ACS PRO
CONTROLLER

Access Control Solution

> The Honeywell ACS PRO controller provides intelligent, flexible, and scalable access control solutions from 2 up to 16 doors.

The ACS PRO enables users to securely manage their system in conjunction with the dedicated access control software IQ-MultiAccess. The user-friendly design and all interfaces available make it simple to install and easy to operate and maintain.

The ACS PRO controller gives you all the benefits of traditional access control, such as helping you secure doors, manage employee access and manage sites remotely. Via IQ-MultiAccess it also lets you pull reports easily to meet compliance requirements. The compatibility of the ACS PRO with the RS-485 I/O devices and door controller ensures economical installations and reduces training and maintenance costs.

Due to the licensing concept, the functional extension of the basic system in case of changing requirements is also possible in existing premises without replacing the hardware. The modular product range consisting of complete assemblies, controllers, and housings with power supply units enables cost-effective assemblies to be adapted to the premises' conditions.

> ACS PRO has been developed with an installer-friendly design that easily adapts to existing IT infrastructure and methods, reducing installation and support costs. So as your system grows, ACS PRO grows with you.

FEATURES AND BENEFITS

INCREASED PRODUCTIVITY

Multi-site access management for global credentials is made easy with IQ-MultiAccess, including visitor management

Multi-site visualization of alarm management and event procedure management and integration with intrusion, video, fire and building automation systems is made easy with WINMAG, meeting compliance needs

VdS compliant 4-door solution is available for needs of customers in Critical Infrastructructure Protection industry

FASTER INSTALLATION

RJ45 Click & Done and push-in connector for doors and readers reducing install time and cabling costs

Built-in fire input override requires no additional relays, giving easy escape routes and first responder access

By default ready for secure Modulbus-type readers, simply convertible to retrofit Clock/Data reader connectivity

LOWER COST OF OWNERSHIP

Designed to scale with your business, single to multi-site without replacing hardware

Single hardware strategy allows stock of one type of device and low service stock, still meeting end customer demands through license activated functionalities

Compatible with existing ACS-8 field modules and ACS-2 installations for easy replacement and expansion

ENHANCED SECURITY

256-bit AES and TLS 1.2 encrypted communication between panel and hosts

Card-to-Host secure ensuring multi-site secure installations using MIFARE DESFire credentials

Security certificate capability ensures secure and trusted connections to the panel

Encrypted bi-directional reader-to-panel communication (Modulbus)

Host decision integration allows integration of image comparison, license plate recognition or scales

FLEXIBLE SOLUTION

Licenses allow full scalability in doors, features and extensions without swapping out hardware

Up to 8 doors can be managed on the controller with Modulbus readers.

Using the RS-485 bus, Modulbus readers and field devices can expand the controller up to 16 doors (4+ controller licensed)
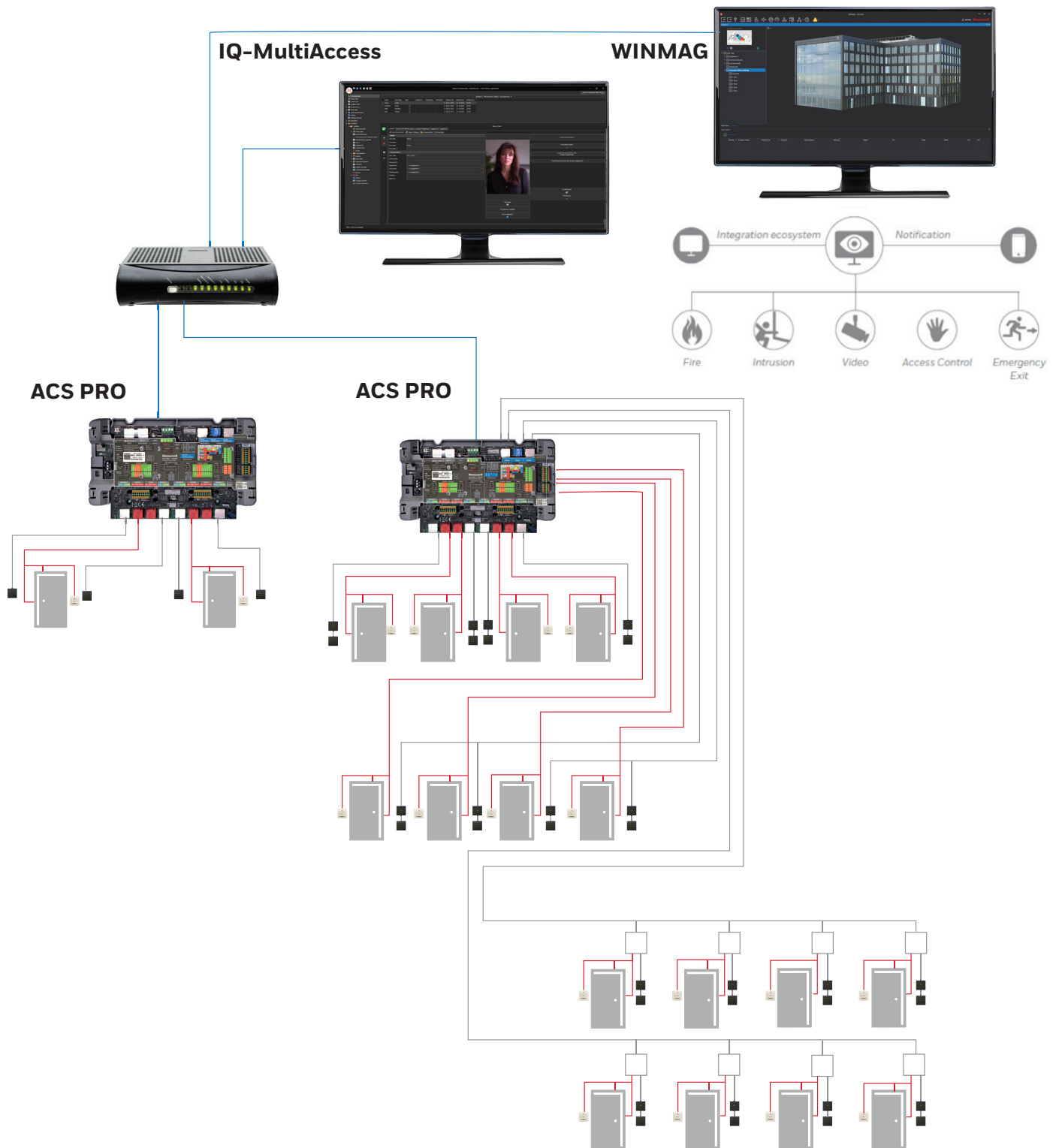
Extensive macro control engine allows flexible triggers and procedures

