



PIXELS CONNECT PTE LTD

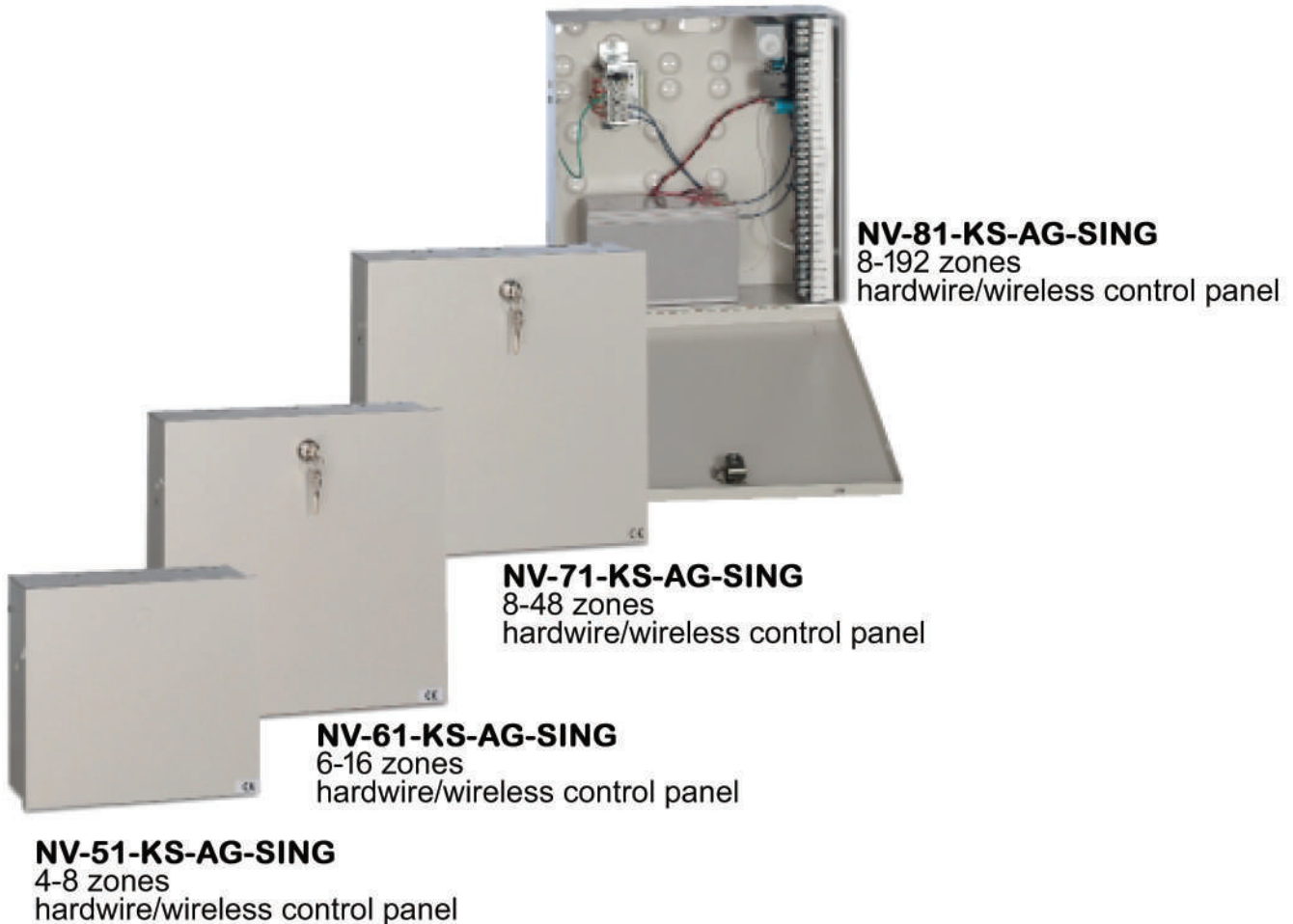
INTRUSION CONTROL PANELS AND GLASS BREAK SENSORS
MAGNETIC CONTACTS, GLASS BREAK SENSORS AND PIR DETECTORS
MAGNETIC CONTACTS
FIRE DETECTORS
SEISMIC DETECTORS AND GLASS BREAK SENSORS
COVERT MINIATURE CAMERAS AND VIDEO TRANSMISSION SYSTEMS





