

## EasyIO FC Controller 20 points EasyIO-FC-20



The EasyIO FC series is aimed at affordable 'canned' solutions for standalone applications, such as roof top units, fan coils, AHU's, package units, etc.

The FC-20 is the first product in the FC range, designed to complement the EasyIO 30P and the awarding winning FG+ series. All of the FC series products are equipped with two RS485 ports. For Ethernet applications you can upscale to the 30P or one of the FG series controllers. All FC products are BACnet and Modbus selectable and can be programmed live and free via CPT Tools

The FC-20 has 20 points of I/O and is priced to meet most high volume applications and price points. The microprocessor based controller has 20 I/O to accommodate general and specific applications featuring BACnet MSTP and Modbus RTU communication protocols. The 20 IOs include, 12 Universal Inputs (UI) supporting current, voltage and resistance based sensor, 4 electrically isolated Digital Outputs (DO) and 4 Analog Outputs supporting current and voltage outputs.

Specification:

Power Supply 24VAC +/- 5% or 20VDC ~ 34VDC

Consumption <11VA

Operating temp 0 to 65 °C (32 to 150 °F)

Storage temp -20 to 65 °C (-4 to 150 °F)

Operating humidity 10% to 95% relative humidity

non-condensing

Dimensions 215 x 125 x 45 mm (L x W x H)

Material UL Approved Plastic

Weight 410g

Inputs & Outputs:

Universal Input 12xUI

12-Bit ADC (with PGA)

Voltage: 0 – 10V (+/- 0,01V). Current: 4 – 20V (+/- 0,01mA). Resistance: 0 ~ 30K (+/- 50 Ohm), 0~10K (+/- 5 Ohm) 0 ~ 1K (+/- 1 Ohm).

Thermistor Sensor: NTC 10K Type 2/3,

3K, 20K (+/-0,1°C).

RTD: 1K Balco, 1K Platinum (+/- 0,2°C).

Digital output 4xDO (with LED's for status)

Type: Relay, SPST NO, 24Vac/Vdc, 2A

Universal Output 4xUO

12-Bit DAC
Voltage: 0~10V.
Current: 4~20mA.

Communication:

Physical Interface 1 EIA-485 Two-wire, Half Duplex

(Port 1) Modbus Baud Rate:

Speed:

9,6K, 19,2K, 38,4K, 57,6K, 115,2K bit/s **Data Bit:** 8 bits, Parity: None, Even Odd **Protocol**: Modbus RTU, BACnet MSTP

Physical Interface 2 EIA-485 Two Wire, Half Duplex

(Port 2) Modbus Baud Rate:

Speed:

9,6K, 19,2K, 38,4K, 57,6K, 115,2K bit/s **Data Bit:** 8 bits, Parity: None, Even Odd **Protocol**: Modbus RTU (for Application

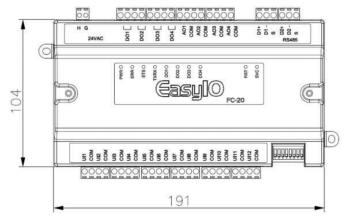
Specific Application only)



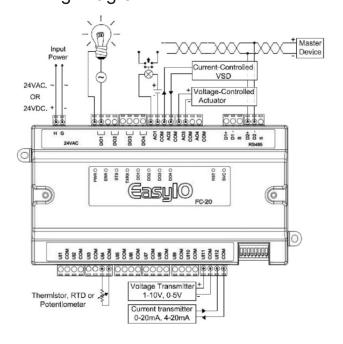
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### **Dimensions**



### Wiring Diagram



The FC-20 comes with one standard RS485 driver to support either BACnet MSTP or Modbus RTU communication (selection via hardware dip-switch). This communication port is also used as configuration/setting and firmware upgrade.

The concept behind the FC series is that the FC-20 is configured can be used as an input/output controller only, or an Application Specific Application Controller. There is also a Real-time clock and a second RS485 (reserved for communicating with other Modbus devices such as Power Meters) are provided for such application.

#### Features:

- Sedona Framework support -programmed using Online Tools inc.
   CPT Tool:
- BACnet MS/TP Server Functionality Support;
- Modbus RTU Slave Support;
- 12 Universal Inputs; Digital, Voltage, Current or Resistance;
- · 4 24VAC relay Outputs;
- 4 Analogue Outputs; Voltage or Current;
- DIP Selectable Communication Mode.