Support of proX, MIFARE Classic, MIFARE DESFire, LEGIC prime, LEGIC advent credentials

Honeywell

ACS PRO – ACCESS CONTROLLER
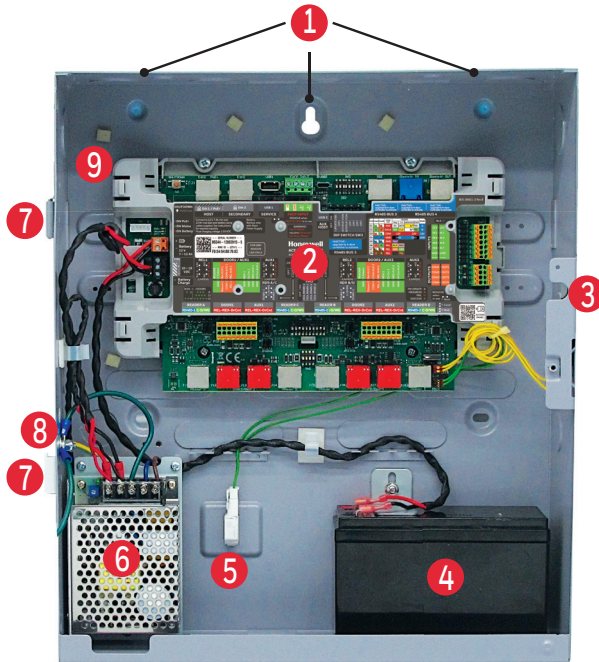
SYSTEM OVERVIEW

ACS PRO is the hardware controller of the access control installation. The readers and door peripherals and field devices are connected to monitor and control up to 16 doors and IQ-MultiAccess and WINMAG software are seamlessly integrated providing the end user maximum control and visualization and further integration to other security, safety and building disciplines. An ACS PRO controller is initialized in the ACS-4 Setup tool and configured in IQ-NetEdit.

IQ-MultiAccess   **WINMAG**

Integration ecosystem   Notification

Fire   Intrusion   Video   Access Control   Emergency Exit

ACS PRO   **ACS PRO**

ACS PRO - ACCESS CONTROLLER

ENCLOSURE OPTIONS

Standard Metal Enclosure

1. Multiple Knock-Out Holes at Top, Side and Bottom
2. All-in Smart Control Panel (ACS4C3-2)
3. Panel Door Tamper
4. 12 V Battery Backup
5. Off-Wall Tamper
6. 13.8 V/45 W Primary Power Supply
7. Door Removal for Easy Wall Mounting and Cabling
8. Panel Door Grounding Point
9. Multiple Tie-Down Points

Access Control Panel
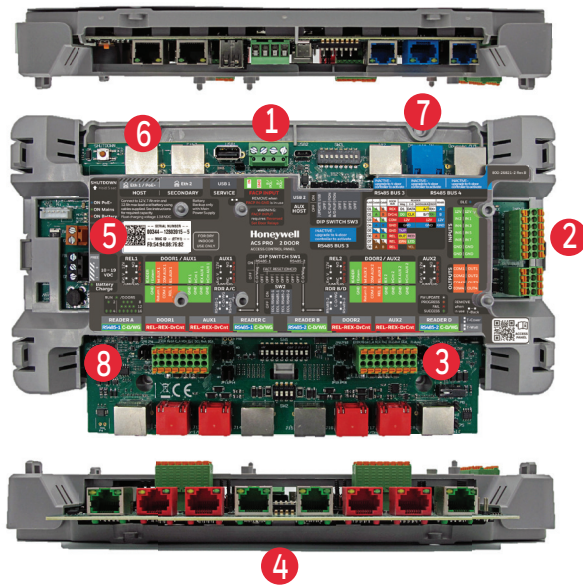
1. FACP Fire Input
2. Eight Inputs/Four Voltage-Free Contacts for Door Control of Four Additional Doors or External Devices
3. Door/Aux Push-In Connections for Standard Door Wiring
4. RJ45 Click & Done Reader/Door Connectivity Modulbus (default) or Clock/Data
5. Serial number for license upgrade
6. Hosted On-Premise with IQ-MultiAccess
7. RJ45 Click & Done External busses Available in 4-door ACS-4 and 4 door and higher ACS PRO controllers Not supported in 2-door ACS PRO variant
8. RUN LED indicates active license for number of doors

