



ACX Series

Access Controller for Ethernet

The ACX Series controllers are the industry's most powerful all-in-one access controllers designed for both critical government and private sector security applications. These Andover Continuum controllers are just as attractive for one to eight reader installations.

- Native Ethernet IP Access Controller
- Access control for 1 to 8 readers
- Powerful CPU with 128 MB of DDR SDRAM and 32 MB Flash
- Dedicated processor for reader inputs
- Battery backed storage for up to 480,000 personnel records
- Flash for easy online software updates
- Andover Plain English (PE) language simplifies programming
- Compatible with Andover Infinity hardware and CyberStation 1.8 and higher software. (CyberStation v1.74 SP2 may be used with a limited feature set.)
- Secure 10/100 Ethernet communications via IPsec/IKE Encryption with hardware acceleration for Authentication and Encryption
- Easy configuration using embedded configuration web pages
- Support for Area Lockdown and Condition "Threat" Level based access rights
- Support for 2nd Generation Continuum XDrivers
- HSPD-12/FIPS 201 Ready

ONBOARD I/O FOR ACCESS CONTROL

TAC understands that not all security installations are the same. The ACX Series has been designed with flexibility in mind. There are two base hardware models: the 5720 and the 5740. The 5740 has double the universal inputs, reader inputs, and outputs onboard as the 5720. These models come standard with the following I/O configurations:

ACX Series	Model 5720	Model 5740
Universal Inputs	6	12
Reader Inputs	4	8
Tamper Input	1	1
Digital Lock Outputs	2	4

The ACX is designed to support both entry and egress readers while supplying +5 or +12 VDC to each reader.

IT FRIENDLY WITH IPSEC/IKE PROTOCOLS FOR NATIONAL SECURITY

Communications with the ACX is not only fast, supporting data transfer rates up to 100 Mbps, but secure with IPsec/IKE encryption and authentication. Encryption (up to 192-bit) and authentication may be enabled for communication to and from Andover Continuum workstations and controllers. Andover Continuum utilizes Internet Protocol Security (IPsec) and Internet Key Exchange (IKE) for its encryption to assure tamper-proof communications over the Ethernet.

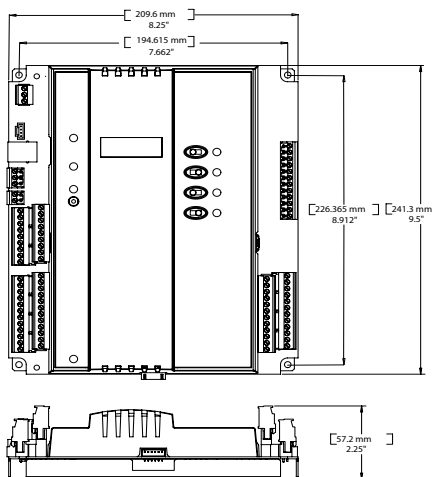
INTERNAL SUPPORT FOR 480,000 PERSONNEL RECORDS

The ACX Series is perfect for large systems. A controller servicing up to 8 areas can hold 480,000 personnel records. With such a large local storage capacity, access decisions can be made swiftly without waiting for validation by a remote server.

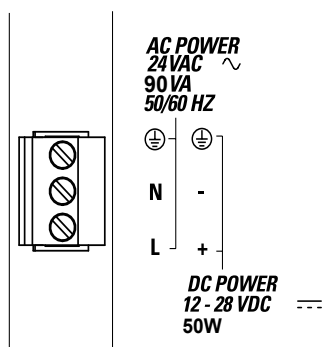
128 MB OF DYNAMIC RAM AND 32 MB OF FLASH MEMORY

Each ACX Series controller comes standard with 32 MB of flash memory and 128 MB of DDR SDRAM. The flash memory is used to preserve 12 MB of application and run-time data. The dynamic RAM is partitioned for dedicated functions: a full 12 MB for applications, 48 MB for personnel records and 8 MB for the operating system. The unused memory is available for future enhancements.

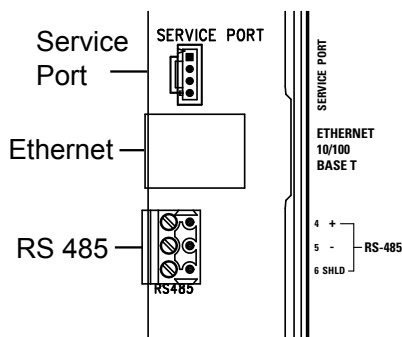
DIMENSIONAL DRAWING



POWER CONNECTIONS



COMMUNICATIONS



Personnel record data is preserved using on-board batteries that can hold the data for at least 7 days without the use of an external UPS. If the controller has its application stored in flash and power loss lasts longer than what the battery can supply for RAM, the controller will send a message to CyberStation and request that the personnel records automatically be reloaded when the power returns.