CONTROL PANELS

A complete range of control panels for residential and commercial applications



The NetworX series offers you the following advantages :

One product line that does it all

Can be used on most installations, yet simple enough to learn only once

Convenient: program all panels (from 4 to 192 zones) the same way

Flexible: install multiple modules in one enclosure

Expandable: add zones quickly and cost-effectively

Reliable: leading-edge wireless technology provides optimal performance

Scalable: configure system easily to meet your customer's needs

Keeps inventory lean: all NV products are universally compatible

Slash training time: all NV panels program the same way, from 4-192 zones

A complete range of control panels for residential and commercial applications



COMPARISON TABLE

Features	NV-51-KS-AG-SING	NV-61-KS-AG-SING	NV-71-KS-AG-SING	NV-81-KS-AG-SING
Number of on-board zones	4	6	8	8
Max. number of zones	8	16	48	192
Max. number of hardwire / wireless zones	4 / 8	6 / 16	48 / 48	192 / 192
Max. number of user codes	8	40	99	240
4 digit / 6 digit user codes	8/8	40/40	99/66	240/180
Number of partitions	1 (non partitionable)	2 (incl. common zones)	8	8
Max. events in event log	185	185	185	512
Number of on-board open collectors	2	4	4	4
Number of on-board relays	0	0	2 (1SPDT/ 1NO) (optional)	2 (1 NC/1 NO)
OC/relay outputs supervised (250 mA)	Yes	Yes	No	Yes
Up/downloadable (Windows)	Yes	Yes	Yes	Yes
Max. number of modules	1 (excl. keypads)	3 (excl. keypads)	32 (max. 24 keypads)	32 (max. 32 keypads)
Max. number of keypads (LCD/LED)	8	8 per partition, max. 16	8 per partition, max. 24	8 per partition, max. 24
2-wire smoke detection	No	Yes (aux 4)	Yes (zone 8)	Yes (zone 8; L37,S6)
Fire alarm verification	Yes	Yes	Yes	Yes
Auxiliary power supply on-board	1 A (35 VA)	1 A (35 VA)	1 A (35 VA)	2A (40 VA)
Max. auxiliary power supply	3 A (1 x NX-320)	7 A(3 x NX-320)	9 A(4 x NX-320)	10 A(4 x NX320)
NetworX compatible	Yes	Yes	Yes	Yes
Telephone line monitoring (voltage / current)	No	Yes	Yes	Yes
Configuration groups	20	20	20	30
Battery switch-off (< 9.5 Volt)	No	Yes	Yes	Yes
Battery supervision	Yes	Yes	Yes	Yes
Dynamic battery test	Yes	Yes	Yes	Yes
Max. battery to install	4 Ah (7 Ah)	7 Ah (17 Ah)	7 Ah (17 Ah)	7 Ah (17 Ah)
Can types	1 X-pand-A can (small)	2	2	2
Final set door	Yes	Yes	Yes	Yes
Summer / wintertime	Yes	Yes	Yes	Yes
Early open/late to close	No	No	No	Yes
On-board RS-232	No	No	No	Yes
Integrated home automation protocol	No	No	No	Yes, via RS-232
Zone activity monitoring	No	No	No	Yes
Automatic disarm enable	No	No	No	Yes
TBR21 approved	Yes	Yes	Yes	Yes
Number of telephone numbers	3	3	3	3
Call-back number	Yes	Yes	Yes	Yes
Unattended up/downloading	Yes	Yes	Yes	Yes
Contact ID format	Yes	Yes	Yes	Yes
SIA format	Yes	Yes	Yes	Yes
4+2 format	Yes	Yes	Yes	Yes
Siren tone format	Yes	Yes	Yes	Yes
Customizable formats	Yes	Yes	Yes	Yes
2-way voice (optional via NX-534)	Yes	Yes	Yes	Yes
Voice (to be done)	Yes	Yes	Yes	Yes
X-10 compatible	Yes	Yes	Yes	Yes
Zone doubling or 2R configuration	Yes	Yes	Yes	Yes

