



IQ®4 Main Plant Controllers

The IQ®4E controller has 10 universal inputs and 6 analogue voltage outputs and is expandable up to 192 points (depending on the controller variant) by adding I/O modules. This flexibility makes it suitable for a broad range of applications. The IQ®4E controller uses Ethernet and TCP/IP networking technologies with embedded XML and is fully compatible with other Trend IQ® controllers. The IQ®4E supports BACnet over IP as standard. Trend communications over a current loop LAN is available as an option. A local PC or display (e.g. IQ®View4) can be connected to the RS232 port. A Wallbus port is also provided for use with room displays.

IQ®4 Plant Controllers

The IQ®4 series of intelligent controllers is designed for their advanced unitary control systems and localised intelligent control of distributed plant. Full compatibility with other Trend IQ® controllers enables the IQ®4 to integrate the local environmental needs with the main air conditioning system in order to optimise both comfort and running costs. With their small footprint IQ®41x and IQ®422 can be placed in smaller control panels, lending themselves to confined space applications. The IQ®4 design meets the required DIN form for standard electrical devices and as such can be fitted within regular electrical enclosures thereby reducing installation costs.

IQ®ECO Terminal Unit Controllers

Designed primarily for commercial buildings, the IQ®ECOs provide intelligent solutions for either individual or open plan offices. They are also ideal for hotel applications where separate room control is required. The entire IQ®ECO range has passed the WSP Association's Conformance Review and as such are BACnet certified.

Field Devices

The efficient control and monitoring of a system depends heavily upon the quality of the field devices connected and the information these provide. Trend offers a complete range of field devices, these include:

Sensors

A range of devices for measuring temperature, humidity, air quality and pressure. The wireless sensors deliver significant benefits in terms of ease of installation and cost, and equally importantly provides flexibility and convenience in areas that are regularly reconfigured.

Valves + Actuators

Trend's range of valves and actuators cover all HVAC applications including 2-way and 3-way linear and rotary valves with a choice of actuators from thermic, linear and rotary through to direct coupled actuators for air dampers, ventilation louvres and VAV-units.

Variable Speed Drives

The range starts at 1.9 Amps and scales to 310 Amps. Drives are available in IP21 and IP54 versions and meet the latest harmonic standard EN 61000-3-12. Using the latest technology, the drives will connect either directly into the controller or via a range of communication networks, including Ethernet, BACnet and Modbus, as a result they are easy to use, puts you in control and, above all, substantially reduces costs.

Supervisors

Supervisors are used to graphically display monitored inputs and outputs, change control parameters and perform a wide range of energy analysis and maintenance functions, simplifying the user's interaction with the BEMS. Trend's IQ®VISION is a real-time user interface that enables users to get the very best from their BEMS, providing graphical information to standard internet browsers. It boasts a diverse range of useful functions such as centralised data logging, archiving, alarming, trending, master scheduling, system wide database management and integration with enterprise software applications - all of which can be used for highlighting and investigating energy use within buildings. IQ®VISION is a completely OPEN and extendable platform that is scalable for every application.

Displays

Trend provides a range of display options that allow different user types to interact with their BEMS without the fear of damage to the overall system. The range covers single controller setpoint adjustment via push button or touch screen options through to site-wide graphical touch screen displays.

Network Products

Trend provides a range of devices which enable interaction between different communication systems or legacy installations. The IQ®4NC provides the means by which the Trend IQ® system network can be extended over a client's IT network, seamlessly connecting all existing Trend IQ® controllers installed, thereby reducing ongoing lifetime costs.

Energy Software

Trend Energy Manager software puts you in control of your building's environmental performance and costs. There is little or no requirement for extensive product training. It uses a simple browser interface and layout to ensure the system is intuitive and easy to learn. Energy Dashboards within IQ®VISION provide dynamic view of a building's energy performance, allowing building occupants and visitors to see an organisation's commitment to improving the management of energy and its energy usage.

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Integration

The Trend BEMS can be easily extended and integrated with a wide range of third party devices and systems: Heating and Air-Conditioning, Lighting, Security equipment, Fire detection. Simply select the relevant Trend integration or interfacing solution to ensure the most cost effective implementation whether it's a simple metering application or full control of all your building services.