SuperBrain
Programmable DDC Multi Programs Controller

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, fan & coil units, chillers, boilers, etc.
SuperBrain offers an advanced control technology especially designed for hotels, hospitals, offices, public and industrial buildings.

Features
- Stand-alone operation.
- Up to 200 ready to use application programs, as well as user-made programs.
- Internal clock and weekly time programs.
- Integrated HVAC software application programs.
- Application programs stored in flash memory.
- User definable application programs.
- Modern 320x240 color LCD display.
- Simple multi lingual menus.
- Panel mounted simple installation.
- Easy operation.
- Low cost.

Input/Output Points
SuperBrain contains two internal systems that can be combined to one system:

2x4=8 Digital outputs:	Dry contact 150mA max
2x2=4 Digital inputs:	Dry contact
2x4=8 Analog outputs:	0-10 VDC (200Ω)
2x4=8 Universal inputs:	0-10 VDC, 4-20mA, PT1000, Ni 1000Ω or dry contact

Technical Data
Power Requirements:	24 VAC ± 20% 60/50 Hz 20VA
Dimensions (HxWxD):	96 x 96 x 71 mm
Shipping Weight:	0.5Kg
Environmental:	
Operation Temperature:	-20 ~ +70°C
Storage Temperature:	-20 ~ +70°C
Humidity	0 ~ 95 RH% non-condensing
Front Panel Protection	IP64

Communication
RS485 port:	Up to 115200 bauds Modbus and BACnet
Ethernet (TCP/IP):	optional
Web browser	optional

SuperBrain DR
Programmable DDC Multi Programs Controller

SuperBrain DR 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 DR is the optimal solution for controlling Air Conditioning units, Fan & Coil units.

SuperBrain DR offers an advanced control technology especially designed for hotels, hospitals, offices, public and industrial buildings.

Features
- Stand-alone operation.
- Programmable controller
- Application program in flash memory.
- Internal clock and weekly time programs.
- Elegant LCD display
- Simple DIN rail installation.
- Multi programs User definable (Optional).
- Low cost.

Input/Output Points
The SuperBrain DR I/O points designed especially to be compatible with the conventional HVAC and electrical control equipment commonly used in the market.

Each controller includes:
8 Digital outputs:	Dry contact 150mA max
8 Digital inputs:	Dry contact
8 Analog outputs:	0-10 VDC (200Ω)
8 Universal inputs:	0-10 VDC, 4-20mA, PT1000, Ni 1000Ω or dry contact

Technical Data
Power Requirements:	24 VAC ± 20% 60/50 Hz 11VA
Dimensions (HxWxD):	160 x 90 x 61 mm
Shipping Weight:	0.47Kg
Environmental:	
Operation Temperature:	-20 ~ +70°C
Storage Temperature:	-20 ~ +70°C
Humidity	0 ~ 95 RH% non-condensing
Front Panel Protection	IP33

Communication
RS485 port:	Up to 115200 bauds. Modbus and BACnet
Ethernet (TCP/IP):	Built-in with web browser capability.
CANbus	Optional port

SuperBrain FC
Programmable DDC Multi Programs Controller

The SuperBrain FC controller is a free programmable controller specifically designed to control air conditioning units, fan coils, AW and VAV units.

SuperBrain FC controller is the optimal solution for air conditioning units that includes several speed levels, heating elements, cooling \ heating valves or motorized dampers.

Features
- 3 speed fan velocities control.
- Internal clock operation control (stand-alone).
- Heating and cooling solenoid control.
- Input for no flow/temperature protector.
- Time proportional control using Solid State Relay (SSR).
- Input for fire/smoke detector.

Options:
- Operating up to 3 heating elements with 20A relays each.

