NEMTEK
Electric Fencing Products

ELECTRIC FENCING PRODUCTS THAT DELIVER PEACE OF MIND

introduction

The Nemtek group manufactures a full range of energizers and fencing hardware and is a globally known and well-respected company. With its pioneering products it has become the benchmark for the security electric fencing industry.

Nemtek's electric fencing solutions have become the products of choice for, and are being specified by, many governments, local authorities and industries to protect defence infrastructures, correctional facilities and utilities.

Nemtek's success has been achieved by:
- Its continuous innovation, resulting in unique, trailblazing and often patented products and technologies
- The reliability and efficiency of the Nemtek products
- Its fast response to the ever-changing market and customer needs
- Its unparalleled customer service and the continuous support and close working relationships it fosters with its customers

This brochure offers you an overview of the electric fencing products that Nemtek designs and manufactures, including a comprehensive range of electric fencing energizers and a complete range of electric fencing hardware. There are Nemtek products available that can reliably address many different types of fencing needs ranging from residential, retail and commercial, to airports, power stations, prisons, defence facilities and other utilities.

Nemtek's unbeatable experience in the security field has revolutionised the design of game and animal farm energizers. These energizers now offer security features and communication techniques, to not only keep animals in, but to also effectively combat the theft and injury of animals by poachers.

For more details and information on Nemtek products, visit **www.nemtek.com**.

THE REASONS FOR USING AN ELECTRIC FENCE

DETECT, DETER AND DELAY

When a physical barrier, such as a wall or a fence, is combined with an electric fence it will deter attempts to infiltrate the protected perimeter. The electric fence delivers a high voltage shock that is non-lethal to the potential intruder. The Nemtek electric fence energizer has a detecting feature, which produces an alarm when the protected perimeter has been breached or tampered with. By using an electric fence, the attempted break-in of the protected area can be delayed giving additional time for a reaction team to respond to the breach.

NEMTEK™ FAMOUS BRANDS

- Druid™ energizers
- Wizord™ energizers
- Merlin Stealth™ energizers
- Sage™ management systems
- FenceScope™ fence tool

- APT™
- Nemtek Agri
- Omega brackets
- Modulus brackets

Patents:
Nemtek's innovative culture has resulted in the company filing for many patents and trademarks around the world to protect its intellectual property and inventive spirit.

NEMTEK SERVICE SUPPORT AND TRAINING

Nemtek offers support and advice for customer's security needs. This includes our expert advice on the design of your fence and choice of hardware and electronics. Nemtek also offers full training courses at all its branches. Training at many other international destinations is provided through Nemtek partners around the world.

ELECTRIC FENCING PRODUCTS THAT DELIVER PEACE OF MIND

residential

Nemtek's extensive range of quality and innovative security electric fencing products help ensure the safety and well-being of households. Nemtek products are trusted and recommended by many homeowners to offer better security for their families and friends.

Economical, reliable and effective designs have been Nemtek's focus over the past twenty five years ensuring exceptional electric fence performance daily. A dynamic design team develops new and existing products to continually expand the security solutions available to homeowners.

The continually evolving and inventive Nemtek range offers innovative solutions for many residential applications, with numerous choices to ensure that the right product is available to make homes secure without compromising on aesthetics. The large range of wall-top brackets and posts make it easy to secure most walls offering a range of effective and reliable security solutions.

commercial

Nemtek has advanced security solutions for commercial applications. Car and boat show rooms, office and commercial parks, caravan, car and motor home displays, outdoor showrooms, and retail complexes are often targeted by criminals and vandals. Nemtek has identified this need for secure perimeter protection combined with aesthetically-pleasing designs that do not compromise on the effectiveness and the performance of the electric fence.

Modulus bracket and post systems are just some of the trusted solutions which ensure that the security electric fencing products are visually appealing but with no compromise on their effectiveness and reliability.
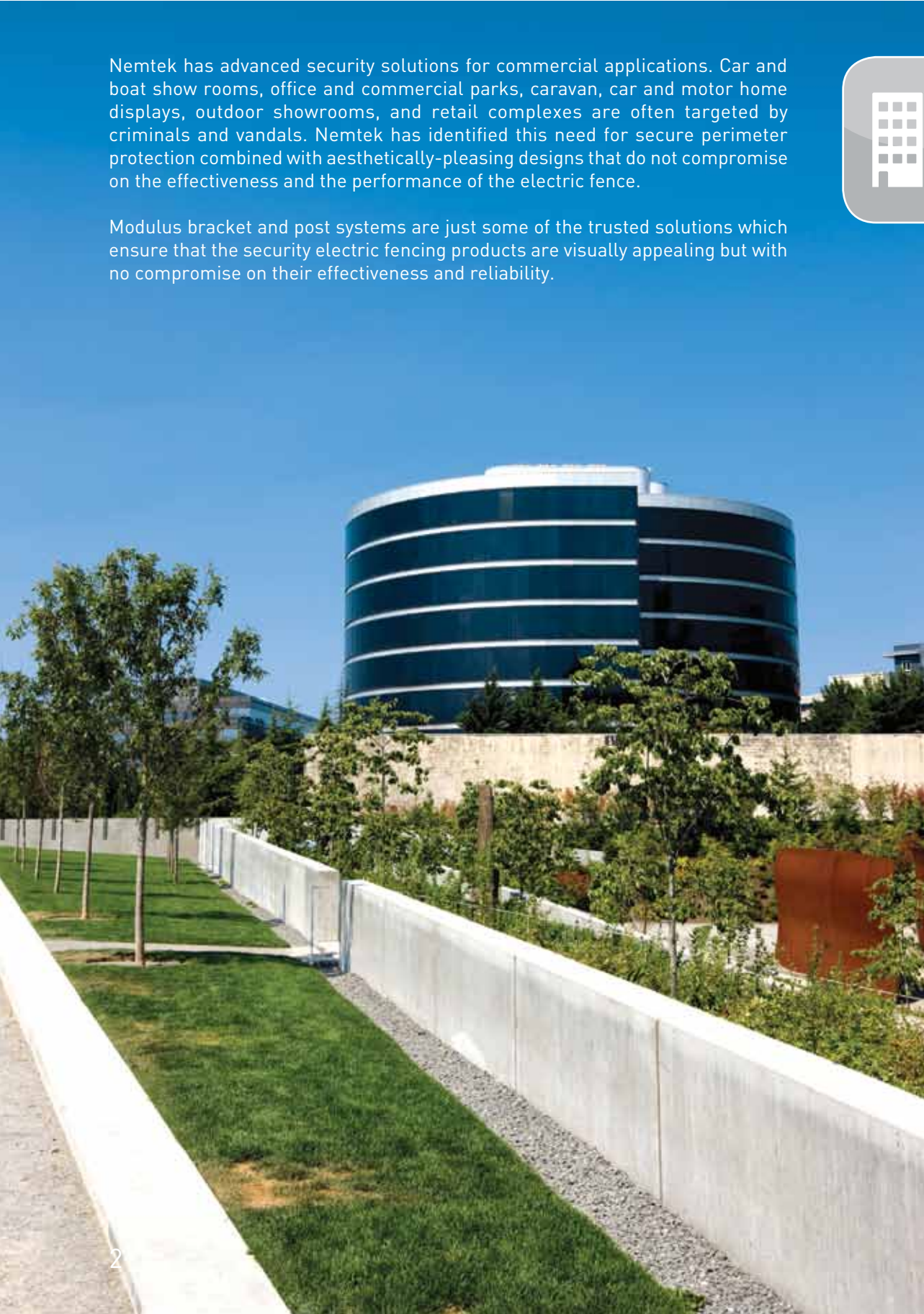
industrial

Solar farms, oil refineries, steel industries and mining sites often need to be protected from intruders, both from a safety and a security point of view. The need to protect large industrial areas has been met by Nemtek's range of full-height fencing solutions. Nemtek systems can be added onto existing fences (piggy back) or can be completely freestanding where no fence exists. In many instances multiple fence zones are required and the modular design of Nemtek energizers makes this easy to achieve.

utilities

Government facilities and critical infrastructures need to be protected. Power distribution facilities, water reservoirs, transport depots, pumping stations and gas pipelines are some of the types of utilities that often need to be protected, as disruptions or interferences can cause large scale implications for governments, cities and the community as a whole.

In many instances protection is required to prevent harm to individuals by stopping them from gaining access to sensitive or dangerous areas such as train depots or even electrical transformers and electrical distribution areas.

