



AX300

**integrated access control & environmental
monitoring solution—safeguard equipment and
systems 24/7/365**



The feature-rich AX300 controller provides true RFID access control security, intrusion, environmental monitoring and remote site monitoring within a single, wall-mount, box solution.

Each AX300 has an advanced integrated monitored power supply and battery charger for up to four locking devices, six smart sensors and two readers. The two readers can be configured as 'in & out' readers for a single door or as two 'in' readers for two independent doors.



The high-speed communication utilises industry standard TCP/IP and UDP for near real-time monitoring and control over local and wide area networks. The 3rd generation IP drivers minimise the amount of data making it ideal to run over existing LAN/WAN networks with limited bandwidth, even in large scale solutions with hundreds of sites.

All data is stored and processed locally to ensure continuous operation even if the network is unavailable. A wide variety of readers are supported including AX, Mifare, DESFire, HID, Felica, Hitag, magstripe, fingerprint, Tag-it, EM4x series with pincode option from 3 to 7 digits, user selectable.

Controllers can be added to the network using the plug and play software or using the built-in keypad and display to minimise installation time.

The high-end controller is, due to its single box solution, quick and easy to install with no need for external power supply or input/output modules. A 7 Ampere 12 volt battery (optional), provides emergency back-up in case of mains failure with central reporting of the fault. An automatic cut-out and conditioner ensures the maximum lifetime of the battery. The electronic fuses are processor-controlled and re-instated automatically with clear fault indication. A suite of diagnostics are built-in to aid the installer and minimise down-time.

The front panel LCD display and buttons allow the installer basic configuration of the controller, alleviating the need to take a laptop on-site. The LCD display also provides instant 'at a glance' system status.

The programmable door mode settings allow the security level to be changed at preset times to automatically open, normal mode, high security or buddy (2 cardholders required).

The IP-based controller supports 4,000 cardholders, 128 time zones and 4,000 transactions. This is expandable to 12,000 / 32,000 cardholders with 256 time zones and 8,000 transactions stored for larger systems.

Applications

Building access control, provides easy installation and servicing, in one wall-mounted unit.

Environmental monitoring, using the 'plug and play' sensors for alarm and pre-alarm of environmental changes.



Smart Sensor Ports

The AX300 provides 6 ports for any combination of add-on sensors. This provides additional monitoring for example, light, temperature, flood, mains power and other critical conditions. This ensures monitoring of the building and equipment 24/7. Faults and alarms can be reported centrally, emailed, SNMP or directly to an ARC (alarm receiving centre).



Sensors provide advanced warning with low-alarm, high alarm, pre-alarm and rate of change alarm and provide analogue status information. Each sensor can be configured centrally to set, for example, high temperature, low temperature etc and how often the data is reported. To minimise network traffic sensors can be configured to read frequently but only report based on an exception condition.

All sensors have been designed to be plug and play and can be connected in any configuration or permutation to the input ports.

AX Software**AX200 / CMAX Server Console**

Standard software supplied for configuration and single user operation support for up to 256 AX200 / AX300 / i-Box units per system

Sentinel+ Alarm Option
Receiving Centre (ARC) for supervised response

ActiveX SDK Option
for 3rd party integration

Inovonics

Wireless security & environmental monitoring solutions

Integrated Access Control for Local and Remote Site Monitoring

AX Enterprise Software:
Incorporating Web Server, configuration and support for 4,096 sites.



AX Dual Redundant Option
With full automatic changeover of server in case of failure

**AX Web Client**

- Support 99 Clients
- Traffic Light Overview
- Alarm Handling
- Graphical Maps
- Exception Reports
- Selected Live Transactions
- Photo ID
- IP Camera Association
- Password Protected
- Door Control – Open, Close, Deadlock, High Security
- Plant Control
- Muster / fire roll-call
- Occupancy (Who's IN)
- Alarm Triggers
- SNMP, Email

Additional Interfaces / Plug-ins

- Senstar – Perimeter security
- Pinpoint – Staff protection
- Inovonics – Wireless
- Optex – Infrared wireless
- SNMP Manager
- Custom reports - Crystal
- Interlock – unlimited, nested
- Third party database
- Milestone - CCTV
- Cliq - Key management
- Morpho - biometrics
- Mifare DESFire encoding
- Dual redundant

Plug and Play Sensors Environmental, Intrusion, HVAC Monitoring and Control

Any combination of up to 6 sensors per AX300 controller to configure your own unique solution sensors supplied with fixing kit and cable

**Mix & Match any Sensor Combination**

IC-TS
Temperature sensor



IC-DPS
Dust particle sensor



IC-LS
Light level & door contact sensor



IC-AMP-100
Clamp on amperage meter sensor



IC-HM
Temperature & humidity sensor



IC-SD
Smoke & temperature detector



IC-INT-P
Intrusion / movement PIR



IC-IO
Inputs/output module 2 inputs - 1 output



IC-TS-DC
Temperature & door contact sensor



IC-PRT
Pressure/Temperature sensor



IC-AI
Intruder alarm interface



IC-IO-8
Inputs/output module 8 inputs - 8 outputs



IC-FT
Fan Speed and Temperature Sensor



IC-INT-DC
Door / panel position sensor



IC-MI
Mains present sensor



IC-FEX
FireTecPro interface



IC-LQT
Liquid Flow and Temperature Sensor



IC-INT-V
Vibration / shock sensor



IC-GA
General 0-5volt analogue interface



IC-PDU
2-12 Way Intelligent PDU



IC-DPS-E
Enhanced Particle sensor



IC-FS
Flood sensor with 5m sensing cable



IC-MFT
Fixed Temp and/ Fan Fail Sensor



IC-PIR
PIR movement sensor

IP Camera Integration

- Live view
- Data stream
- FTP

milestone



scathecctv

AX300 including on-board, monitored, power supply

105-330 AX300 controller

105-323 Battery 12V 7Ah (optional)

