PW-5000 Enclosure Installation Manual

Part Number: PW5K2ENC1 PW5K2ENC2



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Warnings and Cautions

WARNING



Before installation, **TURN OFF** the external circuit breaker which supplies power to the system.

Before connecting the device to the power supply, verify that the output voltage is within specifications of the power supply.

Do not apply power to the system until **after** the installation has been completed. Personal injury or death could occur, and the equipment could be damaged beyond repair if this precaution is not observed!

WARNING

Fire Safety and Liability Notice



Never connect card readers to any critical entry, exit door, barrier, elevator or gate without providing **an alternative exit** in accordance with all fire and life safety codes pertinent to the installation. These fire and safety codes vary from city to city and you must get approval from local fire officials whenever using an electronic product to control a door or other barrier. Use of egress buttons, for example, may be illegal in some cities. In most applications, single action exit without prior knowledge of what to do is a life safety requirement. Always make certain that any required approvals are obtained in writing. DO NOT ACCEPT VERBAL APPROVALS, THEY ARE NOT VALID.

NexWatch never recommends using the PW-5000 or related products as a primary warning or monitoring system. Primary warning or monitoring systems should always meet local fire and safety code requirements. The installer must also test the system on a regular basis by instructing the end user in appropriate daily testing procedures. Failure to test a system regularly could make installer liable for damages to the end user if a problem occurs.

WARNING



EARTH ground all enclosures, for proper installation. **EARTH** ground can be obtained through the power supply or by grounding the cabinet, **BUT NOT BOTH!**

WARNING



Use suppressors on all door strikes. Use S-4 suppressors for installation. NexWatch recommends only DC strikes.

The information in this document is subject to change without notice.

CAUTION

If any damage to the shipment is noticed, a claim must be filed with the responsible commercial carrier.

CAUTION



Electro-static discharge can damage CMOS integrated circuits and modules.

To prevent damage always follow these procedures:

Use static shield packaging and containers to transport all electronic components, including completed reader assemblies.

Handle all ESD sensitive components at an approved static controlled workstation. These workstations consist of a desk mat, floor mat and an ESD wrist strap. Workstations are available from various vendors.

NOTICE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules when wired using metal conduit for the cabling external to the enclosure. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference that will require correction at the users expense.

NOTICE

This document and the data in it shall not be duplicated, used or disclosed to others for procurement or manufacture, except as authorized by and with the written permission of NexWatch, Inc. The information contained in this document or in the product itself is considered the exclusive property and trade secrets of NexWatch. Copyright laws of the United States protect all information in this document or in the software product itself.

NOTICE

Any use of this product is subject to the terms and acceptance of the NexWatch Software Agreement. Please request a copy from NexWatch, and review the agreement carefully.

Disclaimer

Product Liability; Mutual Indemnification

In the event that a Customer receives a claim that a Product or any component thereof has caused personal injury or damage to property of others, Customer shall immediately notify NexWatch in writing of all such claims. NexWatch shall defend or settle such claims and shall indemnify and hold Customer harmless for any costs or damages including reasonable attorneys' fees which Customer may be required to pay as a result of the defective Product or the negligence of NexWatch, its agents, or its employees.

Customer shall hold harmless and indemnify NexWatch from and against all claims, demands, losses and liability arising out of damage to property or injury to persons occasioned by or in connection with the acts or omissions of Customer and its agents and employees, and from and against all claims, demands, losses and liability for costs of fees, including reasonable attorneys' fees, in connection therewith.

Unpacking Procedure

CAUTION

If any damage to the shipment is noticed before unpacking, a claim must be filed with the commercial carrier.

All containers should be opened and unpacked carefully in order to prevent damage to the contents.

The following steps are used to unpack equipment in preparation for installation:

- Open the container and remove the unit(s) and all packing material. Retain the container and all packing materials. They may be used again for reshipment of the equipment, if needed.
- 2. Inspect the contents for shortage. If items are missing, contact the order entry department at 800-227-1667 Option-2.
- 3. Visually check contents. If damage is discovered, perform the following:

If shipping caused damage to the unit, a claim must be filed with the commercial carrier.