Input/Output Points
Analog Output or Input:	2x0-10 VDC, 8mA
Solenoids operation:	2x230VAC, max 150mA 24VAC, max 150mA
Fan relays:	3x5A (optional 3x10A)
Heating element relays:	3x20A (optional)
SSR output:	24VAC, max 150mA
Temperature sensor:	Room / Duct
Digital inputs:	3xDry contact

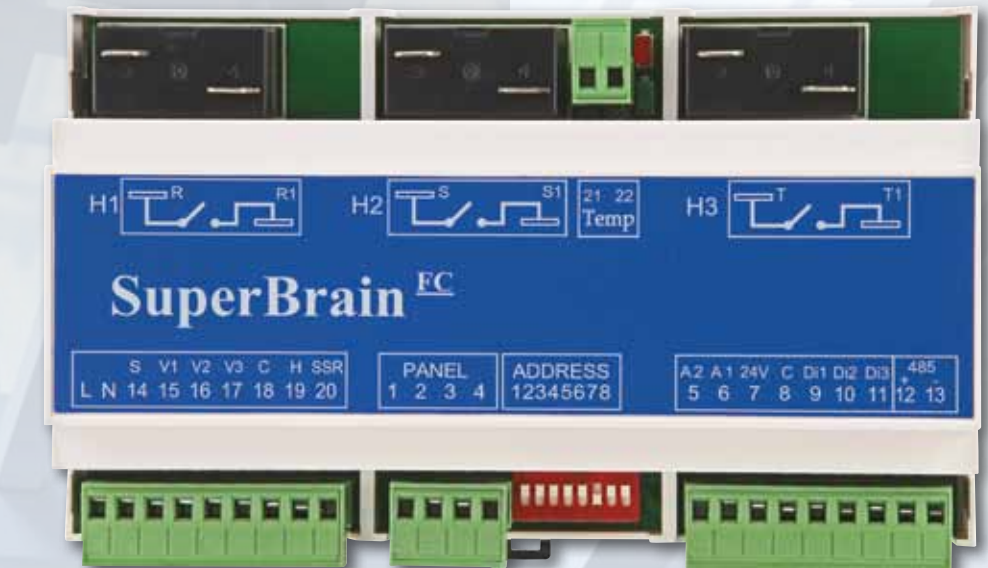### Technical Data
Power Requirements:	230VAC 60/50 Hz 30VA
Dimensions (HxWxD):	
Thermostat Panel:	160 x 90 x 61 mm
SB FC power unit:	96 x 158 x 58 mm
Shipping Weight:	1.169Kg
Thermostat Panel:	0.08Kg
SB FC power unit:	1.089Kg
Environmental:	
Operation Temperature:	-20 ~ +70°C
Storage Temperature:	-20 ~ +70°C
Humidity	0 ~ 95 RH% non-condensing
Front Panel Protection	IP33

Communication
2 x RS485 port:	Up to 115200 bauds. Modbus and BACnet

VeroPoint
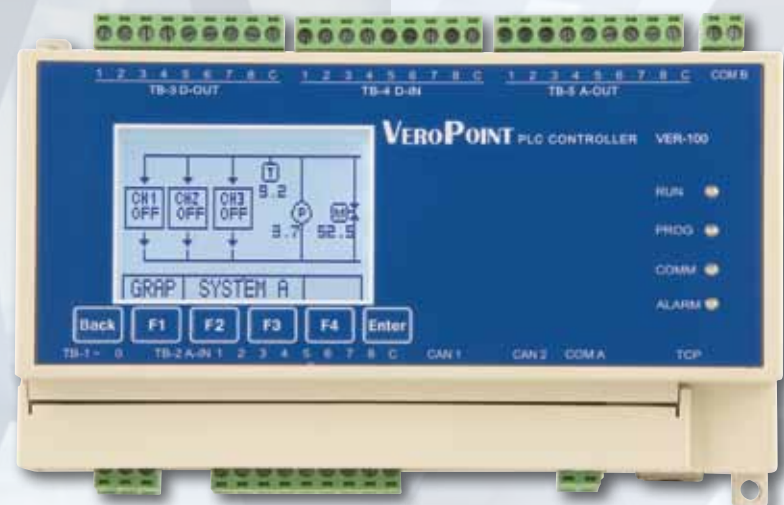### PLC Controller

UniWeb
SCADA, HMI software

VeroPoint is a stand-alone universal Programmable Logic Controller (PLC), especially designed to control and monitor heating, ventilation and air conditioning systems (HVAC), energy electrical systems and automation processes.

