Axxess
Identification

AX300-1U

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

The feature-rich AX300-1U controller provides true RFID access control security, intrusion, environmental monitoring and remote site monitoring within a single, 19" rack-mount solution.

Each AX300-1U has an advanced integrated monitored power supply and battery charger for up to four locking devices, twelve 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 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.

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 2 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.
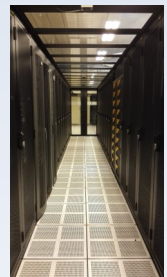
The front panel LCD display and buttons allow the installer basic configuration of the controller, alleviating the need to take a laptop on-site. The LCD display also provides instant 'at a glance' system status.

Applications

Computer rack security, with integrated environmental monitoring, providing permit to work and audits.
Building access control, with equipment centrally installed, provides easy installation and servicing, in one unit.
Street cabinets, single box solution for security, remote access and environmental monitoring of critical equipment.

Smart Sensor Ports

The AX300-1U provides 12 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.

1605-1

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.**

LAN

WAN

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 12 sensors per AX300-1U controller to configure your own unique solution sensors supplied with fixing kit and cable

Mix & Match any Sensor Combination

IC-TS Temperature sensor

IC-HM Temperature & humidity sensor

IC-TS-DC Temperature & door contact sensor

IC-FT Fan Speed and Temperature Sensor

IC-LQT Liquid Flow and Temperature Sensor

IC-DPS-E Enhanced Particle sensor

IC-DPS Dust particle sensor

IC-SD Smoke & temperature detector

IC-PRT Pressure/Temperature sensor

IC-INT-DC Door / panel position sensor

IC-INT-V Vibration / shock sensor

IC-FS Flood sensor with 5m sensing cable

IC-LS Light level & door contact sensor

IC-INT-P Intrusion / movement PIR

IC-AI Intruder alarm interface

IC-MI Mains present sensor

IC-GA General 0-5volt analogue interface

IC-MFT Fixed Temp and/ Fan Fail Sensor

IC-AMP-100 Clamp on amperage meter sensor

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

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

IC-FEX FireTecPro interface

IC-PDU 2-12 Way Intelligent PDU

IC-PIR PIR movement sensor

IP Camera Integration

- Live view
- Data stream
- FTP

milestone

icatchercctv

AX300-1U including on-board, monitored, power supply

105-332-xx AX300-1U controller (replace xx with UK, EU or US mains lead)

105-324 Battery 12V 2Ah (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 2Ah 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 AX300-1U 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

Part	Description
IC-INT-DC	**Door Panel Position Sensor** Detects the position of side panels or doors
IC-TS	**Temperature Sensor** Standard temperature sensor range –20ºC to +80ºC
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:	12	Any combination of AX smart sensors
Fire Input:	1	Dedicated fire input
Ethernet RJ45:	1	10Mbs connection for communication over LAN/WAN
Battery:	1	2Ah monitored charger and battery condition (battery optional)

Material: Powder-coated steel
Supply Voltage: 220 / 240V AC
Operating Temperature:
-20°C to +65°C
Current Consumption:
52.14W at 237VAC @ 0.22A AC *typical example AX300-1U controller with 2 standard magnets and 2 proximity readers, BTU = 182.49*
Dimensions: 1U rack unit
482 x 44 x 190mm (19 x 1.7 x 7.5")
Weight: 2.86kg (6lb 5oz)
Part Numbers: AX300-1U Controller 105-332-xx
12v 2AH Battery   105-324

Warranty Period

RoHS Compliant

CE

Axxess
Identification

1605-1

Distributor: