FEATURE BLAST

NetController II

Product Description

Introducing the NetController II! This re-designed version of the Andover Continuum NetController has extra horsepower and several new features. Compatible with the original NetController, the NetController II is suited for new installations as well as existing Andover Continuum sites for expansion or direct replacement.

NetController Compatible

The NetController II has been designed to replace the original Andover Continuum NetController. Since the form factor has not changed, the NetController II can be substituted for a NetController and plug in to the same enclosure, power supply and I/O modules as a drop-in replacement. The NetController II can also co-exist on the same Andover Continuum system as the original NetController (after a CyberStation software upgrade to v1.8).

Upgrade and add to existing sites with ease.

More Memory – Flash Memory

Each NetController II comes standard with 32MB of flash memory and 128MB of dynamic RAM. The flash memory is used to preserve 12MB of application and run-time data. The dynamic RAM is partitioned for dedicated functions: a full 12MB for applications, an amazing 48MB for Personnel records, and 8MB are reserved for the operating system. 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 power for RAM, the controller will send a message to CyberStation and request that the personnel records automatically be reloaded.

Memory that is unforgettable with dynamic memory retention!

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Store 218k to 480k Personnel Records

The NetController II is perfect for large systems. A controller servicing up to 8 areas can hold 480,000 personnel records and a controller with 32 areas will store 218,000 records. Which such a large local storage capacity, access decisions can be made swiftly without waiting for validation by a remote server.

Store Personnel Records locally!

AC/DC Power Options

The NetController II still supports the NetController power supplies (including UPS models) that power the controller and attached I/O modules with DC voltage. Additionally, the NetController II now supports 24 VAC power sources allowing low cost AC transformers to power the controller for non-I/O module applications.

Power the NetController II with low cost 24 VAC power supplies.

New Communications Port Capabilities

The number of ports stays the same in the NetController II, but their capabilities increase.
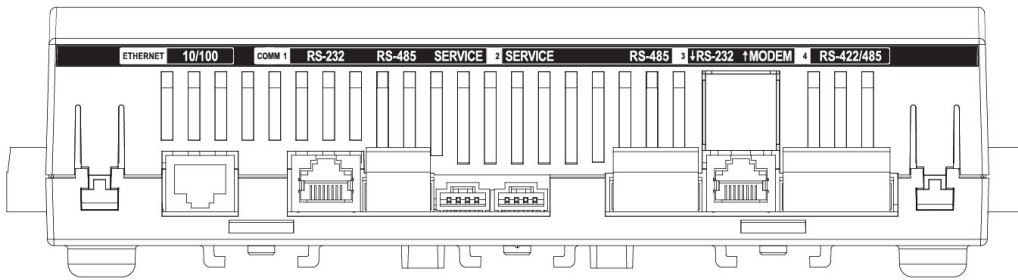
Take a look at the new types and modes for each port:

Type	Connector	Comm. 1	Comm. 2	Comm. 3	Comm. 4	Comm. 16
RS-485	Screw Term.	Yes	Yes	-	Yes	-
	Powered Screw Term.	-	-	-	-	Standard
	Service Port	**New**	**New**	-	-	-
RS-232 full handshaking	RJ-45	**New**	-	Yes	-	-
	RJ-11	-	-	Optional Modem	-	-
RS-422	Screw Term.	-	-	-	**New**	-
FTT-10A	Powered Screw Term.	-	-	-	-	Optional

Mode	Comm. 1	Comm. 2	Comm. 3	Comm. 4	Comm. 16
Autoset	Yes	Yes	Yes	Yes	-
Infinet	Yes	Yes	-	-	-
L-Bus	**New**	-	-	**New**	-
XDriver	Yes	Yes	Yes	Yes	Yes
Printer	Yes	Yes	Yes	Yes	-
ACC-LON	-	-	-	-	Yes
PPP	Yes	-	Yes	-	-
Wireless	**New**	**New**	-	-	-

New comm. port features:

- Support for wireless field bus on Comm. 1 or Comm. 2 (but not both at the same time)
- Service Port connectors allow RoamIO$_2$ service tool or wireless adapter to connect to a field bus.
- RS-422 support on Comm. 4 expands driver possibilities.
- Direct AC256 L-Bus support without LA-1 adapter simplifies AC256 I/O integration.
- Full handshaking support on Comm. 1 RS-232 port.

The NetController II is the hub of all communications.

10/100 Base-T Ethernet with 192-bit IPSec/IKE Encryption

Communications with the NetController II is not only fast (supporting data transfer rate up to 100 Mbps) but secure with IPSec/IKE encryption and authentication. Encryption and authentication may be enabled for communications to and from Andover Continuum workstations and controllers. Andover Continuum v1.8 utilizes Internet Security Protocol (IPSec) and Internet Key Exchange Protocol (IKE) for its encryption to assure confidential and tamper-proof communications over Ethernet.

Establish fast and secure Ethernet connections with IPSec/IKE encryption.