VeroPoint is the optimal solution for controlling and monitoring public buildings, hospitals, hotels and industrial systems.

VeroPoint PLC controller has the capability of functioning as a stand-alone control unit with internal clock. The application programs are stored in FLASH MEMORY, The calendars and the clock are backed-up by a internal battery. Built-in HMI graphics screen allows user friendly menus and to adjust the time schedules as well as easily monitoring all real-time data.

Features
- Ladder/Flow Diagram Programming.
- Ready to use programming functions.
- Universal programmable I/O points.
- Internal Clock.
- Stand-Alone Operation
- Up to 9 Extendable I/O cards.
- Compatibility with most industry HVAC sensors.
- Modern 128 x 64 graphic LCD display.
- Simple multi lingual menus.
- Built-in HMI screens.
- Simple DIN rail installation.
- Historical alarms log.
- Alarms by email.
- Data Logging Programs.
- Energy Saving Programs.

Input/Output Points
8 Digital outputs:	Dry contact 150mA max
8 Digital inputs:	Dry contact
8 Analog outputs:	0-10 VDC (200Ω)
8 Universal inputs:	0-10 VDC, 4-20mA, PT1000, Ni 1000Ω or dry contact

Extension Analog / Digital Card:
8 Digital outputs:	Dry contact 150mA max
8 Universal inputs:	0-10 VDC, 4-20mA, PT1000, Ni 1000Ω or dry contact
8 Analog outputs:	0-10 VDC (200Ω)
or	
Digital inputs:	Dry contact

Extension Digital Card:
16 Digital inputs:	Dry contact
16 Digital outputs:	Dry contact 150 mA max (full version only)

Technical Data
Power Requirements:	230 VAC ± 20% 60/50 Hz 11VA
Dimensions (HxWxD):	179 x 121 x 53 mm
Shipping Weight:	1.1Kg
Environmental:	
Operation Temperature:	-20 ~ +70ºC
Storage Temperature:	-20 ~ +70ºC
Humidity	0 ~ 95 RH% non-condensing
Front Panel Protection	IP33

Communication
RS485 port:	2 ports. Up to 115200 bauds Modbus and BACnet MSTP
Ethernet (TCP/IP):	Built-in, web browser
CAN-bus:	1 CAN-bus ports for I/O cards 1 CAN-bus port (optional)

UniWeb is a user friendly Web software package that especially designed to monitor, control DDC / PLC controllers.

UniWeb is a natural Machine Interface between the control staff and the site's control system. The Web based interface allows easy access for up to 150 users to the system (simultaneously from any PC located in the same network).

UniWeb system designed to control heating, ventilation and air conditioning systems (HVAC) as well as energy, electrical, lighting, fire detection extinguishing systems and process control. UniWeb is the optimal SCADA \ HMI solution for public, commercial and industrial buildings and systems.

Features
- Webserver software package.
- Managing time programs.
- Managing trend reports and graph generator.
- User friendly graphic user interface.
- High resolution graphic display.
- Full multimedia system.
- Multiple DDC/PLC protocol support.
- Windows operating system base.
- Supports TCP/IP and NETBIOS.
- Internet and intranet LAN interface.
- Alarm management and historical reports.
- Telephonic voice, SMS and email alert system.
- Trend reports and data logging.
- Preventative maintenance program (optional).
- Holiday and weekly timetables.
- Back-up programs.
- Multi user web interface.
- Can be accessed from any web enabled device.
- Customizable user interface