Vds Compliant Metal Enclosure

1. Metal enclosure with 13.8 V/45 W power supply
2. VdS compliant audible and visual indicators and buzzer silence
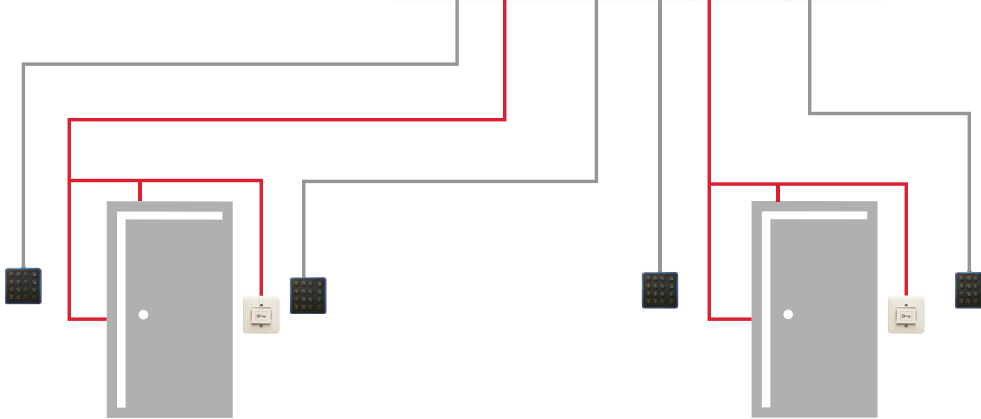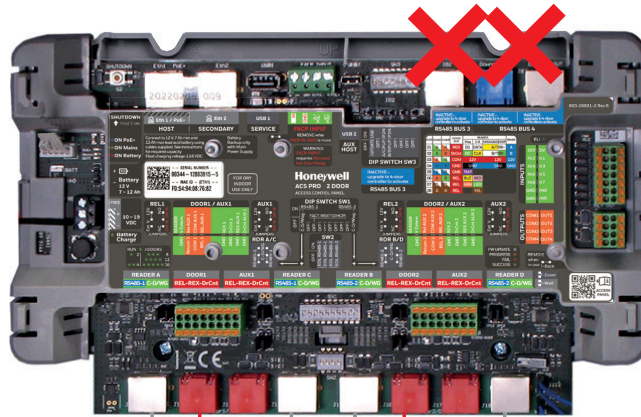
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PROJECT PLANNING EXAMPLE

Two Doors

ACS PRO

ACS3002E-MPS

- 2 doors per controller
- Modulbus or clock/data readers
- RS-485 field device bus disabled
- Metal enclosure with PSU
- ACS-LIC2D license to upgrade to full ACS PRO 4-door unit

ACS PRO – ACCESS CONTROLLER

PROJECT PLANNING EXAMPLE

Four Doors

2 x RS-485 Field device bus

ACS PRO
with 2-door upgrade
license
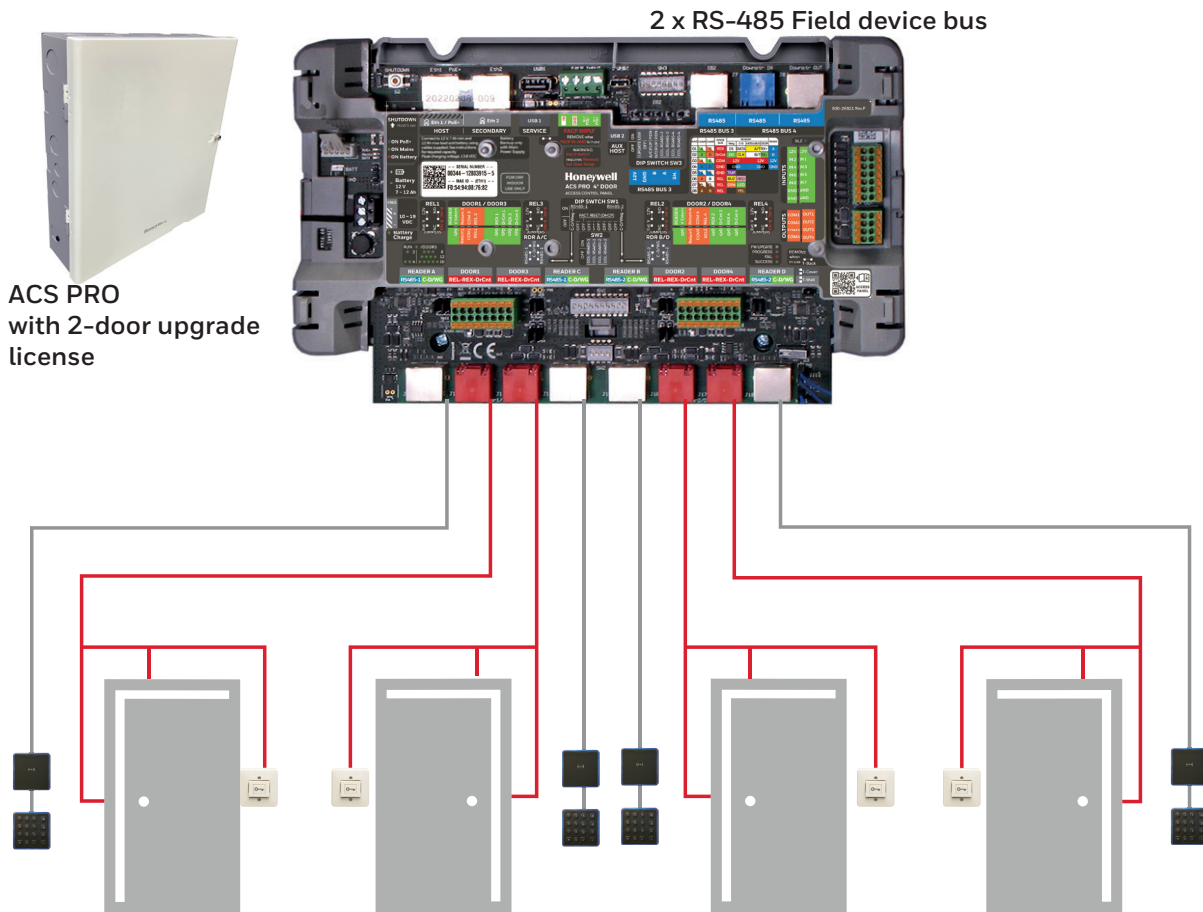
ACS3002E-MPS with ACS-LIC2D 2-door upgrade license
• 4 doors per controller
• Multiple Modulbus readers or single clock/data reader per reader port
• Extensions with field devices possible for external input/output control
• Metal enclosure with PSU