If any other defect is apparent, call 800-227-1667 Option-2 for a return authorization.

Shipping Instructions

To ship equipment back to NexWatch:

- Contact the customer service department before returning equipment at 800-227-1667 Option-2. Please have the following available when calling:
 - A description of the problem or reason for returning the equipment.
 - Original purchase order number, invoice number and if the unit is under warranty.
 - A new purchase order number if the unit is not under warranty
- 2. From the customer service department, obtain the Return Authorization Number (RMA).
- 3. Show the RMA number on all packages shipped. Packages, which are not marked with an RMA number will be refused at the factory and returned **COD**.
- 4. Carefully pack the equipment for shipment. Use the original packing material whenever possible.

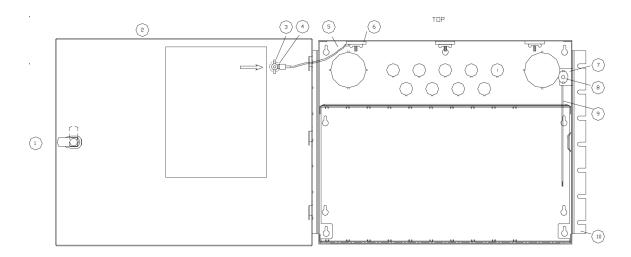
Limited Warranty

All Products sold or licensed by NexWatch include a warranty registration card which must be completed and returned to NexWatch by or on behalf of the end user in order for NexWatch to provide warranty service, repair, credit or exchange. All warranty work shall be handled through Customer which shall notify NexWatch and apply for a Return Merchandise Authorization (RMA) number prior to returning any Product for service, repair, credit or exchange. NexWatch warrants that its Products shall be free from defects in materials and workmanship for a period of two years from date of shipment of the Product to Customer. The warranty on Terminals, Printers, Communications Products and Upgrade kits is 90 days from date of shipment. Satisfaction of this warranty shall be limited to repair or replacement of Products which are defective or defective under normal use. NexWatch' warranty shall not extend to any Product which, upon examination, is determined to be defective as a result of misuse, improper storage, incorrect installation, operation or maintenance, alteration, modification, accident or unusual deterioration of the Product due to physical environments in excess of the limits set forth in Product manuals. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THIS PROVISION. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. NO REPRESENTATION OR WARRANTY OF THE DISTRIBUTOR SHALL EXTEND THE LIABILITY OR RESPONSIBILITY OF THE MANUFACTURER BEYOND THE TERMS OF THIS PROVISION. IN NO EVENT SHALL NEXWATCH BE LIABLE FOR ANY RE-PROCUREMENT COSTS, LOSS OF PROFITS, LOSS OF USE, INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES TO ANY PERSON RESULTING FROM THE USE OF NEXWATCH' PRODUCTS.

Confidentiality

All software, drawings, diagrams, specifications, catalogs, literature, manuals and other materials furnished by NexWatch relating to the design, use and service of Products shall remain confidential and shall constitute proprietary rights of NexWatch, and Customer agrees to treat such information as confidential. Customer shall acquire no rights in the design of Products or the related materials except to use such information solely for the purpose of and only during the time it sells Products. Customer shall not copy the design of any Products or use or cause to be used any Product design or related materials for its own benefit or for the benefit of any other party. The covenants contained in this section shall remain effective throughout the term of this Agreement and thereafter unless specifically waived by NexWatch in writing.

PW-5000 Enclosure



PW5K2ENC1 / PW5K2ENC2

NUMBER	PART NUMBER	EACH	DESCRIPTION
1	PRO22E1LK	1	LOCK WITH RETAINING TANG AND KEY
2	PRO22E1DR	1	REMOVABLE DOOR
3	PRO22E1WN	4	8-32 WINGNUT
4	PRD22E1QC	1	.25 MALE QUICK CONNECT
5	PRD22E1GW	1	DOOR GROUNDING CABLE
6	PR022E1WR	3	7/8' WASHER
7	PRO22E1TH	1	TAMPER SWITCH HOLDER
8	PRO22E1SW	1	TAMPER SWITCH
9	PRO22E1TS	1	TAMPER SWITCH CABLE
10	PRD22E2FL	2	MOUNTING FLANGE FOR 19" RACK AVAILABLE ON PROSSENCE ONLY

Description

The PW-5000 system is designed for maximum efficient use of wall space through the use of a secure metal cabinet (PW5K2ENC1/PW5K2ENC2) that can hold up to nine modules, a 4 amp power supply (PW5K2E1PS) and a self-contained replaceable backup battery.