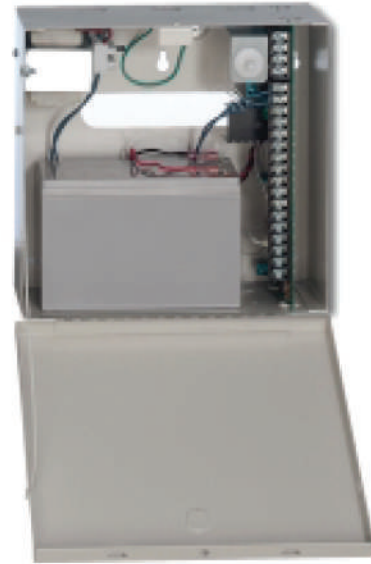


NV-51-KS-AG-SING 4-8 Zone Control Panel

- 4 fully programmable zones
- wireless expansion up to 8 zones
- hardwire/wireless hybrid
- all zones programmable as fire or burglary
- 20 customizable pre-configured zone types
- 8 user code (4 or 6 digits)
- 1 duress code
- up/downloadable with competitor lockout
- modular design with slide in PC boards
- mini X-Pand-A-Can metal enclosure with "tool tray"
- fuseless design
- 2 programmable on-board open collector outputs
- max. 8 keypads
- swinger shutdown
- walk test mode
- siren supervision
- force arm by zone
- automatic arming with auto retry
- fire alarm verification
- answering machine defeat
- built-in siren driver/voltage output
- dynamic battery test
- events reportable to max. 3 phone numbers
- 185 event log
- zone doubling or double E.O.L. configuration (depending on country version)



NV-51-KS-AG-SING
4-8 zones
hardwire/wireless control panel



Battery is optional

Sophisticated security with an economic appeal.

The NV-51-KS-AG-SING brings sophisticated security with an economical appeal to the NetworX family of control/communicators.

Capable of supporting virtually any of the powerful expander modules* from the NetworX family, the NV-51-KS-AG-SING expands the universe of options available to the smaller system user. Wireless expansion, two-way voice and home automation with X-10 are just a few of the available expansion options for this powerful, low-cost control panel.

*Maximum, one module per control panel

Technical specifications:

Supply voltage (typical)	230 Vac, +- 10% 50 Hz
Operating power (nominal)	16.5 Vac/50Hz 25 VA
Current consumption	min. 66 mA
Battery	max. 12 V / 7 Ah
Auxiliary power	500 mA with 25 VA transformer
	1 A with 35 VA transformer
On-board siren driver	112 dB, 2 tones (steady/yelp)
Operating temperature	0° to 50°C
Enclosure dimensions	235 x 212 x 92 (w x h x d)
Weight	2.32 kg (incl. transformer and tamp-

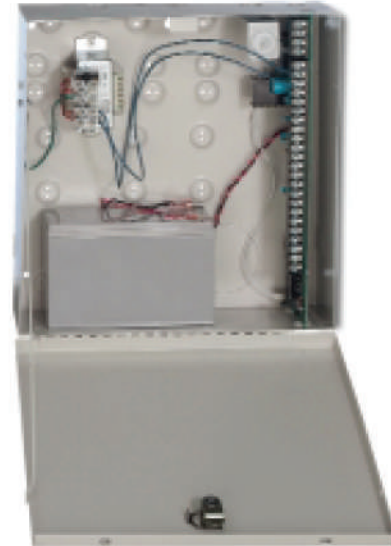


NV-61-KS-AG-SING 6-16 Zone Control Panel

- 6 fully programmable zones
- wireless expansion up to 16 zones
- hardwire/wireless hybrid
- all zones programmable as fire or burglary
- 2 true partitions
- 20 customizable pre-configured zone types
- 40 user codes (4 or 6 digits)
- 1 duress code
- up/downloadable with competitor lockout
- modular design with slide in PC boards
- X-Pand-A-Can metal enclosure with "tool tray"
- fuseless design
- 4 programmable on-board open collector outputs
- maximum 16 keypads per system (8 per partition)
- swinger shutdown
- walk test mode
- siren supervision
- force arm by zone
- automatic arming with auto retry
- fire alarm verification
- 2-wire or 4-wire smoke detectors
- answering machine defeat
- built-in siren driver/voltage output
- dynamic battery test
- voltage and current telephone line monitor
- events reportable to max. 3 phone numbers
- 185 event log
- zone doubling or double E.O.L. configuration (depending on country version)



NV-61-KS-AG-SING
6-16 zones
hardwire/wireless control panel



Battery is optional

Flexible expansion capabilities for mid-size installations.