ADVANCED READER INPUTS WITH DEDICATED PROCESSOR

The reader inputs are powered by a dedicated processor allowing the ACX Series controllers to support current and future devices for advanced applications. The ACX Series hardware is ready to support 260-bit encrypted data messages from the reader.

SUPPORT FOR AREA LOCKDOWN

It is important to be able to contain potential threats when they are detected. The ACX controller can respond to Area Lockdown commands set from Andover Continuum software providing a quick method of sealing off areas. A simple click of a graphic or an automatic program response is all that is needed to disable card readers and exit requests in any given area. First responder personnel can still gain access to the area if their record is marked with "executive privilege".

CONDITION "THREAT" LEVEL-BASED ACCESS RIGHTS

The ACX Series controller can adapt access rights to a change in condition or "threat" levels. Each personnel record can now be assigned a clearance level for each area to which they have access. When the condition is more severe than the person's clearance level then access is automatically denied. The Condition Level may be set manually through CyberStation v1.8 or automatically through a program. A program can even be used to monitor national threat levels and adjust Andover Continuum Condition Levels accordingly.

XP MODULE SUPPORT

Each model supports the use of two xP expansion modules plus an xP-Display unit. The xPBD4 module is ideal for expanding the ACX for special or ADA access to doors. Modules can also be used to provide a cost effective entry reader only solution.

WIRED INFINET OR WIRELESS INFINET SUPPORT

The ACX Series controller can support up to 32 Inifinet nodes. The RS-485 programmable port can be set to support a wired or wireless Inifinet field bus. To use a wireless mesh network, plug an Andover Continuum Wireless Adapter into the Service Port.

FULL CREDENTIAL FORMAT SUPPORT FOR 260-BITS

The ACX Series controllers are ready to support a wide range of card formats. Ideal for retrofits, an ACX controller lets you preserve existing cards by accepting standard formats (Weigand, ABA, HID Corporate-1000, CardKey) as well as custom formats (Custom Weigand, Custom ABA). The ACX can support formats up to 260-bits making the ACX Series controllers ready for government installations that must meet HSPD-12 and FIPS 201 standards.

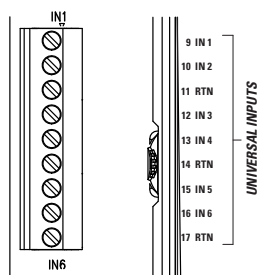
SNMP NETWORK MANAGEMENT AND ALARM SUPPORT

SNMP (Simple Network Messaging Protocol) messages may be sent to network monitoring software such as HP Openview to inform IT managers as to the health and presence of the access controller on the corporate network. The ACX Series controller also supports the SNMP Alarming option.

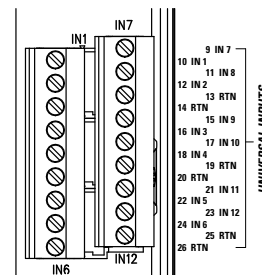
XDRIVER SUPPORT

The ACX Series is available with XDriver support for 2nd Generation Continuum XDrivers to interface with third-party devices. For example, Modbus is a common protocol used in lighting control and power monitoring products. Using a Modbus XDriver on an ACX controller allows the security system to be coordinated with emergency lighting and power systems for added security benefits.

INPUT CONNECTIONS

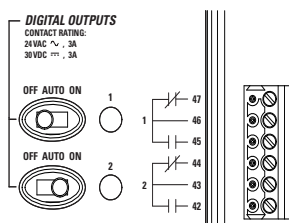


Model 5720

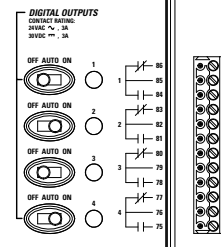


Model 5740

OUTPUT CONNECTIONS

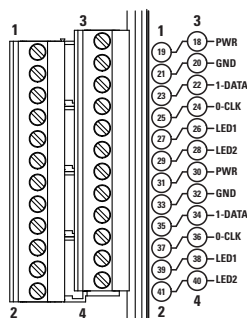


Model 5720

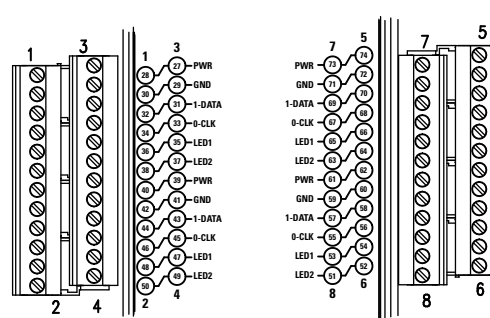


Model 5740

CARD READER CONNECTIONS



Model 5720



Model 5740

SPECIFICATIONS

ACX Series

ELECTRICAL

Power

24 VAC, 50/60 Hz
12-28 VDC auto-sensing

Power Consumption

90 VA (AC)
50 W (DC)

Real Time Clock

Battery-backed by an internal battery

MECHANICAL

Operation Environment

32°-122°F (0-50°C), 10-90% RH
(non-condensing)

Dimensions

8.25" W x 9.5" L x 2.25" H
(209.6 W x 241.3 L x 57.2 H mm)

Weight

1.73 lbs. (0.78 kg.)

