for PoE switch		
Installation and configuration cost		
Supporting service cost (Detailed description)		
Total project cost :		

Part D : Information to be provided by Service Provider

The Service Provider is required to submit the following information and document

- A Statement of Compliance to provide response that the quotation complies with all requirements stated in this Specification.
- Proposed AP location mark on the Floor plan.
- Proposed Network infrastructure show on the Network Diagram.
- Implementation Plan.
- WiFi Access Point certificates issued by OFCA.
- Product information including technical and descriptive literature and catalogues. Information provided by the manufacturer shall be able to substantiate that the products offered meet the mandatory Technical Specification.
- Quantity and Model of the following equipment and devices by filling in the table below :

Equipment and devices	Quantity	Model
WiFi Controllers		
Access Points		
Access PoE Switches		
LAN Cables (if need)		
Others (please specify)		

Part D : Information to be provided by Service Provider (continue)

- Days required for build up of WiFi network by filling in the table below :

Days required for build up of WiFi network:

The Contractor shall complete all the build up of WiFi network and provide school WiFi service **within** _____ **days** upon order confirmation including the testing & commissioning process.

Remarks for set up/installation (if any) :

Part E : Related information provided by the School

A floor plan to be provided by the School

- Annex 1: Geographical distribution of construction
- Annex 1: Floor Plan of the School

Site Visit(s)

Date: 28th January 2026 (Wednesday)

Time: 4:00p.m.-6:00p.m.

Venue: Rm G04A, 2 Tin Pak Road, Tin Shui Wai, N.T. (Ho Ming Primary School (Sponsored by Sik Sik Yuen))

- Q&A raised at the site visits will not be posted out for others reference

Enquiry

- IT Panel person, **Miss Lau Yuet Kiu**
 - Email: **lauyk@ssy.homing.edu.hk**.
- TSS, **Mr. Andrew Hui**
 - Email: **huikw@ssy.homing.edu.hk**
- Telephone No.: **2445 0101**

Selection criteria

School is looking for a contractor based on the following criteria

- Proposed pricing fit with school budget
- Solution suitability to school
- Equipment and services level that can offer
- Case reference
- Other useful information

Terms of Payment

- 60 days after project completed.

Authorization and Signature

Name of Tenderer:

Signature of Person Authorized to Sign Tender:

Date: _____



Company Chop