With available add-on modules to accommodate enhancements such as wireless integration, X-10 home automation and two-way voice, the NV-61-KS-AG-SING provides flexible expansion capabilities for mid-size installations. These multiple systems modules* will slide into the X-Pand-A-Can metal enclosure, with up-front terminal placement and corresponding wire channels for efficient access to all modules.

*Maximum, three modules per control panel

Technical specifications:

Supply voltage (typical)	230 Vac, +- 10% 50 Hz
Operating power (nominal)	16.5 Vac/50 Hz 25 VA
Current consumption	min. 70 mA
Battery	max. 12 V / 17 Ah
Auxiliary power	500 mA with 25 VA transformer 1 A with 35 VA transformer
On-board siren driver	112 dB, 2 tones (steady/yelp)
Operating temperature	0° to 50°C
Enclosure dimensions	290 x 290 x 95 mm (w x h x d)
Weight	3.02 kg (incl. transformer and tamper)



NV-71-KS-AG-SING 8-48 Zone Control Panel

- 8 fully programmable zones, expandable to 48 hardwired zones
- wireless expansion up to 48 zones
- hardwire/wireless hybrid
- all zones programmable as fire or burglary
- 8 true partitions
- 20 customizable pre-configured zone types
- 99 four digit or 66 six digit user codes
- 1 duress code
- up/downloadable with competitor lockout
- modular design with slide in PC boards
- X-Pand-A-Can metal enclosure with "tool tray"
- Optional commercial enclosure for large installations
- fuseless design
- 4 programmable on-board open collector outputs
- 2 optional programmable relays possible (1 SPDT/1 NO)
- maximum 24 keypads per system (8 per partition)
- swinger shutdown
- walk test mode
- siren supervision
- force arm by zone
- automatic arming with auto retry
- fire alarm verification
- 2-wire or 4-wire smoke detectors
- answering machine defeat
- built-in siren driver/voltage output
- dynamic battery test
- voltage and current telephone line monitor
- events reportable to max. 3 phone numbers
- 185 event log
- zone doubling or double E.O.L. configuration (depending on country version)



NV-71-KS-AG-SING
8-48 zones
hardwire/wireless control panel

The flexible system, easily programmable and yet powerful enough to use on most installations.

The installer friendly X-Pand-A-Can metal enclosure allows a complete integration of multiple systems modules* within one enclosure. The up-front terminal placement and corresponding wire channels assure efficient access to all modules at all times. Adding more zones or expanded capability is fast, easy and usually will not require additional wall space or the extra expense of added enclosures.

*Maximum, 32 modules per control panel



Battery is optional

Technical specifications:

Supply voltage (typical)	230 Vac, +- 10% 50 Hz
Operating power (nominal)	16.5 Vac/50 Hz 25 VA
Current consumption	min. 60 mA
Battery	max. 12 V / 17 Ah
Auxiliary power	500 mA with 25 VA transformer 1 A with 35 VA transformer
On-board siren driver	112 dB, 2 tones (steady/yelp)
Operating temperature	0° to 50°C
Enclosure dimensions	290 x 290 x 95 mm (w x h x d) <i>small enclosure</i> 385 x 460 x 119 mm (w x h x d) <i>commercial enclosure</i>
Weight (small enclosure)	3.1 kg (incl. transformer and tamper)
Weight (big enclosure)	8.6 kg (incl. transformer and tamper & stand-offs)