The Nemtek range of hardware, software and energizer design will ensure that a reliable security solution is available for these infrastructures.
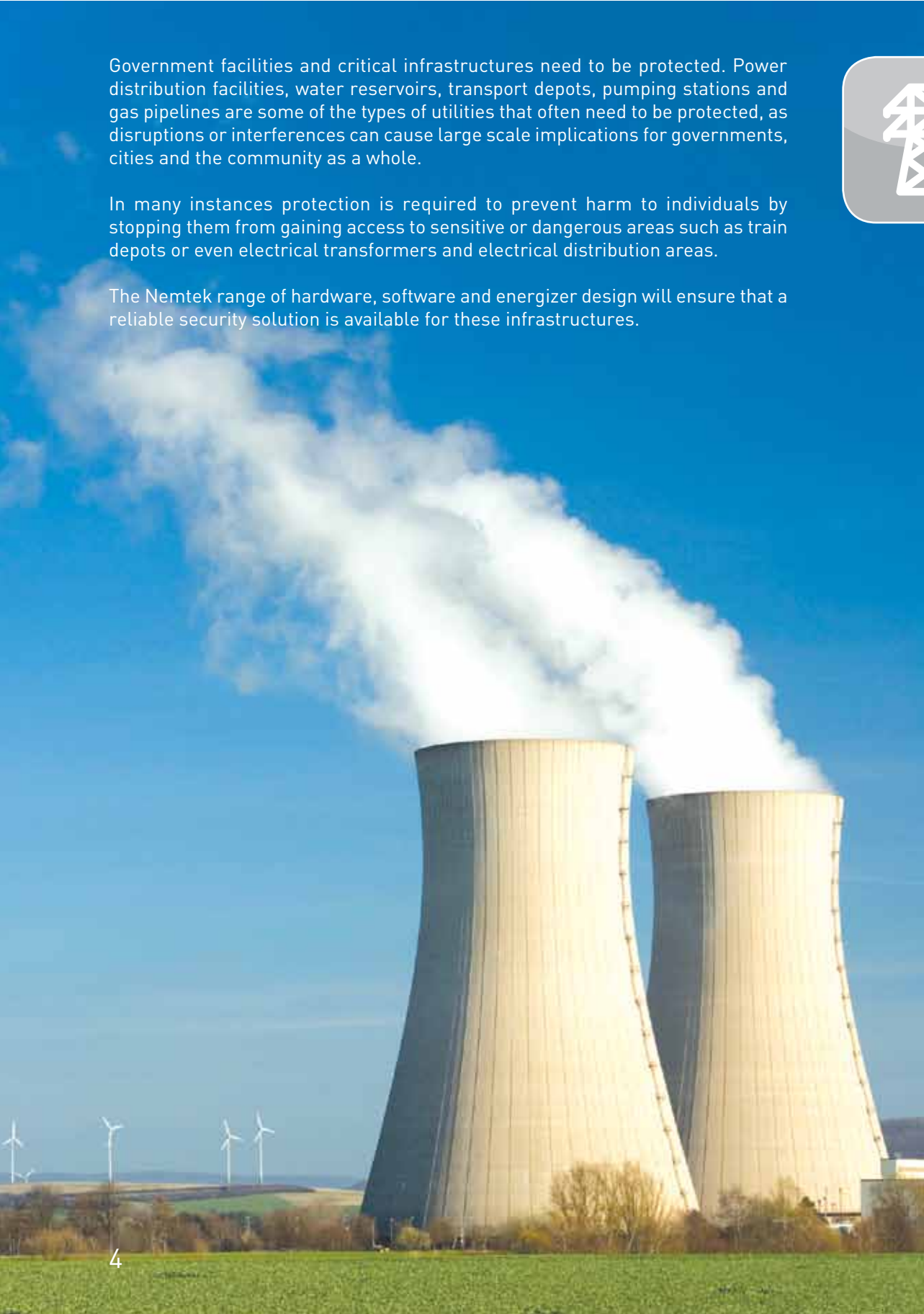
high security

Nemtek manufactures all its products with high security in mind but certain sites require different types of high security solutions.

The Nemtek range of products can be integrated with other technologies such as cameras. These high security sites can also be remotely accessed and monitored with the Nemtek solutions. Our vast experience in these types of sites in many different parts of the world have made Nemtek a trusted source for products and knowledge to address most high security needs.

These sites include prisons, airports, naval bases, border fences, embassies, mints and money distribution points.

game

Traditionally electric fence energizers for animal farming control did not have a fence monitor to detect a break in the fence.

The detecting feature has become an integral part of game and animal control. It allows the user to monitor the condition of the fence at the energizer without having to patrol the fence regularly, thus saving time and money.

Poaching of game is an additional problem faced by game reserves and game farms, but the security features offered by the Nemtek electric fencing energizers can assist in this battle.

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GENERAL INFORMATION

WARRANTIES: Energizer electronics come with a two-year warranty, subject to our standard terms and conditions as set out on the Nemtek website.

COMPLIANCE: Nemtek energizers conform to international electric fencing safety standards. Please refer to the energizer section of the Nemtek website for more details **(www.nemtek.com)**.

SPECIFICATIONS: Product details can change without prior notice. This brochure is for general information and marketing purposes only.

TERMS AND CONDITIONS OF SALE: Sales of all Nemtek products are done subject to our standard terms and conditions of sale and our distribution agreements. Nemtek's terms and conditions of sale are available at all Nemtek branches.

Authorised distributors and representative offices are available around the world, please contact us at **exports1@nemtek.co.za** for further information.

TRAINING COURSES: Nemtek offers training courses for beginners and advanced training on the principles of electric fencing and also on all the products that it manufactures. The scheduled course dates are displayed on our website on **www.nemtek.co.za** or email us at **trainingoffice@nemtek.com**.

For international training courses, please email **exports1@nemtek.co.za**.

ENERGIZERS

ENERGIZERS: SINGLE ZONE

WIZORD

The Wizord energizers have been field tested for many years and boast unsurpassed reliability. Simple to install and easy to maintain.

SINGLE ZONE

2J OUTPUT

WIZORD 2i (E-WIZ2I)

- Built-in alarm monitors tampering or faults on the high voltage and earth fence wires
- Connectable to armed response radio or GSM module
- Lightning and power surge protection
- Intelligent power saving to extend battery life
- Easy-to-use tag included for controlling the energizer
- Powered by 230V mains and includes built-in battery for back-up power
- Built-in gate alarm input to monitor if the gate is open or closed

SINGLE ZONE

3.7J OUTPUT

WIZORD 4i (E-WIZ4I)

- Built-in alarm monitors tampering or faults on the high voltage and earth fence wires
- Connectable to armed response radio or GSM module
- Lightning and power surge protection
- Intelligent power saving to extend battery life
- Easy-to-use tag included for controlling the energizer
- Powered by 230V mains and includes built-in battery for back-up power
- Built-in gate alarm input to monitor if the gate is open or closed

MERLIN 4i

The Merlin 4i energizers have been field tested for many years and boast unsurpassed reliability. Simple to install and easy to maintain.

SINGLE ZONE

3.7J OUTPUT

MERLIN 4i WITH KEYPAD (E-MER4I)

The Merlin 4i includes a keypad for controlling and programming the energizer. The energizer can be installed near the fence and the keypad can be located where it is most convenient for the user. This allows the user to control the energizer remotely, with up to four keypads (EE-MKP).

- Built-in alarm monitors tampering or faults on the high voltage and earth fence wires
- Connectable to armed response radio or GSM module
- Lightning and power surge protection
- Intelligent power saving to extend battery life
- Powered by 230V mains and includes built-in battery for back-up power
- Built-in gate alarm input to monitor if the gate is open or closed
- Gate chime available to alert that the gate has been opened or closed
- The fence voltage outputs can be adjusted using the keypad
- The siren and gate outputs can be bypassed using the keypad

MERLIN STEALTH SINGLE ZONE

The Merlin Stealth single zone energizers are a powerful range that can be used for residential to high-end security needs. These energizers can be controlled by a tag and/or a keypad. The energizers can be programmed to offer customised solutions.

SINGLE ZONE

4.8J OUTPUT

MERLIN STEALTH M15S (E-M15S/V1)

- Built-in alarm monitors tampering or faults on the high voltage and earth fence wires
- Connectable to armed response radio or GSM module
- Lightning and power surge protection
- Intelligent power saving to extend battery life
- Easy-to-use tag included for controlling the energizer
- Optional keypad for controlling and programming the energizer. This allows the user to control the energizer remotely, with up to four keypads
- Powered by 230V mains and includes built-in battery for back-up power
- Two built-in gate alarm inputs to monitor if the gates are open or closed

SINGLE ZONE

7.6J OUTPUT

MERLIN STEALTH M18S (E-M18S/V1)

- Built-in alarm monitors tampering or faults on the high voltage and earth fence wires
- Connectable to armed response radio or GSM module
- Lightning and power surge protection
- Intelligent power saving to extend battery life
- Easy-to-use tag included for controlling the energizer
- Optional keypad for controlling and programming the energizer. This allows the user to control the energizer remotely, with up to four keypads
- Powered by 230V mains and includes built-in battery for back-up power
- Two built-in gate alarm inputs to monitor if the gates are open or closed

SINGLE ZONE

MERLIN STEALTH SINGLE ZONE KEYPAD (EE-M1Z2GK)

The Merlin Stealth energizer can also be controlled and programmed with the optional LED single-zone keypad.

