

# 8864 Ambient Data Controller



## 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.



The 8864 continues the tradition of rock-solid data controllers that "just work."

## Superior Network Security

Remote browser connections require HTTPS and remote terminal sessions utilize a secure SSH protocol.

Questions about the 8864 Ambient Data Controller? Contact Sales at [sales@escspectrum.com](mailto:sales@escspectrum.com) or 512-250-7902

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[sales@escspectrum.com](mailto:sales@escspectrum.com)

10801 N Mopac Expy, Bldg 1-200  
Austin, TX 78759



ESC Spectrum

# 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

**Isolated Digital Input** - Detects open-to-voltage transitions (24V to 120V, AC or DC); optional software debounce available

**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

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