Typically, one of the nine modules can be an intelligent controller (PW55K1IC/PW3K1IC). The remaining eight slots can be used and configured in a variety of combinations of readers.

supervised inputs, relay outputs and other specialized modules to customize the system for the individual site.

The PW5K2ENC1/PW5K2ENC2 can be configured in any combination of the PW5K1IC, PW3K1IC, PW5K1IN, PW5K1OUT, PW5K1R2 and PW5K1R1. An optional daisy chain cable (PW5K1DCC) provides an RS-485 communication and power bus between the nine modules.

Dimensions

	ENCI	ENCZ
Height:	13.9" [0.353 m]	13.9" [0.353 m]
Width:	17" [0.4318 m]	18.9" [0.48006 m]
Depth:	9" [0.2286 m]	9" [0.2286 m]

ENIC4

Metal thickness: .05" [1.27 mm]

Color: Autumn White

Installation holes: Four hangers in a rectangular pattern 12.1" [0.30734 m] H x 16"

ENICO

[0.40640 m] W

Conduit Knockouts

	½" [0.0127 m]	2" [0.05080 m]
Back:	9	2
Top:	9	2
Right Side:	2	1
Left Side:	2	1

Power Supply

Use PW5K2E1PS or other approved power supply. (See Installation Manual for details).

Maintenance

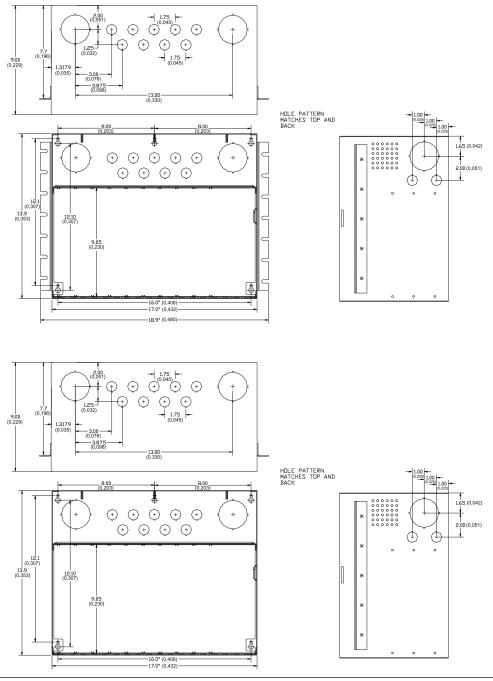
Oil lock once per year. If battery backup is used, change battery every 2 to 2 1/2 years.

Installation Instructions

- 1. Measure and install four mounting screws with heads smaller than .4" [0.01016 m] using proper techniques for the material on which the PW-5000 is being mounted. Use a rectangular screw pattern 12.1" [0.30734 m] H x 16" [0.40640 m] W. Leave the screws exposed approximately 1/2" [0.0127 m].
- 2. Open the door of the enclosure and place the hanging slots over the mounting screws. Push the enclosure over the mounting screws and allow the screws to slide into the slots. Finish tightening the mounting screws to securely hold the enclosure.
- 3. Run all appropriate wiring to the case. Mark each wire as to the panel, location and input type. All cable shields should tie to one of the grounding lugs found at the top of the enclosure.
- 4. Install the required panels into the metal runners. The PW5K2E1PS should be placed in the right most location and installed according to its own instruction manual. The PW5K1IC should be installed next to it as the right-most panel.
- 5. Wire the readers, input and output connections (see wiring guide at end of manual)

- 6. CHECK ALL CONNECTIONS PRIOR TO POWERING UP THE ENCLOSURE AND PANELS.
- 7. The remainder of the panels can be manually wired for power and RS-485 communications using 18 AWG wire. The wires will be daisy-chained from one panel to the next so the power and the communications are wired in parallel. PW5K1DCC is available as an option to be purchased with the equipment. This will reduce wiring time in the field since the power and RS-485 communications between panels is factory-wired in a harness that plugs into the bottom two connectors on each panel. The only field wiring required is the two wiring connections of the red and black 12 VDC cables connecting the PW5K1DCC and the PW5K2E1PS power supply.