- The energizer can be installed near the fence and the keypad can be located where it is most convenient for the user
- Up to four keypads can be connected to one energizer
- The fence voltage outputs can be adjusted using the keypad
- The siren and gate outputs can be bypassed using the keypad

ENERGIZERS: SINGLE ZONE WITH LCD DISPLAY

DRUID

The LCD display in the Druid range makes information on the status and performance of the energizer quick and easy to read. Using the Adaptive Power Technology (APT), pioneered by Nemtek, these energizers offer a unique technology to detect how much power a fence can accept and handle before it starts to arc and waste energy. This maximises the power on the fence and minimises false alarms.

SINGLE ZONE

3J OUTPUT

APT

DRUID 13LCD (E-DRUID/13/LCD)

- Built-in alarm monitors tampering or faults on the high voltage and earth fence wires
- Connectable to armed response radio or GSM module
- Lightning and power surge protection
- Intelligent power saving to extend battery life
- Easy-to-use tag included for controlling the energizer
- Walk test mode for easy fence testing
- The LCD background colour changes to easily identify the fence condition
- Powered by 230V mains and includes built-in battery for back-up power
- Built-in gate alarm input to monitor if the gate is open or closed
- Optional keypad for controlling and programming the energizer. This allows the user to control the energizer remotely, with up to two keypads

SINGLE ZONE

4.6J OUTPUT

APT

DRUID 15LCD (E-DRUID/15/LCD)

- Built-in alarm monitors tampering or faults on the high voltage and earth fence wires
- Connectable to armed response radio or GSM module
- Lightning and power surge protection
- Intelligent power saving to extend battery life
- Easy-to-use tag included for controlling the energizer
- Walk test mode for easy fence testing
- The LCD background colour changes to easily identify the fence condition
- Powered by 230V mains and includes built-in battery for back-up power
- Built-in gate alarm input to monitor if the gate is open or closed
- Optional keypad for controlling and programming the energizer. This allows the user to control the energizer remotely, with up to two keypads

SINGLE ZONE

7.6J OUTPUT

APT

DRUID 18LCD (E-DRUID/18/LCD)

- Ideal choice for long distance series electric fencing systems that require monitoring
- Built-in alarm monitors tampering or faults on the high voltage and earth fence wires
- Connectable to armed response radio or GSM module
- Lightning and power surge protection
- Intelligent power saving to extend battery life
- Easy-to-use tag included for controlling the energizer
- Walk test mode for easy fence testing
- The LCD background colour changes to easily identify the fence condition
- Powered by 230V mains and includes built-in battery for back-up power
- Built-in gate alarm input to monitor if the gate is open or closed
- Optional keypad for controlling and programming the energizer. This allows the user to control the energizer remotely, with up to two keypads

DRUID 114 (E-DRUID/114/LCD)

13.8J OUTPUT

APT

- Ideal choice for long-distance parallel electric fencing systems that require monitoring. This energizer is ideal for controlling game and wild animals
- Built-in alarm that sounds if there is fence tampering or a fence fault
- Connectable to armed response radio or GSM module
- Walk test mode for easy fence testing
- The LCD background colour changes to easily identify the fence condition
- Easy-to-use tag switch included for controlling the energizer
- Powered by 230V mains and includes built-in battery for back-up power
- A solar panel and external regulator with a larger deep-cycle battery can be added when mains power is not available
- Lightning and power surge protection
- Optional keypad for controlling and programming the energizer. This allows the user to control the energizer remotely, with up to two keypads

DRUID SINGLE ZONE KEYPAD (EE-DR.LCD/KP)

SINGLE ZONE

The Druid energizer can also be controlled and programmed with the optional LED single-zone keypad.

- The energizer can be installed near the fence and the keypad can be located where it is most convenient for the user
- Up to two keypads can be connected to one energizer
- The fence voltage outputs can be adjusted using the keypad
- The siren and gate outputs can be bypassed using the keypad

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ENERGIZERS: TWO ZONE

MERLIN STEALTH TWO ZONE

The Merlin Stealth two-zone energizers is a powerful range that can be used for residential to high-end security needs and is a cost-effective solution where more than one zone is required. Separation of the fence into zones allows easy identification of the zone affected by fence faults or tampering. Smart design allows the maximum amount of energy to be transferred to the zone that needs it, yet the combined energy of the two zones will not exceed the legal maximum permitted. These energizers can be controlled by a tag and/or a keypad. The energizers can be programmed to offer customised solutions.

TWO ZONE

7.6J OUTPUT

MERLIN STEALTH M28S-X (E-M28S/V1)

- Built-in alarm monitors tampering or faults on the high voltage and earth fence wires
- Connectable to armed response radio or GSM module
- Lightning and power surge protection
- Intelligent power saving to extend battery life
- Easy-to-use tag included for controlling the energizer
- Optional keypad for controlling and programming the energizer. This allows the user to control the energizer remotely, with up to four keypads
- Powered by 230V mains and includes built-in battery for back-up power
- Two built-in gate alarm inputs to monitor if the gates are open or closed

The Merlin Stealth M25S and M28S energizers can be used in a multi-zone system and can be networked.

TWO ZONE

4.8J OUTPUT

NET-WORK

SYNCHRO-NISE

MERLIN STEALTH M25S (E-M25S/16/V1)

- Can be expanded into a multi-zone system
- Built-in alarm monitors tampering or faults on the high voltage and earth fence wires
- Connectable to armed response radio or GSM module
- Lightning and power surge protection
- Intelligent power saving to extend battery life
- Easy-to-use tag included for controlling the energizer
- Optional keypad for controlling and programming the energizer. This allows the user to control the energizer remotely, with up to four keypads
- Powered by 230V mains and includes built in battery for back-up power
- Two built-in gate alarm inputs to monitor if the gates are open or closed

MERLIN STEALTH M28S (E-M28S/16/V1)

TWO ZONE

7.6J OUTPUT

NET-WORK

SYNCHRO-NISE

- Can be expanded into a multi-zone system
- Built-in alarm monitors tampering or faults on the high voltage and earth fence wires
- Connectable to armed response radio or GSM module
- Lightning and power surge protection
- Intelligent power saving to extend battery life
- Easy-to-use tag included for controlling the energizer
- Optional keypad for controlling and programming the energizer. This allows the user to control the energizer remotely, with up to four keypads
- Powered by 230V mains and includes built-in battery for back-up power
- Two built-in gate alarm inputs to monitor if the gates are open or closed

MERLIN STEALTH TWO-ZONE KEYPAD (EE-M2ZKP)

TWO ZONE

- The Merlin Stealth two-zone energizer can also be controlled and programmed with the optional LED two-zone keypad
- The energizer can be installed near the fence and the keypad can be located where it is most convenient for the user
- Up to four keypads can be connected to one energizer
- The fence voltage outputs can be adjusted using the keypad
- The siren and gate outputs can be bypassed using the keypad

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ENERGIZERS: TWO AND FOUR ZONE WITH LCD DISPLAY

DRUID

The LCD display in the Druid range makes information on the status and performance of the energizer quick and easy to read. Using the Adaptive Power Technology (APT), pioneered by Nemtek, these energizers offer a unique technology to detect how much power a fence can accept and handle before it starts to arc and waste energy. This maximises the power on the fence and minimises false alarms. Synchronisation between energizers can be achieved by using traditional network cabling or by the Druid synchronisation modules which use orbiting satellites and eliminate the need for cabling between the energizers.

2 & 4 ZONE

2 x 2.4J OUTPUT

APT

ALARM SENSOR MODE

NET-WORK

SYNCHRO-NISE

DRUID 25LCD (E-DRUID/25/LCD)

- Two independently monitored and controlled zones
- Each zone can be set independently to be on/off or in high/low voltage modes
- Can be programmed into alarm sensor mode allowing it to be integrated into a separate burglar alarm system
- Four zones can easily be created by linking two Druid 25LCD energizers together using the Druid four-zone keypad
- Built-in alarm monitors tampering or faults on the high voltage and earth fence wires
- Connectable to armed response radio or GSM module
- Lightning and power surge protection
- Intelligent power saving to extend battery life
- Powered by 230V mains and includes a built-in battery for back-up power
- Built-in gate alarm input to monitor if the gate is open or closed
- Optional keypad for controlling and programming the energizer. This allows the user to control the energizer remotely, with up to two keypads
- The relay expansion card can be used to increase the number of information outputs from the energizer
- Walk test mode for easy fence testing
- The LCD background colour changes to easily identify the fence condition

2 & 4 ZONE

2 x 3.7J OUTPUT

APT

ALARM SENSOR MODE

NET-WORK

SYNCHRO-NISE

DRUID 28LCD (E-DRUID/28/LCD)

- Two independently monitored and controlled zones
- Each zone can be set independently to be on/off or in high/low voltage modes
- Can be programmed into alarm sensor mode allowing it to be integrated into a separate burglar alarm system
- Four zones can easily be created by linking two Druid 28LCD energizers together using the Druid four-zone keypad
- Built-in alarm monitors tampering or faults on the high voltage and earth fence wires
- Connectable to armed response radio or GSM module
- Lightning and power surge protection
- Intelligent power saving to extend battery life
- Powered by 230V mains and includes a built-in battery for back-up power
- Built-in gate alarm input to monitor if the gate is open or closed
- Optional keypad for controlling and programming the energizer. This allows the user to control the energizer remotely, with up to two keypads
- The relay expansion card can be used to increase the number of information inputs and outputs from the energizer
- Walk test mode for easy fence testing
- The LCD background colour changes to easily identify the fence condition

