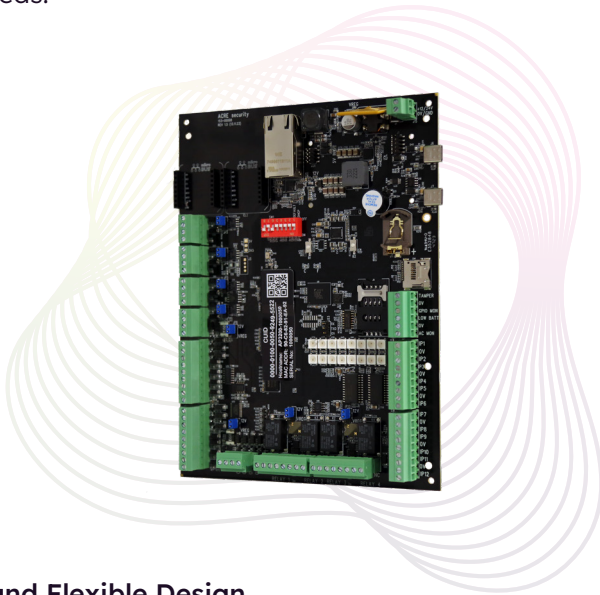


The **acre Smart Controller** is designed to enhance the security of your operations, delivering flexible and secure hardware solutions tailored to your specific needs.



Cost-Efficient and Flexible Design

The acre Smart Controller provides an unmatched combination of cost-effectiveness and design agility, allowing for rapid adaptation to market demands. Investing in acre hardware means choosing a solution that evolves with your business.

Features at a Glance

- ✓ Manage 2 doors with Wiegand or 4 doors using OSDP, supporting up to 8 readers for versatile entry and exit monitoring.
- ✓ 4 relay outputs and 12 contact inputs provide extensive connectivity options.
- ✓ Cardholder capacity of 250,000 and access level capacity of 32,000, accommodating organizations of any size. Assign up to 512 access levels per cardholder for granular security control.

Cost-Savings without Compromise

Reduce your expenses without sacrificing quality. The acre Smart Controller is competitively priced and provides enhanced features such as 4 doors OSDP and additional inputs, making it the superior choice for budget-conscious businesses.

Future-Ready with Modular Upgrades

Stay ahead of the curve with the ability to integrate future expansions such as WiFi, additional relays, or RS-485 ports using our innovative click module system.

Secure your assets and simplify your access control systems with the acre Smart Controller—where innovation meets security.

Key Features

- ✓ OSDP Protocol provides secure channel communications for reader connectivity.
- ✓ Supports up to 4 doors, 12 inputs, and 4 relay outputs.
- ✓ Enhanced features like extended door entry/egress times, lockdowns with override options, and 4-9 digit PIN code support enhance your security measures.
- ✓ Supports 250,000 Cardholders and 50,000 Transaction buffer.
- ✓ Supports multiple card formats, paired and alternate readers, elevator, turnstile and biometric devices.
- ✓ Anti-passback support (area, reader and time based).
- ✓ Click Module for Future Expansion.
- ✓ 4GB eMMC on board and 4Gbit of DDR3 RAM
- ✓ 1 GB Ethernet
- ✓ TPM 2.0 Compatible Chip
- ✓ Host communications protected by TLS 1.3 encryption in transit and AES 256-bit encryption at rest
- ✓ Encrypted file system including database
- ✓ Memory and Clock Battery Backup
- ✓ Power Supply monitoring via onboard dry contact
- ✓ Compliance with FCC, CE, and UL standards ensures top-quality and safety.

Acre Smart Controller

Access Control	<p>250,000 cardholder capacity</p> <p>50,000 transaction buffer</p> <p>Supports total of 4 RS-485 IO protocols</p> <p>512 access levels per cardholder</p> <p>Cardholder - 19 Digit (64 Bit) User ID with 9 digit PIN MAX Activation/Deactivation</p> <p>If/Then macro capabilities</p> <p>Anti-passback support</p> <p>Area, hard, soft, and timed forgiveness</p> <p>Adjustable cardholder capacity</p>
Door Control	Natively supports for up to 8 readers and 4 openings.

GENERAL

Primary Power	12 to 24 VDC \pm 10 %, 160mA @12v, 110mA @ 24v maximum (reader and USB ports not included)
Reader Port	1A max shared by all readers maximum (add 1A max shared by all readers to primary power current)
USB-C Port	For Diagnostic Purposes
Battery	Memory/Clock Backup: 3 Volt Lithium, type BR2032 or CR2032
microSD Card	2GB to 256GB
Host Communication	Ethernet: 10/100/1000 Base-TX and USB port (3.0) with optional adapter
Serial I/O Device	2-wire RS-485, 2,400 to 115,200 bps, asynchronous, half-duplex, 1 start bit, 8 data bits, and 1 stop bit
Inputs	Twelve unsupervised/supervised, standard EOL: 1k/1k ohm, 1%, ¼ watt. Four unsupervised dedicated for cabinet tamper, AC Mains Monitoring, Low Battery and GPIO
Output Relays	Four relays, Form C, NO/NC 5 A @ 30 VDC resistive with LED Status Indicator
Transistor Outputs	General purpose open collector 30 vDC sink 100 mA each

READER INTERFACE

Reader Power	12-24 VDC \pm 10 % regulated, 500 mA maximum each reader
RS-485 Mode	9,600 to 115,200 bps, asynchronous, half-duplex, 1 start bit, 8 data bits, and 1 stop bit. Max. cable length: 2000 ft. (609.6 m)
LED Output	TTL levels, high>3 V, low<0.5 V, 5 mA source/sink maximum
Buzzer Output	Open collector, 12 VDC open circuit maximum, 40 mA sink maximum

CABLE REQUIREMENTS

Power and Relays	1 twisted pair, 16 AWG
Ethernet	CAT-5, minimum, CAT-6 recommended
Reader TTL	6-conductor, 18 AWG, 500 feet (150 m) maximum
Reader RS-485	1 twisted pair, shielded, 120 ohm impedance, 24 AWG, 2,000 ft. (610 m) max.
I/O Devices	1 twisted pair with drain wire and shield, 120 ohm impedance, 24 AWG, 4,000 ft. (1,219 m) maximum

ENVIRONMENTAL

Temperature	-55 to +85 °C, storage, 0 to +55 °C, operating
Humidity	5 to 95% RHNC

MECHANICAL

Dimensions	8 in. (205 mm) W x 4.1 in. (105 mm) L x 0.9 in. (25 mm) H
Weight	10.58 oz. (300 g) nominal, board only

COMPLIANCE AND WARRANTY

Product Compliance	UL 294 Recognized, FCC Part 15 Class A, CE Compliant, RoHS (2011/65/EU & 2015/863), EU REACH (1907/2006), California Proposition 65
Warranty	3 years