8864 Ambient Data Controller

Agilaire is pleased to offer the Model 8864 Data Controller as an updated version of the proven and reliable Model 8832 Data Controller platform. This embedded device ensures complete security and protection against viruses, unauthorized use, and hosting unauthorized software that can put your important data at risk.

ESC Spectrum's Next Generation Ambient Data Controller

This **Industry-leading** Ambient Data Controller Provides Reliable, Robust Data Collection, Computation and Storage Capabilities.



Power Through the Next Decade of Ambient Data Collection

The ESC Spectrum 8864 Data Controller improves upon the industry stalwart ESC 8832 Data Controller, offering 10X more storage space and network speed and 100X more data storage. This hard-working device accurately and securely acquires, stores and protects your data from communications failures.

Powerful Hardware

The 8864's dual Ethernet interfaces allow you to communicate independently and simultaneously with an with instrumentation or network with industry standard ambient monitoring software. Each network port supports multiple sessions of data polling and remote user interaction while the 8864 continues to collect, compute and store new data. Three built-in USB ports allow connections to external keyboards, trackballs, mice and/or supporting USB flash drives.



The 8864 Data Controller
has improved speed,
configuration space, and data
storage for your convenience.

Intuitive and Ready to Use

A capacitive touch screen and intuitive UI makes performing common functions without a keypad or external device easy. You can access the UI remotely anywhere you have a network connection and web browser. Our data controllers are designed to acquire and store data to ensure that no data is lost in the event of a communication failure with your ambient monitoring software. ESC Data Controllers come with a 90-day guarantee and extended protection can be purchased through annual maintenance plans.



Superior Network Security

The data controller integrates an SSH connection for remote access for secure communications for the safety of your data.

Questions about the 8864 Ambient Data Controller? Contact Agilaire, LLC at info@agilaire.com or 865-927-9440

www.agilaire.com 865-927-9552 (fax)



8864 Specifications

CPU	AMD Geode LX 800
Data Bus	64 bits
Speed	500 MHz
Cache	64K L1 cache and 128K L2 cache
FLASH	4 GB - firmware, configuration, and data channels
DRAM	256 MD - operational data and code execution
Ethernet	Dual 10/100 Mbps
Serial Port 0	Optically isolated RS-485 or optional RS-232
Serial Ports 1-3	Optional R-232 or RS-485
MODBUS	MODBUS protocol is supported on any serial or Ethernet port
LCD	7 inch, 16 Million colors, resolution 800 x 480, TFT active matrix
USB	USB 2.0 - two rear, one front port
Channels	999 Channels
Digital I/O Points	999 maximum
Dimensions	17.0w x 5.25h x 14.0d inches (43.2w x 13.3h x 35.6d cm) 19-inch rack
Weight	About 12 pounds (4.5 kg)
Power	Universal 110/220VAC, 50/60 Hz, less than 60W

I/O Expansion Slots - Up to 12 Available Expansion Card Options (8 Points per card)

Analog Current Input - 4-20mA current loop available, differential with programmable gain amplifier

Analog Voltage Input - +/- 100mV, +/- 1V, +/-5V, +/-10V full scale

Digital Input - Detects contact (relay) closures or voltage-to-ground transitions (to 24V); optional software debounce

Meterological Input - Rainfall, Wind Speed/Direction, Temperature, Excitation V Output

Digital Output - Latching-coil relays; rated load: 5A @ 250VAC, 5A @ 30VDC

Analog Output - 4-20mA current loop outputs; 12-bit resolution

Accuracy - \pm 0.1% full scale front-to-back accuracy at room temperatyre, \pm 0.15% full scale over full temperature range

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