DRUID TWO-ZONE KEYPAD (EE-DR.LCD/KP/2Z)

TWO ZONE

- The Druid two-zone energizer can also be controlled and programmed with the optional LED two-zone keypad
- The energizer can be installed near the fence and the keypad can be located where it is most convenient for the user
- Up to two keypads can be connected to one energizer
- The fence voltage outputs can be adjusted using the keypad
- The siren and gate outputs can be bypassed using the keypad

DRUID FOUR-ZONE KEYPAD (EE-DR.LCD/KP/4Z)

FOUR ZONE

- Two Druid two-zone energizers can be controlled and programmed with the optional LED four-zone keypad to form a four-zone system
- The energizers can be installed near the fence and the keypad can be located where it is most convenient for the user
- Up to two keypads can be connected
- The fence voltage outputs can be adjusted using the keypad
- The siren and gate outputs can be bypassed using the keypad

DRUID RELAY EXPANSION CARD (EE-LCD2X/REL)

- The expansion card can be used to increase the number of information inputs and outputs from the energizer
- It can be installed in the energizer housing
- It has four inputs which can be used to switch the individual zones on/off and to switch between high and low voltage for each zone
- It has ten relay outputs which can be used to indicate:
  – Mains failure
  – Battery low
  – Zone 1 and zone 2 alarms
  – Zone 1 and zone 2 check fence alarms
  – Service conditions
  – Tamper conditions
  – Communication timeouts

DRUID SYNCRONISATION MODULE (EE-LCD2X/GPSYNC)

SYNCHRO-NISE

Synchronisation between energizers has traditionally been done by physically connecting the energizers through wiring. The ground-breaking Nemtek synchronisation module synchronises the energizers using satellites; this eliminates the need for wiring between energizers, saving on costs and making the installation quicker and easier.

- Easy to install and ready to use
- Water-tight housing for external installation

TAG (EE-WIZ4/MAGNET)

- Switches the energizers on and off
- Fits onto a key ring
- All Nemtek energizers can be switched on and off, and reset using the Nemtek tag

MULTI-ZONE SYSTEMS

Nemtek offers a variety of solutions for multi-energizer systems. These solutions can be tailored to suit a wide variety of specific needs. The selection will depend on the site, the level of security required and the type of communication link or interface required with other systems on the site.
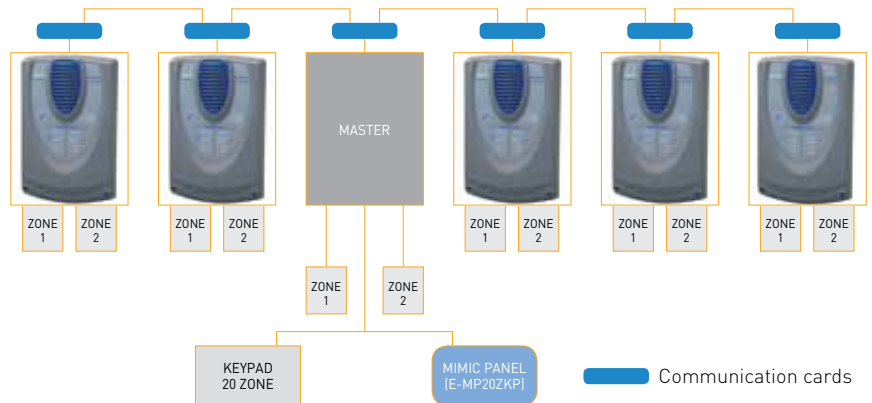
MERLIN STEALTH MASTER SYSTEM

20 ZONE

4.8/7.6J OUTPUT

MERLIN STEALTH MASTER WITH KEYPAD

- The Master is a two-zone energizer which can be set up to control up to nine extra two-zone Merlin Stealth energizers, providing up to 20 zones
- The control of this system is done through the included 20-zone LED keypad
- Communication and controls between all the energizers are achieved via communication cards
- There are two available models of Master energizers:
  - 4.8J (E-M25SM/V1)
  - 7.6J (E-M28SM/V1)

| ZONE 1 | ZONE 2 | ZONE 1 | ZONE 2 | MASTER | ZONE 1 | ZONE 2 | ZONE 1 | ZONE 2 | ZONE 1 | ZONE 2 |

ZONE 1   ZONE 2

KEYPAD 20 ZONE   MIMIC PANEL (E-MP20ZKP)

Communication cards

MIMIC PANEL MASTER SLAVE (E-MP20ZKP)

An optional relay expansion mimic panel can be added to the Master system to increase the number of information outputs.

- 16 outputs, programmable via the 20-zone keypad
- Up to two mimic panels can be added
- Battery back-up

NEMTEK MERLIN FENCE PROBE SOFTWARE WITH SAGE

320 ZONE

MULTI SITE

PC CONTROL

REMOTE ACCESS

NEMTEK MERLIN FENCE PROBE SOFTWARE

Nemtek Merlin Fence Probe is software that provides computer interaction with one or more electric fence sites. Visual map images of the electric fences and their zones can be displayed on a computer screen. This software allows a site to be controlled from a remote location.

- Can control a multitude of sites. Each site will require a Sage Controller
- The status of each fence zone can be monitored and recorded and commands can be sent to the energizers
- Setup Wizard makes configuration easy
- Logs containing system details are recorded
- Fence Probe software is available in 10, 20, 40, 80, 160 or 320 zone packages. These zones are not limited to one specific site but can be located on various sites

64 ZONE

SAGE CONTROLLER (E-FG7/SAGE)

- The Nemtek Merlin Sage is a controller that interfaces the Nemtek Merlin Fence Probe software with the energizers. This is achieved through TCP/IP connectivity
- The Sage can control up to 32 two-zone Merlin Stealth energizers providing up to 64 zones

PC CONTROL

SITE 1
SAGE CONTROLLER 1

| ZONE 1 | ZONE 2 | ZONE 1 | ZONE 2 | ZONE 1 | ZONE 2 |

SITE 2
SAGE CONTROLLER 2

| ZONE 1 | ZONE 2 | ZONE 1 | ZONE 2 | ZONE 1 | ZONE 2 |

SITE 3
SAGE CONTROLLER 3

| ZONE 1 | ZONE 2 | ZONE 1 | ZONE 2 | ZONE 1 | ZONE 2 |
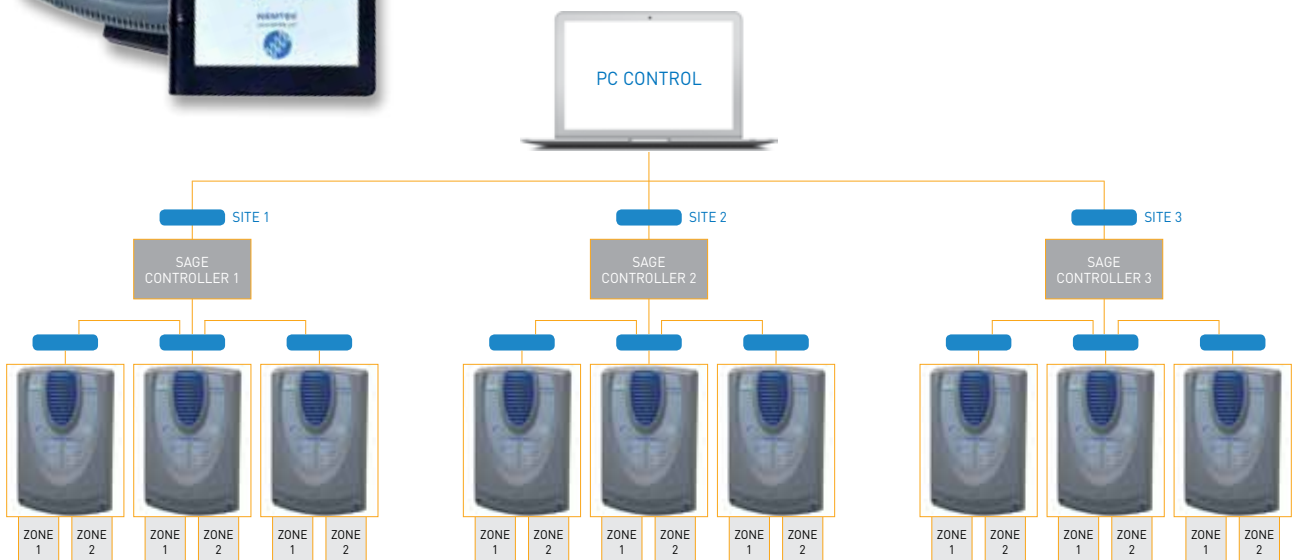
Communication cards

MIMIC PANEL SAGE (E-MPSN/RS485)

An optional relay expansion mimic panel can be added to the Sage Controller to increase the number of information zone outputs.