Installation Diagram



UL1076 Setup PC Minimum Requirements

Two required:

• 500 Mhz • 128Mb RAM

• 9.1Gb hard drive • CD ROM

• 10/100 TX network card • 17" SVGA Monitor

Peripheral Hardware Requirements

- UL approved network HUB with at least 4 ports.
- UL approved CAT 5 network cable and connectors.
- PW5K1IC/PW3K1IC Controller and accompanying I/O boards.
- Network card (conroller mounted)

Operating System Requirements

- Windows 2000 Server.
- Windows 2000 Service Pack 2 or higher.

Software Packages Required

- Microsoft SQL Server 2000.
- Microsoft SQL Server 2000 Service Pack 1 or higher.
- PROWATCH Corporate Edition Release 4 or higher.

Receiving Unit minimum configuration

- PW5K2ENC1 or PW5K2ENC2 cabinet
- PW5K1E5PS (ALTRONIX AL400 ULX) power supply with 40 AH battery back up
- PW5K1IC/PW3K1IC controller panel
- PW5K1IN input panel
- PW5K1EN Lantronix Ethernet card or pw3k1en Cobox Ethernet card
- PW5K1ENSP Tripp Lite DNET1 Ethernet surge protector

The following priority of incoming signals must be used for UL1076

- 1. Fire alarm (N/A) PROWATCH is not certified for fire alarm supervision
- 2. Hold up / Panic alarm
- 3. Burglar alarm

- 4. Watchman tour
- 5. Fire alarm supervision (N/A) PROWATCH is not certified for fire alarm supervision
- 6. Burglar alarm supervision
- 7. Industrial supervision
- 8. Other supervisory services

NOTE: 2 and 3 may have equal priority: 5 and 6 may have equal priority & 7 and 8 may have equal priority

Other UL1075 Notes

- All alarms and troubles must be acknowledged by attending guard.
- Reports of all alarms and troubles must be printed and stored at least once per week.
- When communications are disrupted from the protected area unit to the Central Supervisory station all panels must be buffered. They must transmit all stored alarms and troubles to the Central Supervisory Station when communications are restored.
- If Cameras are used they must be UL approved. Camera operation was not verified by UL.
- Guard Tour was not verified by UL to NFPA 72 standards
- Exit and Entry Delay can not exceed 60 seconds. Polling of a receiving unit may not exceed 200 seconds

Procedures

- 1. Configure the PC's by installing the Windows 2000 Server.
 - A. PC names should be unique and described with Alpha characters.
 - B. IP addresses should be unique and have the same Subnet Mask.
 - C. Each PC should be of the same workgroup name.
- 2. Install Windows 2000 Service Pack 2 or higher.
- Install SQL Server 2000. Select either NT Authentication or Local System, but be consistent with both PC installations.
- 4. Install SQL Server 2000 Service Pack 1.
- 5. Setup the Lantroix PW5K1EN or PW3K1EN per it's installation manual.
- 6. Create a domain admin user account.
- 7. Install the PROWATCH Software on the MAIN PC.
 - A. Select Full Installation.
 - B. Select SQL for Database.
 - C. Upon reboot of the PC, stop the PROWATCH Service.

- 8. Launch the User Interface. The database should now be programmed to accommodate the PW5K1IC panel and accompanying I/O boards. Refer to the PROWATCH Installation Manual for additional detail. The programming should continue until the system is fully functional and communications have been established. Below are the programming requirements for setting up the PW5K1IC panel.
 - A. TCP/IP channel selection required when adding a new PW5K1IC.
 - B. Unique TCP/IP address is required for assignment to the panel and should match the IP address you programmed through the Ethernet setup software.
 - C. Program all the downstream devices for the hardware so that you will be able to monitor the points and system alarms.
 - D. Once the program is configured, shut down the User Interface and restart the service. Launch the User Interface and verify communications.
 - E. Program a Control Map and/or Floorplans with the hardware. Example: Panels, SIO boards, Inputs, Outputs, readers, Comm Server.

