SIEMENS

Site Controls™

MicroPad Controller

A cost-effective energy management option for small facilities

The Site Controls MicroPad features an optional integrated touch screen for enhanced on-site control without sacrificing the above-site capabilities of the Site Controls Enterprise Portal.

The MicroPad controller brings the enterprise power of the Site Controls platform to smaller facilities such as branch banks, clothing stores, convenience stores and quick serve restaurants.

For companies wishing to provide store managers and employees increased control and feedback, the MicroPad offering features an optional 7-inch LCD color touchscreen. But the real power of the MicroPad solution is the integrated connectivity for the multisite operator to the cloud-based Site Controls Enterprise Portal and Analytics Engine. This provides a global unified view of all assets and conditions across the enterprise and innovative capabilities such as automated enterprise exceptions reporting, energy outlier identification and real-time live visibility and control over individual assets. The result is continuous reductions in your energy usage year after year.

Similar to other controllers in the Site Controls solution family, such as the Standard Controller and the rack-mountable 1U Controller, the MicroPad is powered by an industrialized Linux distribution with an embedded Java Virtual Machine (JVM), providing solid, reliable and flexible system architecture with networking support. The firewall friendly device employs HTTP and SSH daemons for remote connectivity and maintenance. A rugged housing combines both the processor and I/O into a single, wall-mountable enclosure, making the unit easy to install and relocate.

Benefits

- Wall-Mountable Form Factor for Installation Flexibility
- Optional Integrated 7" Touchscreen
- Enterprise Visibility through a Cloud-Hosted Enterprise Portal and comprehensive Client Services
- Intelligent DCV option available
- Intelligent Load Management (ILM) Demand Response Aggregation Technology
- No Moving Parts
- Remotely Upgradeable
- Compact, Rugged Housing

Gain enhanced on-site control without sacrificing above-site capabilities

Features Overview
– Lighting, HVAC, and signage control
– Full featured energy and demand meter reporting
– Monitors indoor temp, outdoor temp, humidity, light levels, cycles, pressures, current, etc.
– I/O expansion capabilities
– Advanced energy saving strategies such as DCV, Psychrometrics and global economizer control
– Software overrides with programmable configuration
– Optional remote hardware pushbutton overrides
– Browser-based monitoring, controls and reporting
– Remote reset of HVACs
– Access to equipment performance data on demand
– Maintenance diagnostics and troubleshooting
– Advanced scheduling for single or multiple sites
– Advanced grouping capabilities for controls
– Dynamic load shed via ILM aggregation technology
– Redundant HVAC and lighting defaults in event of system or partial failure
– Intuitive user interface
– Variable polling frequency with all historical data maintained
– Fanless operation
– SD Card (no hard disc) persistent storage
– No moving parts
– All power, inputs/outputs are low voltage (< 24V)
– Easy to install on wall surface
– LED indicators (power and comms)

Input/Output
– 5 x normally open, dry contact outputs
  • 3A single pole relays
  • No stand-alone HOA switches required
  • Output surge/spike protection
– 8 x inputs
  • 10K pull up/down, accessible via terminal cover
  • 4 inputs min 10bit 5V full scale analog inputs for voltage, current loop or resistive sensors

Video
– 7-inch LCD color touch screen (resistive)
– LCD support: 16bPP (minimum)
– Options available for both touch screen and non-touch screen form factors

Connectivity
– 1 x Ethernet port
– 1 x RS485 with auto transmit enable
– 12-24VDC supply
– Self-contained housing
– Easy access to I/O terminals
– ZigBee/802.15.4 MAC/PHY
  • Mesh networking data routing
  • Point-to-point range of 75ft to >300ft depending on local conditions
  • Range boosting available via ZigBee repeators
  • Compatible with Siemens thermostat RDY2000RZ/SC

Processor*
– Ethernet MAC: 1 x FE(10/100)
– Serial Interfaces: 3 x UART, 2 x I2C/SPI, USB OTG
– Memory:
  • DDR with 512MB support (SODIMM support)
  • Support Linux journaling
– Linux OS 2.6.x or above
– Java JVM Support
– SSH daemon
– Low power requirements
– Battery backed real-time clock
– Optional hardware watchdog

Mechanical and Environmental
– Dimensions (L x W x D): 10.0” x 6.5” x 1.5”
– Power requirement - AT: 12V single voltage input (BIOS default)
– Operating Temperature 0 ~ 50° C (32~122° F)
– Storage Temperature -20~80° C (-4~176° F)
– Operating Humidity 0% ~ 90% Relative Humidity, Non-condensing

**Specific system components subject to change.*

Siemens Industry, Inc.
Building Technologies Division
9225 Bee Cave Road
Bldg. B, Suite 100
Austin, TX 78733
Tel (512) 306-9400
Fax (512) 306-9445