- 16 pre-programmed zone relay outputs per mimic
- Up to four mimic panels can be added
- Battery back-up

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DRUID FG7 SYSTEM

DRUID CONTROLLER FG7 (E-FG7/DRUID)

64 ZONE

- The Druid Controller FG7 is a seven-inch LCD screen with touchpad that can be used to control a number of energizers and network relay cards
- Up to 32 Druid two-zone energizers providing up to 64 zones can be controlled
- Up to 31 Nemtek network IO cards can be controlled
- Graphic image of the site with zones and the fence and energizer conditions can be displayed on the LCD screen
- Commands can be sent to the energizers using the touchpad
- Logs containing system details are recorded
- Allows for three different types of users with different access levels to be set up
- Can be configured to allow TCP/IP connectivity for integration with third-party software and systems
- Can provide functionality and control of the system during a power failure

Diagram 1:
Daisy chain configuration

PC CONTROL

FG7 TOUCHPAD

HDMI*

ZONE 1 | ZONE 2 | ZONE 1 | ZONE 2 | ZONE 1 | ZONE 2 | ZONE 1 | ZONE 2
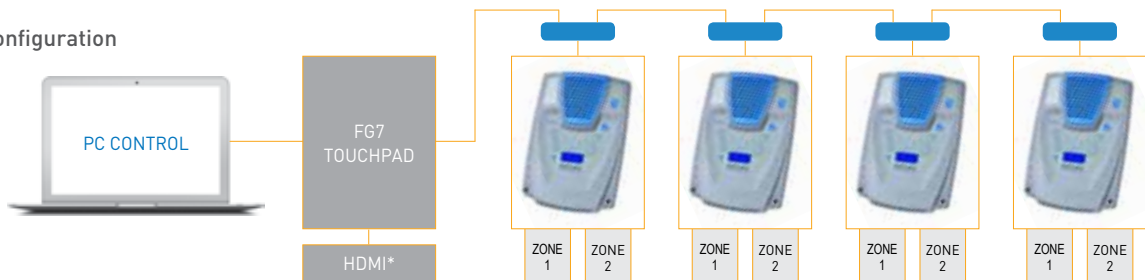
Diagram 2:
Star configuration

PC CONTROL

DRUID NETWORK IO CARD

FG7 TOUCHPAD

ZONE 1 | ZONE 2

Communication cards

Network switch

Microwave link
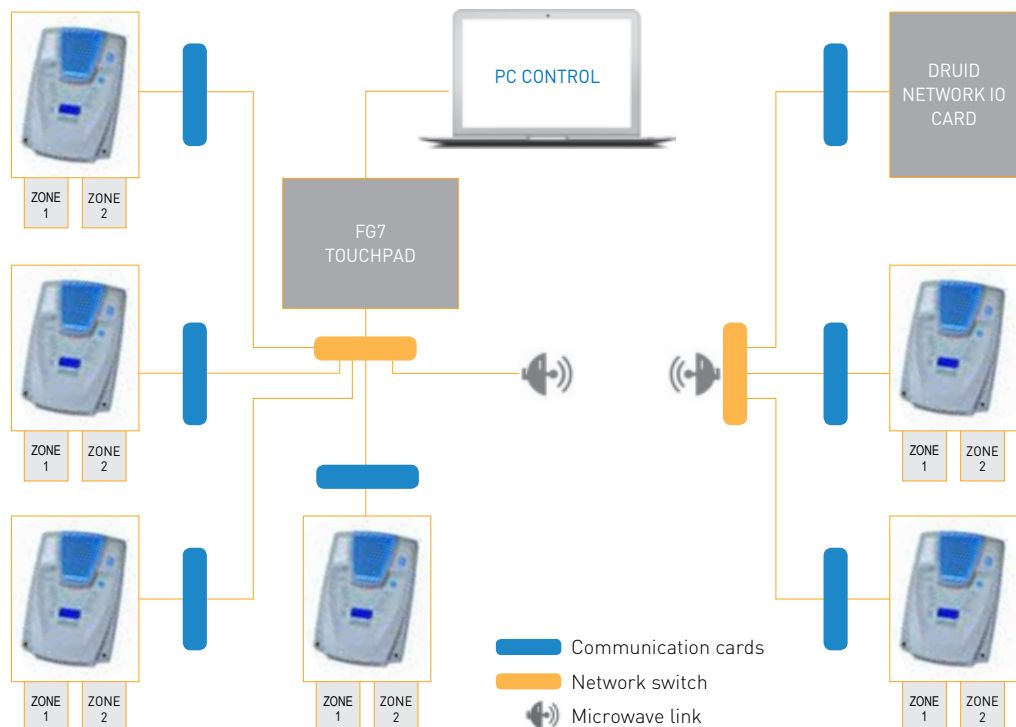
* When using HDMI the FG7 screen is disabled.

NEMTEK DRUID FENCE PROBE SOFTWARE WITH FG7

64 ZONE

31 NETWORK IO CARDS

PC CONTROL

REMOTE ACCESS

NEMTEK DRUID FENCE PROBE SOFTWARE (E-NDFP01)

Nemtek Druid Fence Probe software provides computer interaction with one FG7 controller, 32 two-zone Druid LCD energizers and up to 31 Druid network IO cards.

Visual map images of the electric fence and its zones can be displayed on a computer screen. This software allows a site to be controlled from a remote location.

A programmable timer function can control water pumps, lights and other remote functions using the Druid network IO card. Logs record the operational history of the system over time.

DRUID CONTROLLER FG7 (E-FG7/DRUID)

- The Druid Controller FG7 interfaces the Nemtek Druid Fence Probe software with the energizers. This is achieved through TCP/IP connectivity
- The Druid FG7 can control up to 32 two-zone Druid LCD energizers, providing up to 64 zones and up to 31 network IO cards

PC CONTROL

FG7 TOUCHPAD

HDMI*

DRUID NETWORK IO CARD

DRUID NETWORK IO CARD

Communication cards

19
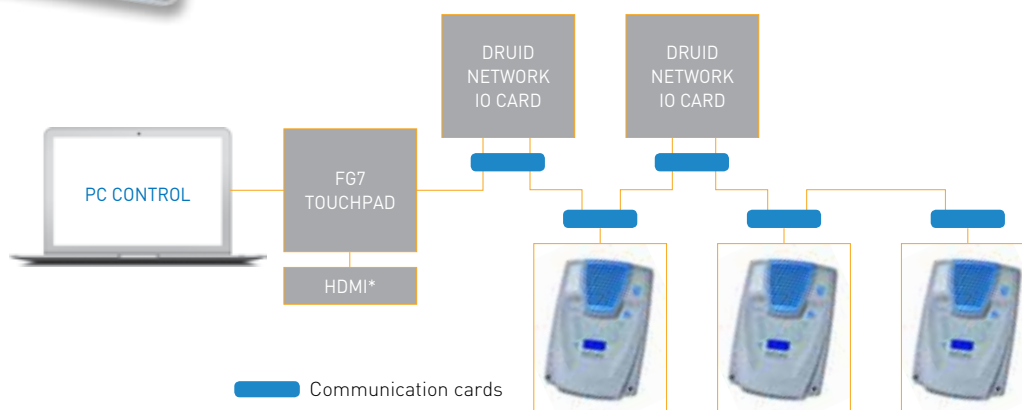
COMMUNICATION CARDS

MERLIN RS232-485 CARDS (EE-M/485)

- RS232 to RS485 communication cards
- Fits inside the Merlin Stealth energizer housing
- For multidrop RS485 communication with Merlin Stealth M25S or M28S energizers

MERLIN MULTI MODE FIBRE CARD (EE-M/MM/ST)

- Converts from RS232 or RS485 to multimode fibre with ST connectors
- Fits inside the Merlin Stealth energizer housing
- For networking over fibre with the Merlin Stealth M25S or M28S energizers

SINGLE-MODE FIBRE CONVERTORS

- Available with SC convertor (EE-FC/SM/SC) connector and an ST connector (EE-FC/SM/ST)
- For networking over fibre with the Druid D25 or D28 energizers

MULITI-MODE FIBRE CONVERTOR

- Multi-mode fibre convertor with ST connectors (EE-FC/MM/ST)
- For networking over fibre with the Druid D25 or D28 energizers

DRUID NEMLINK CARD – ENERGIZER AND FG (EE-LCD2X/NLE)

- Communication card for linking the D25 or D28 energizer to a RJ45 ethernet port
- Communication card for linking the FG7-Druid via RS232 to a RJ45 ethernet port
- For networking of the Druid D25 or D28 and FG7-Druid over a local area network (LAN)

DRUID RS485 CARD (EE-D/485/1)

- RS485 communication card
- Fits inside the Druid D25 and D28 energizer housing
- For communication and synchronisation of the Druid D25 or D28 energizers over a star or daisy chain RS485 network

Special precautions should be taken when connecting a computer network to an electric fencing system. The computer network will be at larger risk from lightning damage. To minimise this increased risk, use a separate network for the electric fencing system or use galvanic isolation to separate the two networks.