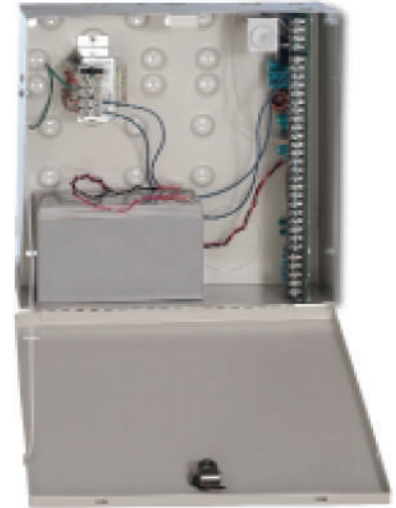


NV-81-KS-AG-SING 8-192 Zone Control Panel

- 8 fully programmable zones, expandable to 192 hard-wired zones
- wireless expansion up to 192 zones
- hardwire/wireless hybrid
- all zones programmable as fire or burglary
- 8 true partitions
- 20 customizable pre-configured zone types
- 240 four digit or 180 six digit user codes
- 1 duress code
- up/downloadable with competitor lockout
- modular design with slide in PC boards
- X-Pand-A-Can metal enclosure with "tool tray"
- Optional commercial enclosure for large installations
- fuseless design
- 4 programmable on-board open collector outputs
- 2 programmable relays (1 NC/1 NO)
- on board RS232 interface for PC/printer connection
- maximum 32 keypads per system (8 per partition)
- swinger shutdown
- walk test mode
- siren supervision
- force arm by zone
- automatic arming with auto retry
- fire alarm verification
- 2-wire or 4-wire smoke detectors
- answering machine defeat
- built-in siren driver/voltage output
- dynamic battery test
- voltage and current telephone line monitor
- events reportable to max. 3 phone numbers
- 512 event log
- zone doubling or double E.O.L. configuration (depending on country version)



NV-81-KS-AG-SING
8-192 zones
hardwire/wireless control panel



Battery is optional

Technical specifications:

Supply voltage (typical)	230 Vac, +- 10% 50 Hz
Operating power (nominal)	16.5 Vac / 50 Hz 40 VA
Current consumption	min. 60 mA
Battery	max. 12 V / 17 Ah
Auxiliary power	2 A with 40 VA transformer
On-board siren driver	112 dB, 2 tones (steady/yelp)
Operating temperature	0° to 50° C
Enclosure dimensions	290 x 290 x 95 mm (w x h x d)
	<i>small enclosure</i>
	385 x 460 x 119 mm (w x h x d)
	<i>commercial enclosure</i>
Weight (small enclosure)	3.9 kg (incl. transformer and tamper)
Weight (big enclosure)	8.6 kg (incl. transformer and tamper & stand-offs)

The most convenient, flexible, durable and user-friendly control panel ever seen.

Featuring sophisticated software which allows up to 240 users to interface with 192 zones and 8 partitions.

The NetworX design allows a fully loaded system to be housed in one single metal enclosure, establishing a logical solution and design response to modular systems. Up to 32 modules can be added to expand the capabilities of the NX8-E.



GENERAL FEATURES

- up to 24 keypads per system
- up to 8 keypads per partition
- maximum keypad distance from control panel: 800 m
- backlit keys with audible feedback
- armed, ready, fire and power LED
- independently adjustable keypad tones
- independently silence keypad tones
- unique "ding dong" chime feature
- three hold-down emergency keys for fire, panic and medical alarm
- audible exit delay countdown
- "silent exit" arming mode
- full keypad supervision
- five "function keys" for simplified operation (stay, chime, exit, bypass, cancel)
- "cancel alarm" button with visual indication
- one button quick arm (stay or away mode) selectable by partition
- programmable duress code
- alarm memory feature
- manual system test for dynamic battery test and/or siren test and/or communicator test
- reset smoke detectors
- set system date and time
- download callback enable
- "service" indication for system diagnostics
- tamper switch for protection against opening and removal
- display of date/time and custom message (2 lines): only on LCD keypads.



NV-200P series



NV-2300P series



NV-2500P series



NV-248P series

All NetworkX control panels can be operated and are fully programmable from any of the NetworkX keypads.

There are a variety of keypads available. Thanks to their special design (with 5 function keys and numerous status LEDs), all keypads are easy to operate. The 5 special function keys simplify the most commonly required functions. The keypads are equipped with screw terminals, allowing an easy connection.

For best comfort, an LCD keypad is the right choice because its display shows customized zone texts.