ACS PRO – ACCESS CONTROLLER

PROJECT PLANNING EXAMPLE

Eight Doors

ACS PRO with additional licenses

2 x RS-485
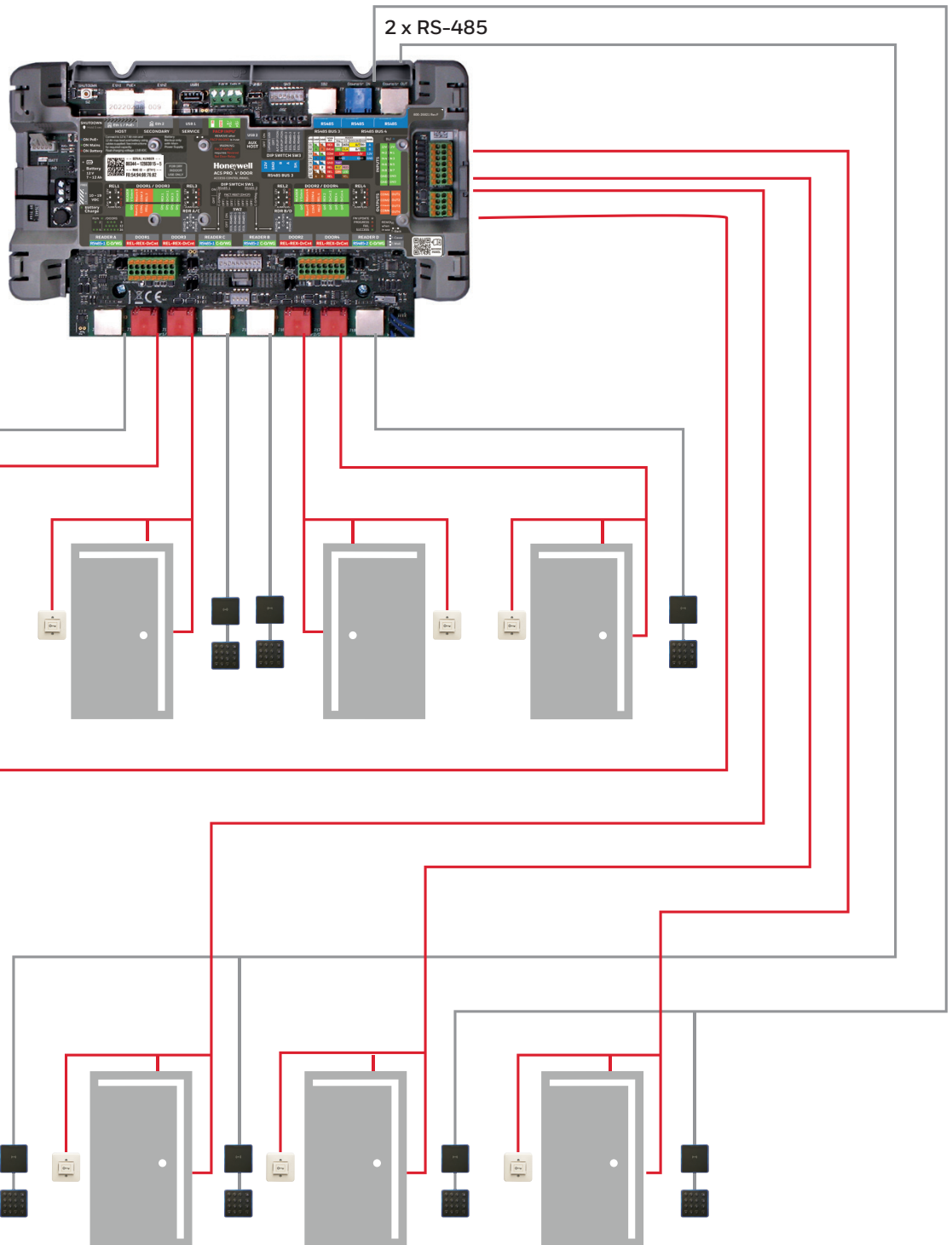
ACS3002E-MPS with ACS-LIC2D 2-door and ACS-LIC4D 4-door upgrade licenses
• 8 doors controlled from controller
• Extensions with field devices possible instead of on-board connections
• Metal enclosure with PSU