NOTE: Use the SQL Enterprise Manger to backup the programmed database. Refer to the SQL Server Manual for instructions.

CAUTION: If the instructions describing the Data Transformation Services are not followed *exactly* **your database could be overwriten**.

Second PC Installation

Follow Instructions 1 through 4 and 7 through 8 listed on pages 12 and 13.

Enterprise Manager Setup

- 1. Open up Enterprise Manager from the secondary PC, the PC you will use for Redundancy.
- Right-click and expand the SQL Server Group.
- 3. Right-click and expand the Computer Name Group.
- 4. Right-click on the PROWATCH Database and select All Tasks then Import Data.
- Click Next. Verify that the Server is selected as MAIN. The database should be PROWATCH. (The source database)

- 6. Click **Next**. Change the **Server** to match the name of the **LOCAL** PC. The database should be selected as PWNT from that Server. (The destination database).
- 7. Click Next. Select Transfer objects and data between SQL Server database.
- 8. Click Next. Uncheck the Create destination objects box.
- Click Next. Check the Create DTS package for replication box. Also check the Save DTS Package box. Leave the radial button set for SQL Server. This menu saves the replication using a DTS package which will be run when the user wants to keep the database current with the MAIN PC.
- 10. Click Next. Change the name or accept the default for the local package being created. Leave the Server name as LOCAL. Select either NT Authentication or SQL Server Authentication, whichever matches your requirements.
- 11. Click Next. Select finish and DO NOT ABORT THIS PROCESS. This DTS process will import all the data from the MAIN PC to the Redundant PC. When the transfer is successful, click OK.
- 12. If a Publication Wizard opens select **Cancel**. Use the SQL Server Manual to utilize this feature later, however it is not required for this setup. Click **Done** and minimize Enterprise Manager.

Pre-Redundancy Verification:

- 1. Stop all the services on the MAIN PC.
- 2. Start services on the Redundant PC and launch the User Interface. Log in as ADMIN.
- 3. Verify that the data is consistent with the MAIN PC.
- Verify communication with the hardware by using the Alarm View, Control Map or Floorplans.
- 5. Next, close the user interface and stop the services on the **Redundant** PC.

DTS Package Verification

- 1. Maximize Enterprise Manager and locate the Data Transformation Services Folder. Expand the folder and the click on Local Packages.
- 2. Find the Local Package that was created earlier. Double-click on the package to open up the DTS menu. Select Package on the menu bar and then Execute.
- 3. The DTS package will run until it is done transferring the data from the **MAIN** PC to the **REDUNDANT** one.
- 4. Follow steps 1-5 in the Pre-Redundancy Section on page 14.

Interim Steps Before Full Redundancy Verification

- 1. Shut down the **Redundant** PC.
- 2. Restart all the service on the **MAIN** PC. Launch the User Interface and verify that communications have resumed.

Redundant Test Examples

NOTE: Stop watch needed for all three test examples.

Example #1

- 1. **Use the MAIN PC's OFF button to shut it down.** Turn on the **REDUNDANT** PC and start the stop watch.
- 2. Log into NT with Administrator rights.
- 3. Launch the User Interface.
- 4. Open the Event Viewer. When the Returned Panel Communications Normal appears, stop the stop watch. This time represents the amount of time that has passed since the MAIN PC went down.

Example #2

- Unplug the power to the MAIN PC. Turn on the REDUNDANT PC and start the stop watch.
- 2. Log into NT with Administrator rights.
- 3. Launch the User Interface.
- 4. Open the Event Viewer. When the Returned Panel Communications Normal appears, stop the stop watch. This time represents the amount of time that has passed since the **MAIN** PC went down.