The following system troubles can be displayed on all keypads, as well as communicated to the central station (if so programmed):

- AC power failure
- Low battery
- Power fault (overcurrent)
- Siren trouble
- Box tamper
- Expander power failure (with NX-320 power supply)
- Expander low battery
- Expander box tamper
- Expander trouble
- Expander overcurrent
- Zone tamper
- Zone low battery (wireless)
- Zone loss of supervision (wireless)
- Zone trouble
- Telephone line cut/trouble
- Failure to communicate
- Loss of system time



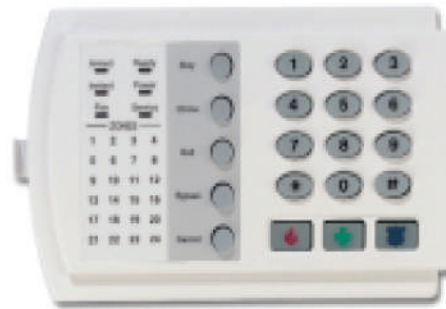
NV-208Q/216Q/256Q : 8 / 16 / 24 zone LED keypad



NV-208Q



NV-216Q



NV-256Q

- backlit keys and full annunciation of system status
- 5 special function keys for simplified operation
- 3 keypad activated emergency alarms (fire, medical, panic)
- full keypad supervision
- "global" or "partition" operation
- compatible with all NetworX panels

Technical specifications:

Operating power (nominal) 12 Vdc via NetworX bus

Current consumption

- min. (quiescent, no lighting) 10 mA

- max. (alarm) 90, 110, 130 mA (8, 16, 24 LEDs)

Operating temperature 0° to 50°C

Dimensions 163 x 102 x 26 mm (w x h x d)

Weight 0.228 kg



NV-2308R/2316R/2324R : 8 / 16 / 24 zone LED design keypad with removable door



NV-2308R



NV-2316R



NV-2324R



NV-2308R with door opened



NV-2308R with door removed

- backlit keys and full annunciation of system status
- 5 special function keys for simplified operation
- 3 keypad activated emergency alarms (fire, medical, panic)
- full keypad supervision
- "global" or "partition" operation
- design keypad with removable door
- compatible with all NetworX panels

Technical specifications:

Operating power (nominal) 12 Vdc via NetworX bus

Current consumption

- min. (quiescent, no lighting) 10 mA

- max. (alarm) 90, 110, 130 mA (8,16,24 LEDs)

Operating temperature 0° to 50°C

Dimensions 158 x 135 x 30 mm (w x h x d)

Weight 0.264 kg



NV-2508S/2516S 8 - 16 zone Vertical LED Keypad with removable door

- backlit keys and full annunciation of system status
- 5 special function keys for simplified operation
- 3 keypad activated emergency alarms (fire, medical, panic)
- full keypad supervision
- "global" or "partition" operation
- vertical LED keypad with removable door
- compatible with all NetworX panels



NV-2516S

NV-2508S



**NV-2508S
with door removed**



**NV-2508S
with door opened**

Technical specifications:

Operating power (nominal)	12 Vdc via NetworX bus
Current consumption	
- min. (quiescent, no lighting)	10 mA
- max. (alarm)	90, 110 mA (8,16 led's)
Operating temperature	0° to 50°C
Dimensions	76 x 145 x 30mm (w x h x d)
Weight	0.220 kg



NV-248V : LCD design keypad with removable door

- Large 2x16 character LCD display
- Adjustable backlit display and full annunciation of system status
- 5 special function keys for simplified operation
- 3 keypad activated emergency alarms (fire, medical, panic)
- full keypad supervision
- "global" or "partition" operation
- design keypad with removable door
- menu driven operation
- language toggle function (choice between 2 languages)
- compatible with all NetworX panels



**NV-248V
with door closed**



**NV-248V
with door removed**



**NV-248V
with door opened**

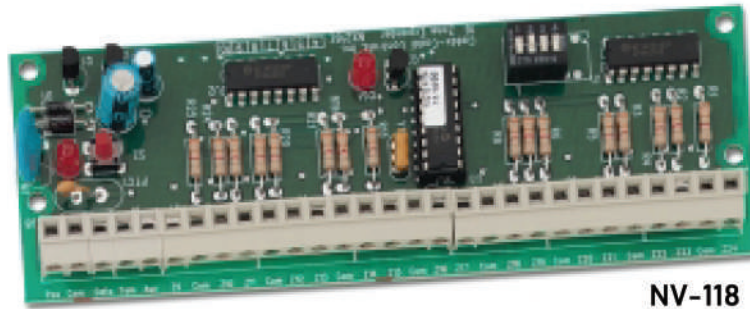
Technical specifications:	
Operating power (nominal)	12 Vdc via NetworX bus
Current consumption	
- min. (quiescent, no lighting)	20 mA
- max. (alarm)	110 mA
Operating temperature	0° to 50°C
Dimensions	158 x 135 x 30 mm (w x h x d)
Weight	0.290 kg