ACS PRO – ACCESS CONTROLLER

PROJECT PLANNING EXAMPLE

16 Doors

2 x RS–485

**ACS PRO
with additional
licenses**

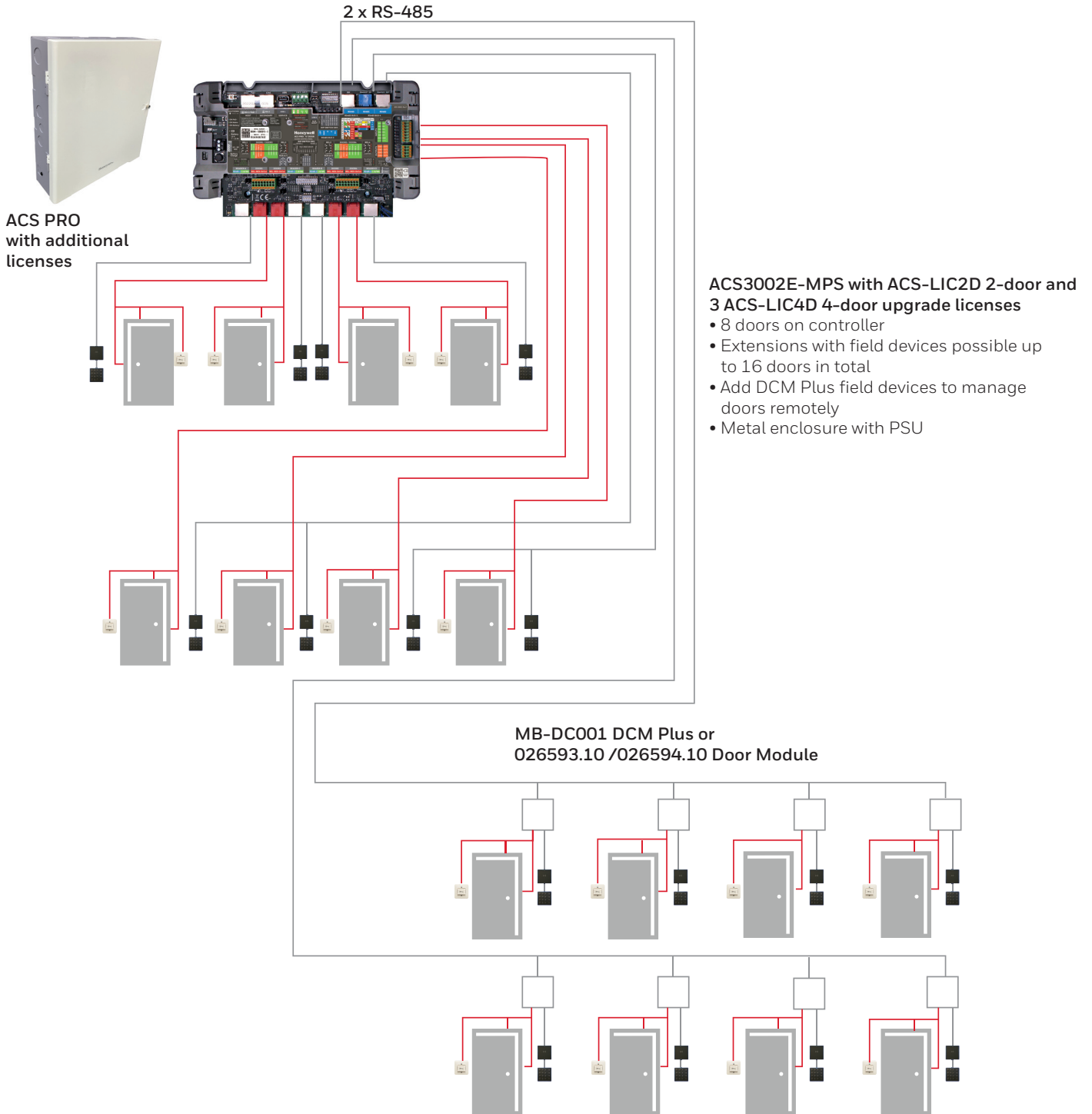**ACS3002E-MPS with ACS-LIC2D 2-door and
3 ACS-LIC4D 4-door upgrade licenses**
• 8 doors on controller
• Extensions with field devices possible up
  to 16 doors in total
• Add DCM Plus field devices to manage
  doors remotely
• Metal enclosure with PSU