DRUID NETWORK IO CARD (EE-FGIO5)

- Programmable network IO card
- Five relay outputs with LED indication, individually set for potential free contacts or 12V output
- Six inputs, individually programmable for active high or low

DRUID NEMLINK CARD – NETWORK IO (EE-LCD2X/NLIO)

- Communication card for linking the Druid network IO card (EE-FGIO5) to a RJ45 ethernet port
- For networking an IO card to the FG7-Druid over a local area network (LAN)

POWER SUPPLY PACK

The Nemtek power pack with built-in battery provides a stable power source and back-up power during a mains failure.

POWER PACK 2AMP

(PP-2.0AMP)

- 2Amp power supply with a built in 7AH battery
- Lightning and power surge protection

FENCE TESTER

FENCE SCOPE MULTI-TOOL WITH POUCH (TL-FS) AND (TL-FSTP)

The Fence Scope is a 4-in-1 tool, which helps diagnose problems on your fence to optimise electric fence installation and ensure that the fence continues to operate at ideal levels.

There are four operation modes to select from:
- **Fence probe mode** – quickly indicates the direction of a fence fault, showing the voltage and current.
- **Fence energy mode** – accurately measures the output energy along the fence. This mode can be used to test the size of the shock the intruder will receive at any point along the fence by simulating the intruder. This helps to ensure that the voltage and the energy is sufficient along the entire fence to deliver an appropriate shock to the intruder.
- **Fence scope mode** – this can record and display wave forms of the electric fence pulse. Distortions in the wave form (wave shape) generally indicate that there are fence faults.
- **Fence noise mode** – this shows the amount of electromagnetic interference generated by the fence or energizer. This feature assists in finding cracked or broken insulators, sparks and shorts along the fence.

ENERGIZER SPECIFICATIONS

Nemtek Energizer Brand	Wizord		Merlin	Merlin Stealth ™				Stealth Master		Druid					
Model Number	2i	4i	4i	M15S	M18S	M25S	M28S M28X	M25M	M28M	13 LCD	15 LCD	18 LCD	114 LCD	25 LCD	28 LCD
Energizer Dimensions															
	L285 x W212 x D120			L370 x W232 x D145						L285 x W212 x D120		L370 x W232 x D145		L400 x W270 x D125	
High Voltage Outputs															
Typical energy output into 500 Ohms load (Joules)	2J	3.7J	3.7J	4.8J	7.6J	4.8J	7.6J	4.8J	7.6J	3J	4.6J	7.6J	13.8J (150 Ω)	2 x 2.4J	2 x 3.7J
Output voltage into an open circuit	7 400V	8 000V	8 000V	8 500V	9 300V	8 500V	9 300V	8 500V	9 300V	9 000V	9 000V	9 600V	9 000V	9 000V	9 000V
High or low voltage modes, alarm monitoring is enabled in both modes. Output voltage settings can be changed for both the high and the low voltage modes	N/A	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of high voltage monitored zones	1	1	1	1	1	2	2	2	2	1	1	1	1	2	2
Number of earth loop monitored zones	1	1	1	1	1	2	2	2	2	1	1	1	1	2	2
Adaptive Power Technology (APT), reducing false alarms and arcing on the fence										Yes	Yes	Yes	Yes	Yes	Yes
Fence interference detection from foreign energizers		Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes
Energizer Controls and Displays															
Keypads for the remote control of the energizer	No	No	4 max 1 incl	4 max	4 max	4 max	4 max	4 max	4 max	2 max	2 max	2 max	2 max	2 max	2 max
Tag switch – to control the energizer without using a keypad	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Remote on/off input	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes	Yes
Displays the output and return voltages										Yes	Yes	Yes	Yes	Yes	Yes
Display type	LED	LED	LED	LED	LED	LED	LED	LED	LED	LCD	LCD	LCD	LCD	LCD	LCD
Gate and Panic Button Inputs															
Timed gate switch input, used to monitor open and closing of the gate	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes	Yes
Panic button input	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes	Yes
Alarm outputs															
Siren output, time programmable	Fixed	Fixed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Strobe light output to visually indicate an alarm condition	1	1	1	1	1	2	2	2	2	1	1	1	1	2	2
Power Supply and Battery Back-up Systems															
Mains supply voltage***	230V	230V	230V	230V	230V	230V	230V	230V	230V	230V	230V	230V	230V	230V	230V
Typical power consumption under normal operating conditions	17VA	18VA	16VA	27VA	27VA	27VA	27VA	27VA	27VA	18VA	18VA	25VA	27VA	18VA	23VA
Internal battery back-up system in case of power failure, capacity of battery	7Ah	7Ah	7Ah	7Ah	7Ah	7Ah	7Ah	7Ah	7Ah	7Ah	7Ah	7Ah	7Ah	7Ah	7Ah
Typical standby time, with a fully-charged battery	24 hrs	24 hrs	24 hrs	6 hrs	8 hrs	7 hrs	6 hrs	7 hrs	6 hrs	24 hrs	24 hrs	24 hrs	9 hrs	24 hrs	24 hrs

Nemtek Energizer Brand	Wizord		Merlin	Merlin Stealth ™				Stealth Master		Druid					
Model Number	2i	4i	4i	M15S	M18S	M25S	M28S M28X	M25M	M28M	13 LCD	15 LCD	18 LCD	114 LCD	25 LCD	28 LCD
Solar power panels can be connected to power the energizers, (recommended Watt size for 24-hour operation)**	60 Watts	60 Watts	60 Watts	120 Watts	140 Watts	120 Watts	140 Watts	120 Watts	140 Watts	60 Watts	90 Watts	140 Watts	140 Watts	90 Watts	140 Watts
Solar voltage regulator	5Amp	5Amp	5Amp	10Amp	15Amp	10Amp	15Amp	10Amp	15Amp	5Amp	10Amp	15Amp	15Amp	10Amp	15Amp
Deep cycle battery size recommended in Amp hours (25% discharge over a 24-hour cycle)	60Ah	60Ah	60Ah	100Ah	150Ah	100Ah	150Ah	100Ah	150Ah	60Ah	100Ah	150Ah	150Ah	100Ah	150Ah
Wire Length Per Energizer (Live Wires in a Series System) for Both Solid and Stranded Wires															
Galvanised wires, 1.2mm															
• Optimal performance up to	2km	3km	3km	8km	10km	2 x 4km	2 x 5km	2 x 4km	2 x 5km	3km	5km	10km	15km	2 x 2.5km	2 x 4km
• Maximum	4km	5km	5km	18km	25km	2 x 9km	2x 13km	2 x 9km	2 x 13km	5km	8km	25km	35km	2 x 4km	2 x 6km
Galvanised wires, 2.0mm, 2.24mm															
• Optimal performance up to	3km	4km	4km	16km	20km	2 x 8km	2x10km	2 x 8km	2x10km	3.3km	5km	20km	20km	2 x 3km	2 x 4km
• Maximum	6km	10km	10km	35km	50km	2x17km	2x25km	2x17km	2x25km	6.6km	12km	50km	50km	2 x 6km	2 x 10km
Stainless steel 1.0mm, 304 and 316 grade															
• Optimal performance up to	0.5km	0.6km	0.6km	0.6km	0.7km	2x0.7km	2x0.8km	2x0.7km	2x0.8km	0.6km	0.7km	0.8km	0.9km	2 x 0.6km	2 x 0.7km
• Maximum	0.6km	0.9km	0.9km	0.9km	1km	2 x 1km	2x1.2km	2 x 1km	2x1.2km	0.9km	1km	1km	1.2km	2 x 0.9km	2 x 1.1km
Stainless steel 1.2mm, 304 and 316 grade															
• Optimal performance up to	0.6km	0.7km	0.7km	0.8km	1km	2x0.8km	2 x 1km	2x0.8km	2 x 1km	0.7km	0.8km	1km	1km	2 x 0.7km	2 x 0.9km
• Maximum	0.9km	1km	1km	1.1km	1.3km	2x1.1km	2x1.3km	2x1.1km	2x1.3km	1km	1.1km	1.3km	1.3km	2 x 1km	2 x 1.2km
Stainless steel 1.6mm, 304 and 316 grade															
• Optimal performance up to	1.2km	1.4km	1.4km	1.6km	2km	2x1.6km	2 x 2km	2x1.6km	2 x 2km	1.4km	1.6km	2km	2km	2 x 1.5km	2 x 1.9km
• Maximum	1.8km	2km	2km	2.2km	2.6km	2x2.2km	2x2.6km	2x2.2km	2x2.6km	2km	2.2km	2.6km	2.6km	2 x 2.1km	2 x 2.5km
Stainless steel 2.0mm, 304 and 316 grade															
• Optimal performance up to	1.8km	2.1km	2.1km	2.4km	3.3km	2x2.4km	2 x 3km	2x2.4km	2 x 3km	2.1km	2.4km	3.3km	3km	2 x 2.3km	2 x 2.9km
• Maximum	2.7km	3km	3km	3.3km	3.9km	2x3.3km	2x3.9km	2x3.3km	2x3.9km	3km	3.3km	3.9km	3.9km	2 x 3.2km	2 x 3.8km
Aluminium wire 1.6mm and 2.0mm															
• Optimal performance up to	6km	8km	8km	32km	40km	2 x 16km	2 x 20km	2x16km	2 x 20km	8km	10km	40km	40km	2 x 6km	2 x 8km
• Maximum	12km	16km	16km	60km	80km	2 x 30km	2 x 40km	2x30km	2 x 40km	16km	20km	80km	80km	2 x 12km	2 x 16km
Multi-energizer Systems															
Can be used in multi-energizer network system						Yes	Yes No	Yes	Yes					Yes	Yes
Compliance															
IEC 60335-2-76 Cispr 14, EN 61000	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Output energy is a function of component tolerance and energy settings, and is reduced during power failure.

