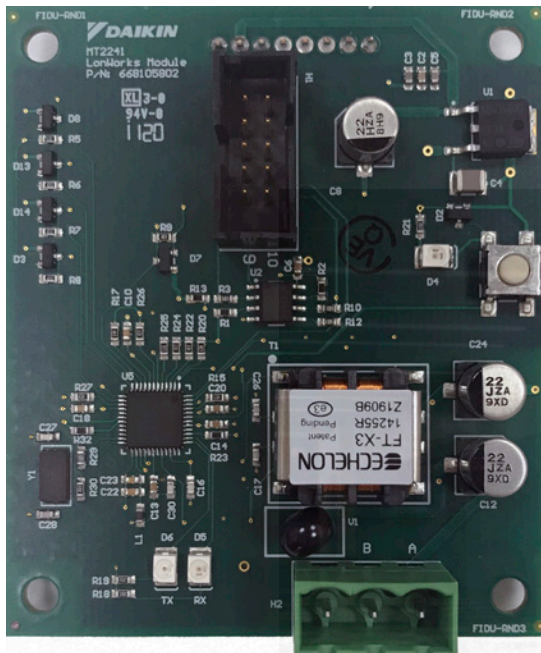




MicroTech® Controls for LONWORKS® Networks



Advanced HVAC Technology

Provide superior indoor environmental quality in learning environments by ensuring the proper amount of clean and conditioned ventilation airflow is delivered to each classroom.

- Daikin Applied's unit ventilators use advanced HVAC technology to reduce operating costs while closely matching classroom comfort requirements. For nearly a century, schools have relied on unit ventilators to keep classrooms comfortable. Since 1918, Daikin and its legacy brands have remained an industry leader by meeting the changing requirements of schools with the highest quality unit ventilator products available. In addition, we realize that keeping expenditures down is a high priority for school administrators and school boards. Daikin's unit ventilators are inexpensive to install and operate, and they are designed with dependable, efficient features that provide years of trouble-free service.
- MicroTech® unit ventilator controllers provide easy integration to your Building Automation System of choice for monitoring, data logging, and alarm information points per unit regardless of the open, standard protocol you prefer. MicroTech unit ventilator controllers integrate all factory-installed options including CO₂ sensors for outside air modulation. Part-load, variable-airflow option varies fan speed for enhanced comfort control while reducing operating costs. Daikin unit ventilator models are available in floor and ceiling models, air-source air conditioners, air-to-air heat pump and water source heat pump (boiler/tower and geothermal) configurations.



Network Solutions for Building/Equipment Applications

Unit ventilators with MicroTech controls support industry standards to provide superior building performance and a higher quality indoor environment.

Application

The LONWORKS® communication module connects the unit controller to the building automation system (BAS) on a LONWORKS network. It enables the exchange of variables between the unit controller and the network.

The communication module is LonMark 3.4 certified and is configured in accordance with the LonMark Space Comfort Control (SCC) Functional Profile, v2.0 (8500_20). The object type is 8505 SCC-Unit Ventilator.

Features

- Integration into a building automation and control system via LONWORKS
- Installed with LonMark® 3.4 certified firmware
- LONWORKS-standard Neuron Processor that translates the the unit controller application into the LONWORKS network protocol. Each processor has a unique 48-bit Neuron ID for network addressing.
- LEDs that indicate communication status and network activity
- Configurable using the latest Echelon® Commissioning Tool (CT) for FT 6050 Smart Transceiver devices
- Circuit board easily connects to the unit controller

Technical Specifications

| | |
|--------------------------------|--|
| General | |
| Dimensions | 2.95" x 2.6" (75mm x 65 mm) |
| Operating | |
| Temperature | -40 - 158°F (-40 - 70°C) |
| Humidity | <90% RH (note that the board has 2mil factory-applied conformal coating for extra humidity protection) |
| Storage and Transportation | |
| Temperature | -40 - 158°F (-40 - 70°C) |
| Humidity | <90% RH |
| Power | DC 5 V (+/-5%) power supplied by unit controller baseboard |
| Network | |
| Network cable | Twisted pair wire with 3-pin connector, compliant with RS-485 standard TIA/EIA-485-A |
| Bus connection | Galvanically isolated, 78k baud |
| Transceiver | LONWORKS FT 6050 Smart Transceiver supports TP/FT-10 channel Polarity insensitive |
| LONWORKS data memory | 512 KB SPI flash memory |
| Network connector | 3-pin (GND, A, and B) network connector plug |
| Transformer | FT-X3 communications transformer |
| Communications Protocol | ISO/IEC 14908-1 (ANSI/CEA 709.1-B and EN14908.1) control network protocol |
| Agency Listings/Certifications | |
| US | UL 60730 (baseboard) |
| Canada | CSA E60730-1 (baseboard) |
| International | OSI Model, ISO Standard 7498-1 LonMark 3.4 certified to SCC (8500_20) Functional Profile, v2.0 |

For more information about our complete offering of HVAC systems and solutions, contact your local Daikin Applied Sales office or visit www.DaikinApplied.com to find an office near