# SuperBrain HVAC & BMS Multi Programs Controller LCD Color Graphic DDC controller





## General

SuperBrain is a stand-alone Direct Digital Controller (DDC) especially designed to control and monitor heating, ventilating and air conditioning systems (HVAC) as well as energy, lighting and electrical systems.

SuperBrain is the optimal solution for controlling air conditioning units, VAV and fan & coil units. SuperBrain offers an advanced technology product especially designed for hotels, hospitals, large offices and other public buildings.

#### **Feature**

Stand- alone operation Up to 400 ready to use application programs Weekly time programs
Integrated HVAC software application programs
Application programs stored in flash memory
User definable application programs
Modern high resolution color graphic LCD display.

SuperBrain is especially designed to provide swift, efficient and cost effective solutions, serving the needs of HVAC system manufacturers.

The controller eliminates the need for installation of weekly clock timers, time delay relays, modulating HVAC controllers, indicator lamps, etc.

Simple multi lingual menus.
RS 485 communication port for BMS System
Ethernet (TCP/IP) communication port
Modbus RTU or Modbus TCP/IP communication protocol supported, (Bacnet MSTP or Bacnet IP optional) with Web Browser for TCP/IP
Open protocols supported
Simple installation.
Easy operation
Low cost

# **HVAC & BMS Software Application Programs**

The SuperBrain DDC controller includes up to 400, HVAC and BMS software application programs stored in the flash memory. By using the simple multi lingual menus, the user can define the application programs to be used.

Besides, Superbrain can interface Modbus RTU protocol and convert to Bacnet IP protocol.

## **Input/Output Points**

The Input/Output Points of the SuperBrain DDC controller are divided into two sub controllers (A/B). Each one of the sub controller includes up to 50% of the following Input/Output Points:

8 Digital Outputs: Triac 150 MA Max

8 Analog Outputs: 0-10 VDC modulating control

8 Universal Inputs: 0-10 VDC or Ni 1000 or dry contact

4 Digital Inputs: dry contact

DDC can expand I/O points over 350 points

Superbrain model have two type, SB-1 has RS485 port, SB-2 have both RS485

and TCP port.

### Dimensions: 96 mm x 96 mm x 71 mm

Shipping Weight: 200 Grams, Power Requirements: Voltage 24AC +/- 20%

Minimum Transformer Size: 20VA

Frequency: 50/60 Hz, Operation Limits: Temperature: 0-50°C

Humidity: 0-95% RH

Brand Name: Control Applications, Israel

SuperBrain controller has been connected to BMS control computer support for Chiller system, AHU, PAU, FCU, VAV, CAV, FAN, BTU, Staircase, Lighting, electrical, Genset, ATS, water pumps, fire pump, boiler, oil level control, water level control.