

University of Manitoba
Information Services and Technology
Wireless Networking Hardware and Technical Requirements

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Purpose:

This document will assist the deployment of wireless networking technology on the University of Manitoba campus. It is intended as a follow-up to the Information Services and Technology (IST) **Standards for Wireless Networks** http://umanitoba.ca/computing/ist/guidelines/wireless_standards.html document and the **Wireless Networking Procedures** located at <http://umanitoba.ca/computing/ist/guidelines/media/Wireless-Guidelines.pdf>. The objective is to ensure interoperability, reliability and security to the wireless network service while protecting the University's information resources and electronic communications. The inherent nature of the wireless technology requires cooperation and coordination between departments and faculties to facilitate deployment in different buildings and prevent possible radio frequency spectrum interference or network impairments.

Hardware:

- Cisco access points supporting 802.11a, 802.11b and 802.11g
- Cisco 2.4 GHz or 5 GHz antennas as specified in the wireless site survey (see below)
- Ethernet switches with 24 Ethernet 10/100 ports and in-line power (802.3af PoE) and 2 small form-factor pluggable (SFP) or GBIC ports.
- Wireless 802.11a, 802.11b or 802.11g client card (dependant on wireless network standard in the client's workstation and level of encryption required)

Software:

- client software drivers etc. to support client card
- Supplicant which supports EAP- TTLS
- CNS will work with faculties and departments to arrange a formal wireless site survey and the configuration of the wireless access points on a fee basis. The wireless network users will be required to authenticate with a valid "UMnetID" account and password.

- For more current and detailed information, please contact Doug Dennis at 474-8290 or dennis@cc.umanitoba.ca