YES* Indicates that this function is available at the cost of another function, further details are on our website www.nemtek.com.

**   Solar panel sizes and battery capacities are based on the exposure to sunlight in southern Africa and can change depending on the location of the solar panels.

***   All energizers are manufactured with a 230Vac ± 10% transformer, 110 Volts are available on request. Batteries are supplied as a standard.

Specification may change without prior notice.

TAUT WIRE SYSTEM

The Nemtek taut wire system measures tension changes on the fence wire in a particular direction and will set off an alarm if there is a threat of intrusion.

The taut wire sensors will set off an alarm if the wires are cut or if there is an attempt to part the wires in order to gain entry. Each sensor is placed in the middle of a straight run and can detect up to a 100m span of wires. The taut wire system can be combined with an electric fence system. The combination of taut wires and a monitored electric fencing system creates a formidable detection and deterring barrier.

TAUT WIRE CONTROLLER FG7 (E-FG7/TW)

- The taut wire controller FG7 is a seven-inch LCD display screen that can be used to control up to 31 taut wire sensors and a network IO card
- Graphic images of the site with zones and the fence condition can be displayed on the LCD screen
- Commands can be sent to the taut wire sensors to configure them and adjust their sensitivity
- Logs containing system details are recorded
- Allows for three different types of users with different access levels to be set up
- Can be configured to allow TCP/IP connectivity for integration with third-party software and systems

TAUT WIRE SENSOR (E-TWS1)

- The taut wire sensor can detect a rapid change of tension and send an alarm condition to the controller
- Built-in filter to reduce unwanted false alarms due to weather conditions and changes in tension over time
- Will notify the controller if an adjustment is required on the sensor
- Can be programmed from the controller
- UV stabilised polymers for outdoor use
- Stainless steel mountings and fasteners are included with the sensor

DRUID NETWORK IO CARD (EE-FGIO5)

- Programmable network IO card with four relay outputs to create four zones and one global alarm output
- Relays individually set for potential free contact or 12V output

TAUT WIRE SENSOR DUMMY
(E-TWS2)

- Used to reduce the cost of a system where not all wires need to be monitored
- Looks the same as a normal taut wire sensor
- UV stabilised polymers for outdoor use
- Stainless steel mountings and fasteners are included with the sensor
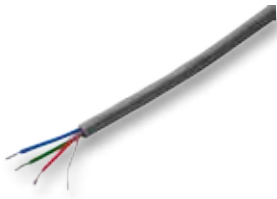
MYLAR SCREEN 3 CORE CABLE (CB-TWC/200)

- UV stabilised 200m roll of three core Mylar screened cable
- Communication cable to connect the sensors to the FG7 controller

BRACKETS AND ACCESSORIES

WALL-TOP BRACKETS

Nemtek brackets are made to a high standard to maximise security and ensure long life in the field. The level of security achieved is directly affected by the choice of bracket, the number of wires forming the electrical barrier and the distance between the brackets. Nemtek offers a large range of brackets to suit most wall types and applications. They are made from steel and are finished in a high quality outdoor powder coating, or are hot-dip galvanised for coastal conditions. Our factory can manufacture different types of designs and finishes on request.

ROUND BAR
- 5 or 6 wires
- PC or HDG finish
- 600mm or 750mm long

FLAT BAR
- Straight and angled
- 5 or 6 wires
- PC, HDG or HDG and PC finish
- 730mm or 830mm long

SQUARE TUBE
- Straight and angled
- 6, 8, 10 or 12 wires
- PC finish
- 995mm, 1 195mm, 1 395mm or 1 595mm long

TOP BEND BRACKET
- 6, 8 or 10 wires
- PC finish
- 995mm, 1 195mm or 1 395mm long

SQUARE TUBE JURASSIC BRACKET
- Straight and angled
- 6,8 or 10 wires
- HDG or HDG and PC finish
- 995mm, 1 195mm or 1 395mm long
- Ideal for coastal use

SQUARE TUBE JURASSIC TOP BEND
- 6 or 8 wire
- HDG or HDG and PC finish
- 995mm or 1 195 mm long
- Ideal for coastal use

PC: Powder-coated finish in black or white. **HDG:** Hot-dip galvanised, **HDG and PC:** First hot-dip galvanised and then powder-coated

PROFILE POLE
- 6 wires
- PC or HDG finish
- 385mm long

T-POLE
- 6 wires
- PC or HDG finish
- 600mm long

SQUARE TUBE JURASSIC T-POLE
- 8 wires
- Offering high security
- Large base plate for stronger mounting
- PC or HDG finish
- 760mm long

WALL-TOP BRACKET ACCESSORIES
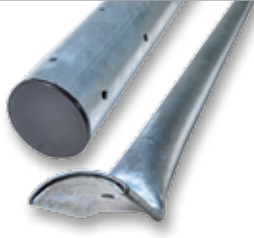
STAY AND LUG
- 600mm black PC (EST/L/B) and white (EST/L/W)
- 750mm black PC (EST/L/BL) and white (EST/L/WL)
- 600mm HDG (EST/L/HD)
- 750mm HDG (EST/L/HDL)
- 600mm up to 6 wires, 750mm up to 8 wires bracket support

STAY HEAVY DUTY
- 1 000mm black PC (ESTBL10) and white (ESTWL10)
- 1 000mm HDG (ESTHDL10)
- Used with brackets with up to 12 wires

STAY SLEEVE
- Insulator for the stays. UV stabilised
- For 600mm stay in black (ESTSSB) or white (ESTSSW)
- For 750mm stay in black (ESTSLB) or white (ESTSLW)
- For 1 000mm stay in black (ESTSLBL10) or white (ESTSLWL10)

LUGS
Lugs are used with the stays and are available for both the 8mm and 10mm stays.
- For 8mm stay (EA-L635)
- For 8mm stay HDG (EA-L635/HDG)
- For 10mm stay (EA-L670)

ROUND BAR STAY CLAMP
(EA-RAT)
- Used in conjunction with the 8mm stay and lug to secure the stay on to the round bar

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NAIL-IN ANCHORS • Nylon plug and screw ideal for inland use • 6mm x 40mm in length (100 box) (EA-640) • 6mm x 60mm in length (100 box) (EA-660) • 8mm x 80mm in length (50 box) (EA-880)	
HAMMER DRIVE ANCHORS • Hammer drive with zinc alloy ideal for coastal use • 6mm x 50mm in length (100 pack) (EA-HDP650) • 6mm x 65mm in length (100 pack) (EA-HDP665)	
COACH SCREW AND PLUG (EA-CSSET/HD) • Hot-dip galvanised for coastal use • Ideal for use with the Nemtek square tube brackets • 8mm x 75mm in length (50 pack) including wall plug and washer	
TEK SCREWS – SELF DRILLING • Tek screw 12*25: inland use (EA-TEK12X25) and coastal use (EA-TEK12X25/HDG) • Tek Screw 12*38: inland use (EA-TEK12X38) and coastal use (EA-TEK12X38/HDG) • Tek Screw 12*65: inland use (EA-TEK12X65) and coastal use (EA-TEK12X65/HDG) • Tek Screw 14*75mm: inland and coastal use (EA-TEK14X75/DM) • Tek Screw 14*102mm: inland and coastal use (EA-TEK14X102/DM) • Tek Screw 14*142mm: inland and coastal use (EA-TEK14X142/DM)	

FREE-STANDING SYSTEM

Nemtek has a range of products available to set up a free-standing electric fence. These include corner posts and end posts for tensioning the fence and intermediate posts for guiding the wires between the posts.