Simplified Options

The NetController II comes standard with more features in the base model. No longer are there options for more memory, Ethernet, and I/O count. Every NetController II gives you 128MB RAM, 32MB Flash, 10/100 Base-T Ethernet, and support for 32 IOU modules. There is only one hardware option that is not field installable: the I/O bus type (RS-485 or FTT-10A). All other options may be installed or flash upgraded in the field.

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The NetController II will initially support the following options:

- Infinet node counts (0, 8, 32, 64, 127, or 254)
- Encryption Support
- XDriver port enabling (Comm1, 2, 3, 4, 16)
    - NOTE: Enabling any port for XDriver will permit an XDriver over the Ethernet port.
- Modem (Field Installable)
- Advanced Alarming – SNMP and Redundant Alarming
- Critical Security (including Condition "Threat" Level-based Access Rights)

Receive a higher level of power from the start.

Support for Area Lockdown

It is important to be able to contain potential threats when they are detected. The NetController II can respond to Area Lockdown commands set from the Andover Continuum v1.8 software providing a quick method of sealing off areas. A simple click on 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".

Rapidly "Lockdown" areas when potential threats are detected.

Condition "Threat" Level-based Access Rights

The NetController II can adapt access rights to a change in condition or "threat" levels (as the U.S. Department of Homeland Security refers to them). 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, access is automatically denied. The Condition Level may be set manually or automatically through a program using CyberStation v1.8. A program can even be written to monitor national threat levels and adjust Andover Continuum Condition Levels accordingly.

Although the U.S. government only calls for five condition levels of threat, v1.8 is capable of assigning up to 255 condition levels for local security needs.

Automatically adjust Access Rights when conditions and threat levels change.

Support for HID Corporate-1000 Cards

The NetController II now supports HID's Corporate-1000 cards. The Corporate-1000 standard permits organizations to register with HID to purchase access cards with a single site code that will allow up to one million cards for that one site code. This feature is particularly attractive to enterprise level customers who have multiple sites.

Reduce your site codes to one!

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Web Server and Configuration Web Pages

Like the original NetController, the NetController II supports the hosting of custom web pages directly from the controller. The NetController II has replaced the terminal interface of the NetController with configuration web pages, allowing for easy configuration of controller settings such as the IP address and encryption settings.

Initialize the NetController II from a web page.

XDriver Support

The NetController II is available with XDriver support to third-party devices using 2nd Generation Continuum XDrivers. The BACnet/IP, Modbus/RTU, Modbus/TCP, and Plain English Filter drivers are some of the ones that have been recompiled and tested for the new hardware. In the future, other drivers may be made available for the NetController II.

Link Andover Continuum with third party equipment for a comprehensive solution.

CyberStation support

The NetController II requires that all CyberStation and web.Client products are at v1.8 or greater for full use of all the features that the NetController II has to offer. The NetController II can be used with Continuum v1.74 SP2 but limited to the features that do not require v1.8 (e.g. Area Lockdown, Condition "Threat" Level, HID Corporate-1000 Card support). If you are replacing a NetController with a NetController II, CyberStation will perform a one-time, one-way conversion to the new model number creating the NetController II specific objects in the process.

Simply upgrade to the future.

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Feature History Table

Andover Continuum Feature Comparison	NetController	NetController II
CPU Speed	7.3 MIPS	144 MIPS
	24 MHz	166 MHz
Dynamic Memory	8 MB	128 MB
Available for Application	5 MB (shared)	12 MB (dedicated)
Available for Personnel	5 MB (shared)	48 MB (dedicated)
Flash Memory		32MB
Battery Backed Run-time/Personnel Data		7 days
Maximum Personnel Storage	78,000 (shared)	480,000 (dedicated)
Power Supply Support		
PS120/240-ACxx (xx = 85, 85U, 50, 50U. 50US, 50-S)	•	•
PS-48DCxx (xx = 50, 50U)	•	•
24VAC or 12-28VDC Input*		•
Andover Continuum I/O Module Support	•	•
Comm. Port Type Support		
RS-485	•	•
RS-232	•	•
Modem	•	•
FTT-10a	•	•
RS-422		•
Service Ports		•
Comm. Port Mode Support		
Autoset	•	•
Infinet	•	•
L-Bus	with LA-1 Adapter	•
XDriver	•	•
Printer	•	•
ACC-Lon	•	•
PPP	•	•
Wireless Infinet II Field Bus Support		•
Ethernet		
10 Mbps	•	•
100 Mbps		•
IPSec/IKE Encryption		•
Area Lockdown Support		•
Condition "Threat" Level Support		•
Configuration		
VT100 Terminal Mode Configuration	•	
Web Page Configuration		•
Agency		
NFPA 70, 72	•	•
UL/CUL 916	•	•
UL864	•	
UL294/1076 (with AC-1)	•	
CE	•	•
EMC Directive 89/336/EEC	•	•
FCC CFR 47 Part 15 Class A Emissions	•	•
EN55022 Class A Emissions for European Union	•	•
C-Tick	•	•
WEEE 2002/96/EC	•	•
RoHS		•

* Non-Andover Continuum Power Supply input can only be used for non I/O Module applications.

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