

Centre Hospitalier L'Universite de Montreal

Organization: Centre Hospitalier L'Universite de Montreal + Pomerleau

Technology Focus: Distributed Antenna System (DAS), In-Building Coverage System

Duration of the project: 2010-2020

The CHUM is a 3.5 million square feet multi-level, multi-building hospital structure build in a 3P consortium scenario. The buildings vary in height and go up to 20 floors of hospital space and 5 underground parking levels all of which require a distributed antenna system or DAS capable of supporting mobile phone RF coverage for PCS, Cellular and AWS as well as UHF radio services and 900 MHz paging services.

The UHF radio system DAS is a passively distributed system and it is operated separately and parallel to the cellular system.

The cellular DAS distribution is a fibre feed active DAS solution using 41 fibre remote amplifier locations and over 1000 antennas.



The wireless operators will provide their signals at the head end of the system onto the DAS point of interconnect (POI). The different bands from the different POIs are then sent to a host shelf, modulated on a fibre link and sent over to the remote location where the RF signal is demodulated and amplified for distribution in a particular sector.

The 900 MHz paging network distribution is accomplished by utilizing the paging base station power as well two 900 MHz paging amplifiers. The 900 MHz paging signal is routed to all RU locations via coaxial cable and combined onto the cellular DAS.