Enclosure Type

UL open class, flammability rating of
UL94-5V, IP 10

Mounting

Wall mount using attached fasteners.
(Andover Continuum NEMA 1-style
enclosure available.)

BATTERY

Internal Battery

NiMH, 3.6 VDC, 800 mAh

Battery Backup

Minimum 7 days DDR SDRAM and
real-time clock

COMMUNICATIONS

Comm. Error Checking

International Standard CRC 16

Ethernet LAN Interface

10/100 Ethernet; ethernet cable with
RJ-45 connector.

Serial Comm. Interface

One RS-485 programmable port,
software configurable for Infinet,
wireless adapter, RoamIO₂ or
third-party system.

CONNECTIONS

Power

3-position connector on left side of
module for direct connection to a
24 VAC or 12-28 VDC external
power source.

Ethernet

RJ-45 connector for 10/100 Ethernet

INPUTS

Cabinet Tamper Input

2-pin connector for cabinet tamper
switches located on the cabinet door
and wall.

SPECIFICATIONS

ACX Series (continued)

Universal Inputs

6 (Model 5720) or 12 (Model 5740) universal inputs that can be configured as supervised or general purpose UI.

Alarm Inputs

6 (Model 5720) or 12 (Model 5740) supervised inputs. Single or double resistor supervision, series or parallel.

Card Reader/Keypad Inputs

4 (Model 5720) or 8 (Model 5740) inputs. Each input can be connected to a card reader, dedicated keypad, or reader/keypad combination.

CARD READER/KEYPAD

Card Reader Type

Wiegand, ABA, or CardKey (jumper selectable)

Max Number of Bits/Card

Up to 260 bits/card

Card Reader Power

+5 VDC @ 120 mA or

+12 VDC @ 180 mA
(jumper selectable)

Max Wiring Distance (Reader to ACX)

500 ft. (152.4 m) using 18 AWG
200 ft. (60.96 m) using 22 AWG

DOOR OUTPUTS (FORM C RELAY)

Door Outputs

2 (Model 5720) or 4 (Model 5740)
Form C relays with a manual override switch

Output Rating

24 VAC/30 VDC @ 3 A

Card Reader LED Output

(2) each, open collector; up to
100 mA

Output Protection

5000 V isolation, 270 V MOV on
each output

Overrides

3-position manual override switch
on each output for manual control
of relay. LED override status indica-
tor.

USER LEDS

Status Indicator LEDs

CPU CPU Active

RS-485

TX: Transmit Data
RX: Receive Data

ETHERNET

ACT/LINK: Indicates status of
Ethernet activity
and link.

10/100 Mbps: Not lit for 10 Mbps
Orange for 100
Mbps

EXP PORT POWER

Expansion module 24 VDC power.

PUSH BUTTON SWITCHES

Clear Memory

RESET/Clear Memory

Reset IP Address

(On PC board) Resets network
address settings in flash memory
and restores all non-volatile settings
to factory defaults.

DIP SWITCHES

Universal inputs, 10 K ohm pull-up
disable/enable

GENERAL

Microprocessor

Freescale "Coldfire" MCF5275
running at 150 MHz

Memory

DDR SDRAM: 128 MB
Flash: 32 MB

AGENCY LISTINGS

FCC Class A, ICES-003, CE,
C-Tick, WEEE, UL/CUL 916

Pending: UL 294, UL 1076

MODELS

ACX-2-0000000

ACX 5720, 4 Readers, 0 Infinet
nodes, 6 in, 2 DO, 10/100bT

ACX-4-0000000

ACX 5740, 8 Readers, 0 Infinet
nodes, 12 in, 4 DO, 10/100bT

OPTIONS

008 8 Infinet Nodes
032 32 Infinet Nodes
H High Encryption
X XDriver Enabled
A Advanced Alarming (includes
SNMP Alarming)
C Critical Security (includes
Condition "Threat" Level
feature)

EXPORT CLASSIFICATION

The ACX Series Access Controller is classified in ECCN 5A002 and its software package is classified in ECCN 5D002. These items are controlled by the Bureau of Industry and Security (BIS), U.S. Department of Commerce, because of their encryption functionality. BIS authorized the export and reexport of the ACX Series Access Controller and its software package under License Exception ENC in CCATS # G055204.

DO NOT EXPORT THIS PRODUCT
FROM THE COUNTRY OF
DESTINATION.

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