**MB-DC001 DCM Plus or
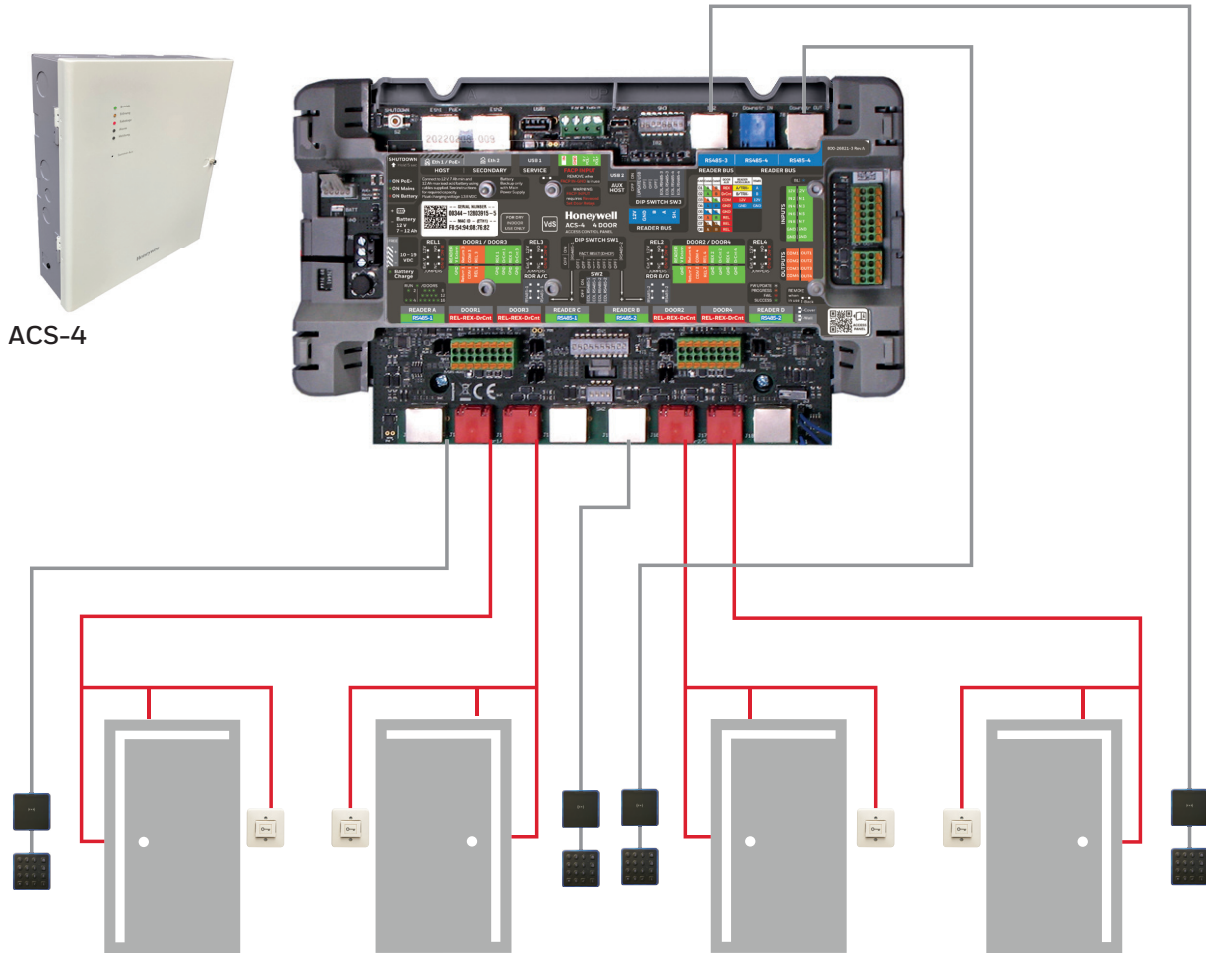026593.10 /026594.10 Door Module**

ACS PRO – ACCESS CONTROLLER

PROJECT PLANNING EXAMPLE

Four Doors (VdS)

ACS-4

ACS3004V-MPS
- Up to 4 doors per controller
- Designed to work with Modulbus Readers with MIFARE DESFire Technology
- No extensions possible
  No upgrade licenses possible
- Metal enclosure with PSU and LEDs and buzzer
- VdS Z123001

ACS PRO – ACCESS CONTROLLER

TABLE 1. TECHNICAL SPECIFICATIONS			
	Specifications	**ACS PRO | 2– to 16–DOOR SOLUTIONS: ACS4C3-2, ACS3002E-MPS**	**ACS–4 | VdS 4–DOOR SOLUTION: ACS4C3, ACS3004V-MPS**
Communications	Built-in Communication Options	Fast Ethernet, USB (Service only)	Fast Ethernet, 2 RS-485 busses, USB (Service only)
	Field Device Expansion Module Connectivity via Modulbus	Not available in ACS PRO 2-door basic model. After license ACS-LIC2D upgrade: Two RS-485 busses to connect ACS-8 field devices via default Modulbus protocol[3], such as: - Input module, RS-485 (026590) - Output module, RS-485 (026591) - Input/Output module, RS-485 (026592) - Door module, 12 V DC, RS-485 (026593.10) - Door module, 230 V AC, RS-485 (026594.10) - Door Controller Module DCM Plus (MB-DC001) [1]	Two RS-485 busses to connect Modulbus readers for door 3 and door 4 separately
Readers/Doors	Door/Reader Capacity	ACS PRO: 2 doors - 4 readers in RS-485 Modulbus [2] and Clock/Data mode	ACS4C3 and ACS3004V-MPS: 4 doors - 8 readers in RS-485 Modulbus mode [2], VdS Compliant
	Door Expandability via Licenses	Use ACS-LIC2D license to expand ACS PRO to 4-door controller Use ACS-LIC4D license to expand further per 4 doors up to 16 doors [3]	No
	Default Reader Compatibility	By default Modulbus readers, selectable to Clock/Data readers per 2 reader ports Support of proX, MIFARE Classic, MIFARE DESFire, LEGIC prime, LEGIC advant	By VdS compliance Modulbus readers, supporting encoded MIFARE DESFire credentials
Outputs	Number of Door Outputs	4 Change over contact (jumper selectable NO or NC) – per door output rated at 3 A @ 30 Vdc (Voltage free) or 4 Change over contact (jumper selectable NO or NC) – per 2 (door) outputs rated at 750 mA @ 12 Vdc (self-powered from panel) [4]	4 Change over contact (jumper selectable NO or NC) – per door output rated at 3 A @ 30 Vdc (Voltage free) or 4 Change over contact (jumper selectable NO or NC) – per 2 door outputs rated at 750 mA @ 12 Vdc (self-powered from panel) [4]
	Number of Auxiliary Outputs	As ACS PRO 2-door basic model: 2 Change over contact (jumper selectable NO or NC) – per door output rated at 3 A @ 30 Vdc (Voltage free) or 2 Change over contact (jumper selectable NO or NC) – per 2 door outputs rated at 750 mA @ 12 Vdc (self-powered from panel) [4] and 4 NO contact outputs (NC selectable in software) rated at 3 A @ 30 V (Voltage free). After license ACS-LIC2D upgrade: 4 NO contact outputs (NC selectable in software) rated at 3 A @ 30 V (Voltage free)	4 NO contact outputs (NC selectable in software) rated at 3A @ 30V (Voltage free)
	Output Expandability	Not available in ACS PRO 2-door basic model. After license ACS-LIC2D upgrade: Maximum 256 field relays via up to 64 Modulbus output devices[3]: Connect ACS-8 field devices via default Modulbus protocol (up to 32 devices per bus), such as: - Output module, RS-485 (026591) (4 outputs per device) - Input/Output module, RS-485 (026592) (2 outputs per device) - Door module, 12 Vdc, RS-485 (026593.10) (3 outputs per device) - Door module, 230 Vac, RS-485 (026594.10) (3 outputs per device) - Door Controller Module DCM Plus (MB-DC001) (3 outputs per device) [1]	No