Example #3

- 1. Unplug the network cable from the HUB for the MAIN PC. Turn on the REDUN-DANT PC and start the stop watch.
- 2. Log into NT with Administrator rights.
- 3. Launch the User Interface.
- 4. Open the Event Viewer. When the Returned Panel Communications Normal appears, stop the stop watch. This time represents the amount of time that has passed since the **MAIN** PC went off line.

Power Supply Dimensions

Height: 15.5" (39.4cm)

Width: 12" (30.5cm)

Depth: 4.5" (11.43cm)

Color: Grey

Installation holes: Four hangers in a rectangular pattern 13.5" H x 9.825" W (34.3cm

H x 25cm W)

Conduit Knockouts

3/4"

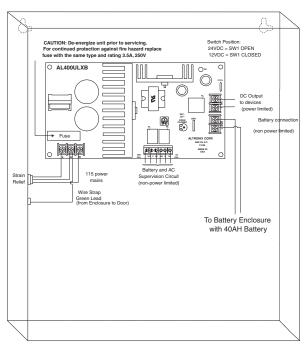
Top: 3

Bottom: 3

Right Side: 3

Left Side: 1

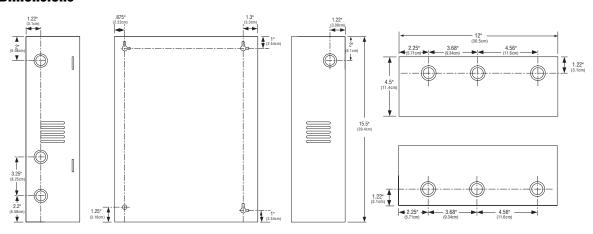
Power Supply Enclosure



Installation Diagram

AL400ULX Assembly diagram for use with the PRO22ENC1 and PRO22ENC2 for UL1076

Dimensions



ALTRONIX AL400 ULX (PW5K1ESPS)

Installation

Installation Instructions

- Install the PW5K1E5PS (Altronix AL400ULX) power supply and battery enclosure per the supplied instructions.
- 2. Measure and install four mounting screws with heads smaller than .4" (1cm) using proper techniques for the material on which the PW5K2ENC1 or PW5K2ENC2 is being mounted. Use a rectangular screw pattern 12.1" H x 16" W (0.307m H x 0.4064m W). Leave the screws exposed approximately 1/2" (1.27cm).
- 3. Open the door of the enclosure and place the hanging slots over the mounting screws. Push the enclosure over the mounting screws and allow the screws to slide into the slots. Finish tightening the mounting screws to securely hold the enclosure.
- 4. Run all appropriate wiring to the case. All cable shields should tie to the grounding lug found on the top of the enclosure.
- Install the required panels into the runners. The PW5K1IC should be placed in the right-most position. The PW5K1EN ethernet card should be mounted on the PRO22IC prior to mounting in the enclosure. See panel instructions.
- 6. Wire the readers, input and output connections.
- CHECK ALL CONNECTIONS PRIOR TO POWERING UP THE ENCLOSURE AND PANELS.
- 8. Wire the 12VDC, AC Fail, Battery Fail and tamper switch from the AL400ULX to the enclosure. Make sure that the power supply is not powered up at the time.
- 9. Wire the 12VDC to the Panel on the far right first making sure that the polarity of the wires are correct.
- 10. Wire the tamper switch, AC Fail and Battery Fail to assigned inputs.
- 11. Wire the PW5K2ENC1 or PW5K2ENC2 tamper switch to the tamper input located on the first panel on the right.
- 12. The remainder of the panels can be manually wired for power and RS-485 communications using 18 AWG wire. The wires will be daisy-chained from one panel to the next so the power and the communications are wired in parallel.
 - They may also be wired using the Auxiliary Rack Harness purchased with the equipment. This will reduce wiring time in the field since the power and RS-485 communications between panels is factory-wired in a harness that plugs into the bottom two connectors on each panel. The only field wiring required is the two wiring connections of the red and black 12VDC cables connecting the Auxiliary Rack Harness and the Rack Power Supply Harness.
- 13. CHECK ALL CONNECTIONS PRIOR TO POWERING UP THE ENCLOSURE AND PANELS.
- 14. Wire the TCP/IP connection to the network HUB.

