



## FCX LONWORKS® FAN COIL CONTROLLERS

The FCX range of LONWORKS® Fan Coil Controllers provide cost-effective, interoperable, distributed control of Fan Coil Units. They are shipped with a standard control application that meets the LONMARK® Fan Coil Unit functional profile (#8020) to facilitate installation in interoperable control networks. To minimise engineering time a 'self-commissioning' LNS plug-in is available for the FCX controllers, which automates commissioning tasks normally carried out by an engineer, including documentation. The FCX controllers will operate either as standalone devices or as part of a LONWORKS control network.

### FCX-10 Fully featured Controller

This controller meets the requirements of typical hotel rooms and commercial offices. In addition to fan coil control the FCX-10 has a dedicated input for attaching a standard PIR occupancy detector, which can be used to control the occupancy status. A further digital input is available that is configurable to trigger occupancy or to disable the air-conditioning function when attached to a window contact, thus saving energy when a window is left open.

Further energy savings can be achieved by using the FCX-10 lighting control function. The lighting output can be controlled by the PIR occupancy detector or by a network variable. When occupancy is controlled by the PIR a network configurable

time function determines the duration of the occupancy period since the PIR was last triggered. LED status indication of fan speed, heating mode, cooling mode, PIR and digital input is available to enable rapid commissioning, without the need for local commissioning tools.

### FCX-20 Budget Controller

This controller meets the growing need to reduce the cost of terminal control applications in this very competitive market and conforms to the LONMARK functional profile (#8020). The control points include; 3 speed fan, heating and cooling valves (raise/lower), 1 digital temperature sensor input and a general purpose digital input.

### Self Commissioning LNS™ Plug-in

The LONWORKS® LNS Plug-in is compatible with the FCX range of controllers. It provides installers with a simple commissioning wizard that can dramatically reduce the engineering time currently required to commission most fan coil unit controls. The self-commissioning function reduces the commissioning by automating the manual tasks usually associated with commissioning fan coil units. They can be commissioned one by one or in groups of up to 64 units at a time, with detailed reports being generated for the installer / commissioning engineer at the end of the self commissioning routine.



### Features

- Preloaded with LONMARK® compatible functional profile (#8020)
- Self Commissioning LNS™ Plug-in
- Simple Local User Interface
- Lighting Control built-in
- Direct connection of 3 speed fan
- Direct connection of thermal actuators
- Digital input for window contact
- LED Status indication of all inputs and outputs
- Dallas 1 Wire® bus port support for additional input/output devices

*Feature set applies to FCX-10 only.*

### Simple User Interface

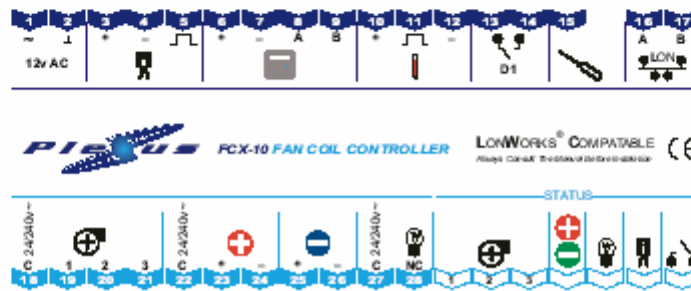
The FCX-10 can be controlled and monitored via the built in LON network or via the optional LDX-04 User Interface. When the user interface is connected to the FCX-10 parameters can be changed and status monitored by a simple, intuitive menu structure.



### Menu Options

- ▼ **View**
  - On/Off mode
  - Current space temperature
  - Space temperature set-point
  - Fan speed
- ▼ **Change**
  - On/Off mode
  - Space temperature set-point
  - Fan speed

### FCX-10 Physical Connections



# Specification

## **PiPlus** FCX-10 FAN COIL CONTROLLER

- Processor **■** Neuron 3150 5MHz
- Memory **■** 32K Flash Memory
- Transceiver Type **■** FTT-10A with blocking capacitors for LPT-10 compatibility
- Service Pin Function **■** Recessed service switch and LED
- Power Supply **■** 12V AC or 15V DC
- Inputs **■** 1 x Digital (PIR)
  - 1 x Digital (General Purpose)
  - 1 x Digital Temperature (Dallas 1-Wire® Bus)
- Outputs **■** 2 x Digital (Valves) 240V/5A
  - 3 x Digital (Fan Speed) 240V/5A
  - 1 x Digital (Lighting) 240V/5A
- Status LED's **■** Heating/Cooling Mode, Fan Speed, Lighting output, PIR Activity, Digital input
- Expansion Bus **■** I<sup>2</sup>C
- Mounting **■** 35mm DIN Rail
- Dimensions **■** H90 x W106 x D58mm
- Terminals **■** Screw Connector with snap fit covers to IP20 finger protection
- Operating Temperature **■** 0° to +50°C
- EMI **■** CE / EN55022 / EN61000-4