NV-118 - 16 zone expander module for NV-8 NV-118E - 16 zone expander module for NV-8E

- expansion by 8 or 16 zones (max. 5 modules)
- remotely locatable: can be installed up to 800 m from the control panel
- box tamper input
- equipped with a power isolator

The NV-118 is a microprocessor-controlled 16-zone expander for the NV-8 control panel. Up to five NV-118 expanders can be added to the NetworX control panel with a maximum zone count of 48 zones. The NV-118 can be slid into the control panel enclosure or can be installed remotely.



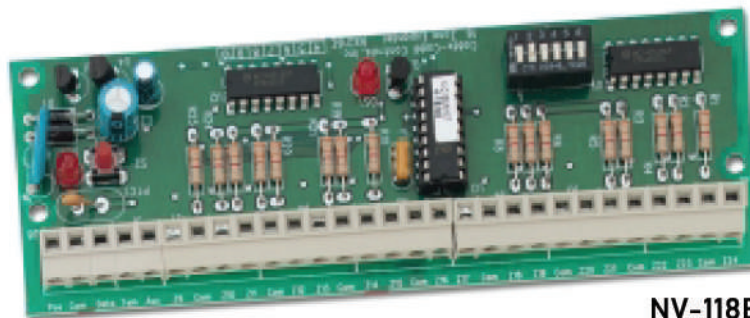
NV-118

Technical specifications:

Operating power (nominal)	12 Vdc via NetworX bus
Current consumption (typical)	34 mA
Auxiliary power output	12 Vdc/ 100 mA
Tamper input	NC contact
Operating temperature	0° to 50 °C
Dimensions PC board	153 x 54 mm
Weight PC board	0.066 kg

- expansion by 8 or 16 zones (max. 23 modules)
- remotely locatable: can be installed up to 800 m from the control panel
- box tamper input
- equipped with a power isolator

The NV-118E is a microprocessor-controlled 16-zone expander for the NV-8E control panel. Up to twenty-three NV-118E expanders can be added to the NV-8E control panel with a maximum zone count of 192 zones. The NV-118E can be slid into the control panel enclosure or can be installed remotely.



NV-118E

Technical specifications:

Operating power (nominal)	12 Vdc via NetworX bus
Current consumption (typical)	34 mA
Auxiliary power output	12 Vdc/ 100 mA
Tamper input	NC contact
Operating temperature	0° to 50 °C
Dimensions PC board	153 x 54 mm
Weight PC board	0.066 kg



NV-550-E/NV-551-E : door/window transmitters NV-580-E : Wireless PIR motion detector

- installs on anything that opens or closes
- 2 internal reed switches allow for vertical or horizontal mounting
- supervised: sends a supervisory signal to receiver every 64 minutes
- input for NO or NC external switch (disable both read switches)
- tamper switch
- compatible with NV-508-E NV-515-E and NV-558-E receivers
- color: off-white (NV-550-E) or brown (NV-551-E)



The door/window transmitters can be installed on doors, windows or virtually anything that opens and closes. During normal application, the sensor transmits open (trip) and close (restore) signals to the control panel receiver. The sensor also sends a supervisory signal every 64 minutes.

Technical specifications:

Power source	3.6 Volt lithium battery
Battery life (typical)	5-8 years
Transmit range	150 m (open air)
Interval supervisory signal transmission	: 64 minutes
Input	NO or NC for external switch
Tamper switch	NC
Operating temperature	0° to 50° C
Color housing	
- NX-450-I	off-white
- NX-451-I	brown
Dimensions	
- contact	82 x 39 x 24 mm
- magnet	40 x 11 x 13 mm
Weight	0.052 kg (including magnet and battery)

- compatible with NV-505-E NV-516-E and NV-558-E receivers
- passive infrared detector: 11 x 12 m
- 3-minute transmitter lock out time after an alarm (extends battery life)
- special walk test mode after tamper activation (60 sec.)
- tamper switch (opening/removal)
- optional pet lens NX-485
- supervisory signal transmitted every 64 minutes
- standard/high sensitivity setting



The wireless PIR motion detector can be used to provide an extra margin of safety. Without the need for wires, it can be placed where ever it is not practical to install door/window sensors on every opening.