Cable Specifications

Application	Nexwatch Part No.	AWG	Description	Max. Dist.	Imp.	Сар.
N-485 connections*	NC2442-TN	N/A N/A	Belden 9842 or equivalent	4000' (1200 m)	120Ω	12.8pf/ft
CR-1, TR-1, CI-1, KR-1 Wiegand card readers	NC1861-BL	18	6 conductor shielded	500' (152 m)		
NR-1 magstripe reader	NC1861-BL	18	6 conductor shielded	500' (152 m)		
PR-1-280 Cotag reader: 280 read head to SZC SZC to N-1000-II	NC1861-BL NC1861-BL	18 18	6 conductor shielded 6 conductor shielded	300' (91 m) 500' (152 m)		
PR-2 Hughes reader: scanner to reader reader to N-1000-II	NC1861-BL NC1861-BL	18 18	6 conductor shielded 6 conductor shielded	30' (9 m) 500' (152 m)		
PR-3, PR-5 Indala readers: A-3/A-5 read head to RE-2 RE-2 to N-1000-II	NC18121-YL NC1861-BL	18 18	12 conductor shielded 6 conductor shielded	75' (23 m) 500' (152 m)		
	PR-20 , PR-22 Indala readers:					
A-20/A-22 read head to RE-2 RE-2 to N-1000-II	NC18121-YL NC1861-BL	18 18	12 conductor shielded 6 conductor shielded	75' (23 m) 500' (152 m)		
PR-10, PR-12 Indala readel	rs: NC1861-BL	18	6 conductor shielded	500' (152 m)		
HG-3 hand geometry reader	r: NC1861-BL	18	6 conductor shielded	500' (152 m)		
5 conductor keypad	NC1861-BL	18	6 conductor shielded	500' (152 m)		
Alarm input points	NC 2221-BR	22	2000' (610 m)			
Relay outputs	NC 1821-OR	18	twisted pair, shielded	2000' (610 m)		

NOTE: For Plenum rated cable just add a "P" to NexWatch part number prefix; for example NC1861-BL becomes PNC1861-BL

NexWatch Cable Part Numbers

Part Number	Description	Application	Length
NC1841-GY	18 AWG/4 conductor	reader cable	1,000' [305 m]
NC1861-BL-500	18 AWG/6 conductor	reader cable	500' [152 m]
NC1861-BL	18 AWG/6 conductor	reader cable	1,000' [305 m]
NC18121-YL-500	18 AWG/12 conductor	keypad cable	500' [152 m]
NC18121-YL	18 AWG/12 conductor	keypad cable	1,000' [305 m]
NCNET-1	50 ohm	network cable	1,000' [305 m]
NC2221-BR	22 AWG/2 conductor	alarm cable	1,000' [305 m]
NC1821-OR	18 AWG/2 conductor	power/door cable	1,000' [305 m]
NCC59206-BK	RG-59	video cable	1,000' [305 m]
NCP1841-GY	18 AWG/4 conductor Plenum	reader cable	1,000' [305 m]
NCP1861-BL-500	18 AWG/6 conductor Plenum	reader cable	500' [152 m]
NCP1861-BL	18AWG/6 conductor Plenum	reader cable	1,000' [305 m]
NCP18121-YL	18 AWG/12 conductor Plenum	keypad cable	1,000' [305 m]
NCP18121-YL-500	18 AWG/12 conductor Plenum	keypad cable	500' [152 m]
NCPNET-1	50 ohm Plenum	network cable	1,000' [305 m]
NCP2221-BR	22 AWG/2 conductor Plenum	alarm point cable	1,000' [305 m]
NCP1821-0R	8 AWG/2 conductor Plenum	power/door cable	1,000' [305 m]
NC2442-TN	$24\text{AWG}/120\Omega12.8$ pf RS485 wire	communication cable	1,000' [305 m]
NCP2442-TN	24 AWG/120 Ω 12.8pf RS485 wire	communication cable	1,000' [305 m]



Your Access to the Future

47102 Mission Falls Court • Fremont, CA 94539 USA Ph: (510) 360-7800 • Fax: (510) 360-7820 www.nexwatch.com