ACS PRO – ACCESS CONTROLLER

TABLE 1.TECHNICAL SPECIFICATIONS			
	Specifications	ACS PRO | 2– to 16-DOOR SOLUTIONS: ACS4C3-2, ACS3002E-MPS	ACS-4 | VdS 4-DOOR SOLUTION: ACS4C3, ACS3004V-MPS
Inputs	Number of Inputs	16 (+8) Configurable four-state supervised input points. Factory Default settings: Status, REX, 2 reader tampers, and 8 auxiliairy inputs	
	Input Expandability	Not available in ACS PRO 2-door basic model. After license ACS-LIC2D upgrade: Maximum 256 field inputs via up to 64 Modulbus output devices[3]: Connect ACS-8 field devices via default Modulbus protocol (up to 32 devices per bus), such as: - Input/Output module, RS-485 (026592) (4 inputs per device) - Door module, 12 dc, RS-485 (026593.10) (4 inputs per device) - Door module, 230 Vac, RS-485 (026594.10) (4 inputs per device) - Door Controller Module DCM Plus (MB-DC001) (4 inputs per device) [1]	No
	Panel Tamper	Panel door, Off-Wall and Back tamper / External tamper	
	FACP (Fire) Input	Normally Close contact or reversed polarity triggered Fire input forces all 4 outputs (2 door/2 Aux or 4 door) in fail-safe state, releasing fail-safe locking devices and unlocking all connected doors for escape/evacuation purposes. Hardware solution overrides any software or controlled setting.	
Power Inputs	Standard Power Supply Unit from Metal Enclosure	100 Vac to 240 Vac, 50 Hz/60 Hz Input provides 13.8 Vdc @ 3.3 A	
	Controller Power Input	10 Vdc ~ 19 Vdc, Typical 13.8 Vdc (standard power supply from metal enclosure)	
Power Outputs	Power for Locking Devices and Other Peripherals	12 Vdc, up to 750 mA per 2 door outputs for locking devices Total power output from panel to devices: 3 A @ 12 Vdc	
	Backup Battery System	12 Vdc, 7Ah ~ 12 Ah battery (not included)	
Enclosure	Material	Metal, grey similar to RAL7500	
	Wiring Holes/ Knockouts	20 Aligned holes	
	Power Supply Unit	Included and mounted	
	Front Cover	MPA2ENCME/ ACS3002E-MPS: Metal, blind, grey similar to RAL7500	ACS4ENCMV / ACS3004V-MPS: VdS Compliant with LED indications and silence buzzer button, metal grey similar to RAL7500
	Protection Class	IP30 (EN 600529)	
	Environmental Class per VdS	Not applicable	ACS3004V-MPS: II