**Door 1**

105-274 AX Mini Proximity Reader

999-006 Proximity Request to Exit

999-022 Green Triple Pole Resettable Breakglass

310-207 Electric Strike 12v adjustable fail-safe / fail-secure

310-206 Cabinet rack weatherproof locking handle

Support for non AX Readers including HID, 125 KHz, 13.56 Mhz including biometrics.
Wiegand (8 to 50 bit programmable)

Auxiliary I/O

IC-ASB Sounder/ beacon module

Outputs

- 2 x Programmable volt-free relays
- 1 x Pulsed output for automatic doors / gates
- 1 x 12VDC 1 Amp output for auxiliary equipment
- 1 x Sounder timed output 12VDC 100mA
- 1 x Beacon timed output 12VDC 100mA
- 1 x 7Ah battery backup

Inputs

- 2 x Programmable inputs NO/NC
- 1 x Dedicated fire input

Electronic fuses are processor controlled and re-instated automatically with clear fault indication. On-board diagnostics.

Door 2

105-257-X AX MTX Multi-Technology Reader

999-006 Proximity Request to Exit

999-022 Green Triple Pole Resettable Breakglass

308-122 Standard Magnet Lock

308-117 Z&L Bracket for inward opening doors

Support for non AX locks that can be directly connected to AX300 lock output, rated at 12V up to 1.5A

Plug & Play AX300 Smart Sensors

check for latest availability of other sensors due to ongoing developments

IC-INT-DC	Door Panel Position Sensor Detects the position of side panels or doors
IC-TS	Temperature Sensor Standard temperature sensor range -20°C to +80°C
IC-HM	Temperature & Humidity Sensor High accuracy temperature, condensation and humidity sensor
IC-TS-DC	Temperature & Door Contact Sensor Combined standard temperature and door position sensor
IC-MI	Mains Present Monitoring Sensor Monitors the availability of mains power
IC-LS	Light Level & Door Contact Sensor Combined light level and door position sensor
IC-FS	Flood Sensor Flood sensor with 5 metres of water sensing cable
IC-SD	Smoke & Temperature Detector Combined optical smoke and temperature detector
IC-INT-P	Intrusion / Movement PIR Detection of people for intrusion or presence
IC-PIR	General Input Module PIR movement detection sensor
IC-MFT	Fan Fail & Temperature Sensor Fixed temperature alarm and fan fail sensor
IC-FT	Fan Speed & Temperature Sensor Monitors fan speed based on RPM and temperature
IC-FEX	Fire Extinguishing Interface Cabinet / rack fire extinguishing interface eg FireTecPro
IC-IO	Inputs / Output Module Two general purpose inputs and 1 relay output module
IC-GA	General Analogue Sensor 0—5 volt dual analogue sensor for connection to 3rd party devices
IC-ASB	Sounder / Beacon Module Combined sounder and beacon for audio and visual warning
IC-PRT	Pressure & Temperature Sensor Combined pressure and temperature sensors
IC-LQT	Liquid Flow & Temperature Sensor Combined liquid flow and temperature sensors
IC-DPS	Dust Particle Sensor Monitors the concentration of dust particles in the air flow
IC-INT-V	Vibration / Shock Sensor Monitors continuous vibration or sudden shock levels
IC-AI	Intruder Alarm Interface External Intruder Alarm system interface
IC-AMP-100	CT Clamp Current Sensor (Amps) Clamp on current monitor
IC-IO-8	Multi I/O board 8 input/8 output module
IC-PDU	i-PDU (2 or 12 way) Monitored power distribution unit

Technical Data

Inputs & Outputs

Readers:	2	Wiegand (8 to 50 bit programmable)
Door Contact:	2	Normally closed monitoring circuit
REX:	2	Request to exit pushbutton or electronic proximity exit device
Breakglass:	2	Monitored
Lock Outputs:	2	1.5 Amp 12vDC lock outputs
Inputs:	2	Programmable inputs for advanced features (NO/NC)
Relay Outputs:	2	Programmable relays volt-free for advanced features
Breakglass:	2	Breakglass relay outputs
Volt-free Relay:	1	For access control automatic doors
Sounder Output:	1	Timed output 12vDC 100mA
Beacon Output:	1	Timed output 12vDC 100mA
Auxiliary Output:	1	12vDC 1 Ampere output for third party equipment
Smart Sensors:	6	Any combination of AX smart sensors
Fire Input:	1	Dedicated fire input
Ethernet RJ45:	1	10Mbps connection for communication over LAN/WAN
Battery:	1	7Ah monitored charger and battery condition (battery optional)
Material:		Powder-coated steel
Supply Voltage:		220 / 240V AC
Operating Temperature:		-10°C to +40°C
Current Consumption:		52.14W at 237VAC @ 0.22A AC <i>typical example AX300 controller with 2 standard magnets and 2 proximity readers, BTU = 182.49</i>
Dimensions:		300 x 260 x 75mm (11.8 x 10.2 x 2.9")
Weight:		2.4kg (5lb 2oz)
Part Numbers:	AX300 Controller	105-330
	12v 7AH Battery	105-323

Warranty Period

The equipment is guaranteed against defects in materials and workmanship for 2 years from date of shipment (see warranty policy for details). Due to continued research, development and product enhancements, the information contained in this publication is subject to change without notice.



27-28 Shrivenham Hundred Business Park, Watchfield, Swindon,
Wiltshire SN6 8TZ United Kingdom
Tel: +44 (0)1793 784002
Fax: +44 (0)1793 784005
Email: info@axxessid.com
Website: www.axxessid.com



1605-1

Distributor: