



Unit 12 – 2355 Royal Windsor Drive
Mississauga, Ontario
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FAN COIL CONTROL AND DIAGNOSTIC PLATFORM

Avnan's fan coil controller platform combines an advanced control board and a user-friendly mobile application, streamlining HVAC system management for technicians. The control board features Wi-Fi and Wireless connectivity, BACnet integration, and support for multitap PSC motors and valve actuators, enabling monitoring, energy tracking, and seamless operation with smart thermostats and sensors. The accompanying mobile app enhances efficiency by providing technicians with data insights on system performance, troubleshooting guides, and the ability to monitor, track, and diagnose issues without disassembling the unit, saving valuable time and effort.

APPLICATION

Fan coil units (FCUs) efficiently regulate indoor temperatures using a fan and heat exchanger. They are widely used for their energy efficiency, compact design, and seamless integration with centralized or standalone HVAC systems.

ADVANCED CONTROL BOARD

Our fan coil main control board features Wi-Fi and Wireless communication with integrated BACnet capabilities, making it an ideal solution for modern HVAC environments and versatile applications. In addition, it also provides options to control a multi-tap PSC motor and multi-valve actuators.

This capability allows for real-time monitoring and efficient interaction with other subsystems, providing streamlined operation and maximum energy savings.



MOBILE APP DIAGNOSTICS

Wireless connectivity gives technicians insight into the system and helps to diagnose system problems quickly and efficiently.

Avnan's BLE app includes troubleshooting guides which can provide real-time data for temperature, fan speed, valve position and system status with current operating mode for technicians to identify and resolve any problem with the system.



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FUNCTIONS & FEATURES

Fan coil operation demands precise control of airflow, temperature, and energy consumption, requiring advanced control circuit boards and temperature sensors to enable valve actuation and variable speed operation of the fan motor. Additional capabilities, like automatic fault detection and maintenance alerts make these units unique.

- Controls EC motors by PWM or analog voltage 0-10V monitoring their speed
- Controls multi-speed PSC motors
- Works with 2, 3, 4, or 6-pipe systems for heating and cooling using on/off or modulating actuators
- Multi-inputs for various sensors such as: temperature, relative humidity, Indoor Air Quality, water leak, condensation overflow
- RS-485 Communication Port
- Optional opto-isolator module for ECM control
- BACnet for Building Energy Management system (BEMS)
- Compatible with most standard thermostats
- BLE app for troubleshooting

ABOUT AVNAN

Avnan is an award-winning electronic product design and manufacturing company specializing in customer HVAC control design and global manufacturing of printed circuit board assemblies, wire harnesses and other custom components. With 30 years in business and locations throughout North America and Asia, Avnan offers flexible solutions that make it easy for OEMs to produce high-quality products cost-effectively.



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