ACS PRO – ACCESS CONTROLLER

TABLE 1.TECHNICAL SPECIFICATIONS			
	Specifications	**ACS PRO | 2– to 16–DOOR SOLUTIONS: ACS4C3-2, ACS3002E-MPS**	**ACS–4 | VdS 4–DOOR SOLUTION: ACS4C3, ACS3004V-MPS**
Installation	Removable Terminal Blocks	Power supply, battery, fire input, push-in for all door peripherals and auxiliary inputs and outputs	
	Graphic Wiring Info Cards	Color-coded/Door label for additional wiring instructions	
	RJ45 Terminals	Reader ports, door peripherals (use with MPA2S5), RS-485 busses (active after ACS-LIC2D license upgrade), 2 Ethernet ports (only Host active)	Reader ports, door peripherals (use with MPA2S5), RS-485 busses for Modulbus readers, 2 Ethernet ports (only Host active)
System Information	Real Time Clock	Geographical Time Zone support, Daylight Savings Time support	
	Clock Synchronization	Yes: via Host Software	
	Processor	NPX i.MX6	
	System MTBF	250,000 hours	
	Temperature Ratings	Operating (including battery): –10°C to 45°C (14°F to 113°F) Storage: –40°C to 85°C (–40°F to 185°F)	
	Humidity	5 % to 96 % RHNC	
	Certifications and Approvals	EMC/CE	EMC/CE, ACS3004V-MPS: VdS Z123001 EN 60839-11-1:2013, EN 50131-6:2017 + A1:2021
Physical	Dimensions	360 mm (W) × 410 mm (H) × 110 mm (D)	
	Weight	KIT ACS3002E-MPS: 5.8 kg (battery not Included)	KIT ACS3004V-MPS: 5.9 kg (battery not Included)
LEDs	Status LEDs	7 visible LEDs: 3 Power LED, Battery LED, Bluetooth Low Energy LED, RUN LED (indicating number of doors licensed) and Firmware status LED. 26 LEDS on RJ45 Connectors: Communication, Reader mode, Reader Communication, Door Peripheral States	
Host Modes	Software/Platform	IQ-MultiAccess	
	Visualisation	WINMAG	
Door Control	Door Control Modes	Card Only; PIN Only; Card Or PIN; Card And PIN; Door Lockdown; Disabled door;Limited use card; Expire on date; True and Timed Anti-Passback; Duress, Man-trap, turnstyle	
	Macros for Customer Actions	Yes	
	Anti–Passback Capability	Local and via host software; hard and soft APB available and timed Anti-Passback	
Cards and Databases	Card Event and Buffer Capacity	30000	
	Firmware Revision	V01.20+ Firmware updates via ACS-4 Set up tool	V01.17+ Firmware updates via ACS-4 Set up tool
	Export Capability	Via Host Software	
	Card Formats	proX, MIFARE Classic,MIFARE DESFire, LEGIC prime, LEGIC advant	
	Room Time Zone	512	
	Holidays	512	
Reporting/ Diagnostics	Reports	Via Host Software	

(1) From Q4-2023

(2) Fully Encrypted using Encoded MIFARE DESFire cards

(3) Not available for ACS PRO 2-door basic systems without additional door licenses.

(4) When using RJ45 terminal connections, the output current is limited to 500mA per RJ45 connector

ACS PRO – ACCESS CONTROLLER

TABLE 2. LICENSING INFORMATION				
	Solution		Required Licenses (ACS PRO ONLY)	
Controller	**Access Controlled Doors**	**RS-485 (BUS 3 AND 4) Field Device Busses**	**ACS-LIC2D: 2-Door Upgrade from Basic Model**	**ACS-LIC4D: 4-Door Upgrade from 4-Door and Higher**
ACS PRO BASIC MODEL: ACS4C3-2, ACS3002E-MPS	2	Deactivated	None	None
	4	Yes	1	None
	8	Yes	1	1
	12	Yes	1	2
	16	Yes	1	3
ACS-4 VdS MODEL: ACS4C3, ACS3004V-MPS	4, not extendable	Yes: for Modulbus readers only	None	None

Note: Other configurations are not applicable.

For extension/upgrade of already upgraded controllers, add the difference between the required licenses and the installed licenses

ACS PRO – ACCESS CONTROLLER

TABLE 3. ORDERING INFORMATION	
Solution ACS PRO	**Description**
ACS3002E-MPS	ACS PRO | 2-door basic model, controller & metal encl, PSU, no external busses
Extension Licenses	**Description**
ACS–LIC2D	License for ACS PRO 2-door model, upgrade to 4-door controller and external busses
ACS–LIC4D	License for ACS PRO 4+-door controller, allowing the controller to manage 4 extra doors
Accessories	**Description**
ACS4C3-2	ACS PRO | 2-door controller, in plastic bracket, extendable (FW V01SP2 [V01.20] or higher)
MPA2ENCME	Metal wall mount enclosure + PSU for ACS PRO controller
MPACSENCM2U	Metal enclosure 19"-rack mount + PSU for ACS PRO controller [1]
MPDIN10	Set of 10 DIN-rail adapters
MPA2RJ	RJ45 to 8-screw terminal block
MPA2S5	S5 suppressor/supervisory cable for door peripherals (Lock, door contact and REX button)
018004.10	7 Ah lead acid battery, 12 V
018011.10	12 Ah lead acid battery, 12 V
Compatible Field Devices	**Description**
MB-DC001	DCM Plus - Door Controller Module, 2-door expansion via RS-485
MPIEOP4	Extension Module – 4 Relay outputs via RS-485 (IB2 only) [1]
MPIEIO84E	Extension Module – 8 Inputs / 4 open collector outputs via RS-485 (IB2 only) [1]
Backward Compatible Field Devices	**Description**
026590	Input module, RS-485
026591	Output module, RS-485
026592	Input/Output module, RS-485
026593.10	Door module, 12 Vdc, RS-485
026594.10	Door module, 230 Vac, RS-485
Solution ACS–4 VdS Compliant	**Description**
ACS3004V-MPS	ACS-4 | 4-door controller & metal encl, PSU, VdS compliant, non-extendable
Accessories	**Description**
ACS4C3	ACS-4 | 4-door controller, in plastic bracket for VdS compliant systems (FW V01SP1 [V01.17] or higher)
ACS4ENCMV	Metal wall mount enclosure + PSU for ACS-4 controller for VdS Compliance

(1) From Q1- 2024

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