Technical specifications:

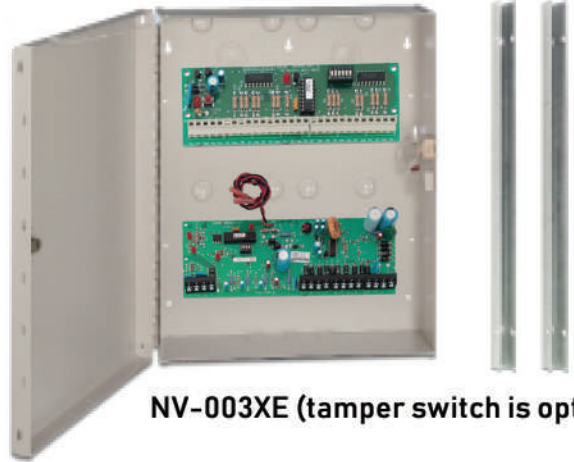
Power source	two 1.5 Vdc AA alkaline batteries
Battery life (typical)	3-4 years
Transmit range	150 m (open air)
Interval supervisory signal transmission	: 64 minutes
Range PIR	11 x 12 m
Sensitivity setting	2 levels (standard/high)
Power safe features:	
- Transmitter lock out time	3 minutes after an alarm
- Special walk test mode	60 sec (after tamper activation)
Tamper switch	detection of opening and removal
Operating temperature	0° to 50° C
Dimensions	73 x 62 x 59 mm
Weight	0.128 kg (incl. batteries)
Color housing	off-white



ENCLOSURES AND ACCESSORIES



NV-002X



NV-003XE (tamper switch is optional)



NV-003X



NV-005-X



NV-600-XE



NV-005X



NV-AC LS

There is a choice between 3 different enclosure types. Depending on the enclosure type, a cam lock or stand-off rails may be included. Please refer to the table underneath for more technical data. Tamper switches and cam locks can be ordered separately, as well as card slides.

Technical specifications:

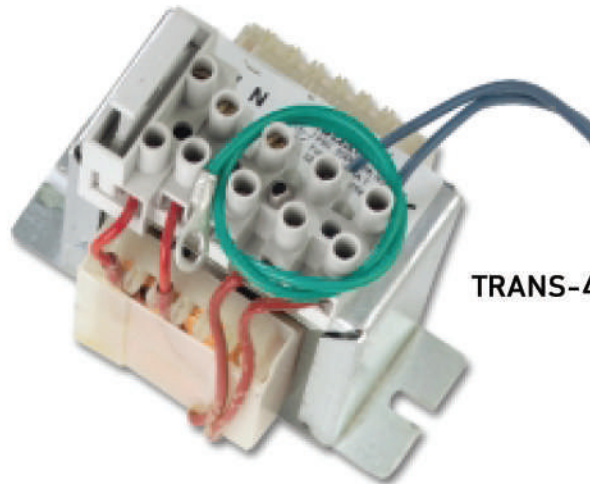
	NV-002X	NV-003	NV-003X	NV-003E
Compatibility	NX-4	NX-6/8/8E	NX-8/8E	NX-8/8E
Cam lock	No	Yes	Yes	Yes
Tamper switch	No	No	No	No
Stand-off rails	No	No	No	Yes
Dimensions (mm)	212 x 235 x 92	290 x 290 x 92	475 x 395 x 130	475 x 395 x 130
Weight (kg)	1.2	2.02	7.1	7.1 (excl. rails)



TRANSFORMERS



TRANS-3A



TRANS-4A

There is a choice of a 35VA and 40VA transformer. Both transformers are CE compliant and come with a fuse terminal block. Please refer to the table below for further technical data.

Technical specifications:	TRANS-3A	TRANS-4A
Compatibility	NV-51/61/71-KS-AG-SING	NV-81/320-KS-AG-SING
Power	35VA	40VA
Fuse terminal block included	Yes	Yes
CE-compliant	Yes	Yes
Dimensions (mm)	86 x 45 x 80	86 x 45 x 80
Weight (kg)	0.75 kg	0.75 kg