INTERMEDIATE POSTS (Y PICKETS)						
Nemtek picket intermediate posts	**Number of wires**	**Number of holes**	**Fence height**	**Finish**	**Associated insulators**	
Nemtek Y picket – 1.5m Bitumen (EY-Y15NB) Hot-dip galvanised (EY-Y15NHD)	Up to 12	12 100mm spacing	1.2m	Bitumen or hot-dip galvanised	Picket insulator	
Nemtek Y picket – 2.4m Bitumen (EY-Y24NB) Hot-dip galvanised (EY-Y24NHD)	Up to 20	20 100mm spacing	2.0m	Bitumen or hot-dip galvanised	Picket insulator	
Nemtek Y picket – 3.0m Bitumen (EY-Y30NB) Hot-dip galvanised (EY-Y30NHD)	Up to 24	24 100mm spacing	2.4m	Bitumen or hot-dip galvanised	Picket insulator	

CORNER, END POSTS AND ASSOCIATED STAYS					
Round corner and end straining posts	**Number of wires**	**Number of holes**	**Fence height**	**Finish**	**Associated stays**
Round tube 76 x 2mm–2.4m (EY-CPR7620HD24)	20	2 x 20	2.0m	Hot-dip galvanised	Round 38 x 2mm–2.4m (EY-CSR3824HD)
Round tube 76 x 2mm–3.0m (EY-CPR7620HD30)	24	2 x 24	2.4m	Hot-dip galvanised	Round 50 x 2mm–3.0m (EY-CSR5030HD)
Hot-dip galvanized nut (EA-SCRM10NUTSHD) **and bolt** (EA-SCRM10X100-H) • Secures the stay support to the round post • Use one for an end post and two for a corner post					

OFFSET BRACKETS AND OUTRIGGERS

Offset brackets utilise the strength and rigidity of an existing fence, reducing the costs of the electric fence system. They are generally used for animal control and are available in 4mm galvanised high-tensile steel.

INSULATOR OPTIONS FOR THE OFFSET BRACKET

TENSION BOBBIN INSULATOR (EI-BTL)
- Easy to use and economical
- Hard to break

BOBBIN PORCELAIN (EI-BPFL)
- Fireproof and long lasting

LIVE AND EARTH WIRE OFFSET (DOUBLE OR TRIPLE OFFSET)

The live and earth wire offsets are designed to carry a live and earth wire along the fence line. These are ideal for areas where earth conditions are not good. Ideal for long-fencing systems.

- Offset double – 225mm (EY-OD225) (excludes insulator)
- Offset double – 350mm (EY-OD350) (excludes insulator)

- Offset triple – 240mm (EY-OT240) (excludes insulator)

LIVE WIRE OFFSET AND OUTRIGGER (SINGLE WIRE)

The single wire offset and the outrigger brackets are used to carry the live wire along the fence. The outrigger comes with a built-in insulator (EI-PI). The offset wire can be used with the porcelain insulator bobbin (EI-BPFL) or the tension bobbin insulator (EI-BTL).

- Outrigger single – 230mm (AA-OUTRIGGER230) (includes insulator)
- Outrigger single – 340mm (AA-OUTRIGGER340) (includes insulator)

- Offset single – 225mm (EY-OS225) (excludes insulator)
- Offset single – 450mm (EY-OS450) (excludes insulator)

OMEGA BRACKETS

OMEGA BRACKET FINISH	OMEGA THICKNESS	OMEGA BRACKET – PRECUT SIZES (mm)						
		900mm	**1 200mm**	**1 500mm**	**1 800mm**	**2 100mm**	**2 400mm**	**3 000mm**
PRE-GALVANISED	1mm	EY-PR275/0900/1	EY-PR275/1200/1	EY-PR275/1500/1	EY-PR275/1800/1	EY-PR275/2100/1	EY-PR275/2400/1	EY-PR275/3000/1
HOT-DIP GALVANISED	1mm	EY-PRHDIP0900/1	EY-PRHDIP1200/1	EY-PRHDIP1500/1	EY-PRHDIP1800/1	EY-PRHDIP2100/1	EY-PRHDIP2400/1	EY-PRHDIP3000/1
	2mm				EY-PRHDIP1800/2	EY-PRHDIP2100/2	EY-PRHDIP2400/2	EY-PRHDIP3000/2

The Omega bracket is a versatile and flexible solution for use with an existing fence. The mechanical strength and structure of the existing fence is used to set up the electric fence. This reduces the time and cost of constructing a completely new fencing system. The pre-punched holes provide flexibility for the placement of the insulators.

FEATURES

- Available in pre-galvanised grade of mild steel for inland use
- Hot-dip galvanised for coastal use where corrosion is high
- Available in pre-cut lengths, making it versatile and flexible where different lengths are required
- Lightweight and easy to transport reducing handling time and transport costs
- 2mm Omegas used for corners, end posts and gates where the bracket will be under stress of tensioning
- All 2mm Omega brackets are hot-dip galvanised for coastal use

OMEGA DOUBLE SHIELD INSULATOR

OMEGA BRACKET ACCESSORIES

S-HOOK (ES-HK/EP)
- Suitable for end posts and gates
- Hot-dip galvanised finish

90 DEGREE S-HOOK (ES-HK/EP/90DEG)
- Suitable for corner posts
- Hot-dip galvanised finish

180 DEGREE S-HOOK (ES-HK/EP/DS)
- Suitable for splitting zones along straight runs
- Hot-dip galvanised finish

OMEGA PULL THROUGH ASSEMBLY (EI-BTL2, ES-HK/EP/PTH)
- Ideal for wire change of direction in inner corners
- Quick and easy to install

OMEGA SPACER (EY-O/SWT)
- Used to offset the Omega bracket away from the fence or wall
- Can be used on flat or round surfaces

OMEGA INSULATOR (EI-OB)
- Quick fit design
- Double tracking fin to reduce tracking and arcing

HEAVY DUTY COMPRESSION SPRING (ES-CNT3)
- Can be used with any electric fence wire
- Stainless steel spring
- Can tension up to 2.24mm galvanised and stainless steel wire
- Can tension up to 2.5mm aluminium wire

HYBRID BB HEAVY DUTY NYLON TENSIONER (ES-CTNTBB)
- Can be used with any electric fence wire
- Can tension from 1.2mm to 2.5mm wire, making it very versatile

HEAVY DUTY COMPRESION SPRING HYBRID (ES-CNT3HB)
- Can be used with any electric fence wire
- Can tension up to 1.6mm galvanised and stainless steel and up to 2mm aluminium wire
- Stainless steel spring maintains a constant tension on the fence
- Can be adjusted as required with the built in ratchet

OMEGA WELDED BRACKETS
- Heavy duty weld brackets to secure the 2mm Omega posts onto the end and corner post
- Available in three different lengths 75mm (EY-OS/WS075AU), 112mm (EY-OS/WS112AU) and in 180mm (EY-OS/WS180AU) lengths

MODULUS SYSTEM

The patented Modulus brackets are designed with flexibility in mind. By using the different components, a full range of sizes and different applications can be formulated. It gives the installer flexibility on the spacing of the insulators, number of insulators and height of the fence. The key components are the two-way and three-way brackets. The two-way is primarily used as an intermediate bracket. The three-way is used as an end tensioning post, as a corner post, to change the wire direction, or as an inline strain post on long straight walls.
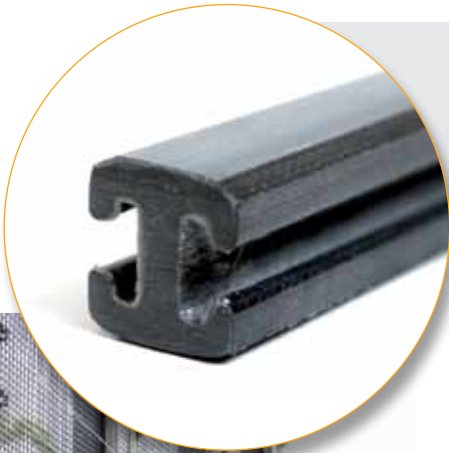
KEY FEATURES OF THE MODULUS SYSTEM
- Durable and can be installed in most harsh environments
- Light to transport and easy to handle
- Insulator can be installed on both sides

MODULUS TWO-WAY BRACKET
- 2 660mm/27 wire (EMOD-2660C)
- 2 360mm/24 wire (EMOD-2360C)
- 1 960mm/20 wire (EMOD-1960C)
- 1 160mm/12 wire (EMOD-1160C)
- 960mm/10 wire (EMOD-960C)
- 560mm/6 wire (EMOD-560C)
- 460mm/5 wire (EMOD-460C)

MODULUS END CAP 19x19
(EMOD-BENDCAP)

MODULUS SLIDE INSULATOR
(EMOD-BSLD)

MODULUS MOUNTING BRACKET
Single hole (EMOD-BRKT)

MODULUS THREE-WAY BRACKET

- 2 660mm/27 wire (EMOD-3WS2660C)
- 2 360mm/24 wire (EMOD-3WS2360C)
- 1 960mm/20 wire (EMOD-3WS1960C)
- 1 160mm/12 wire (EMOD-3WS1160C)
- 960mm/10 wire (EMOD-3WS960C)
- 560mm/6 wire (EMOD-3WS560C)
- 460mm/5 wire (EMOD-3WS460C)

MODULUS END TRIPLE CAP 26x19
(EMOD-BENDCAP 3)

MODULUS SPACER
(EMOD-BSPR)

MODULUS HOOK
(ES-HK/MOD)

MODULUS BASE (EMOD-BB)
- Used to secure up to a six-wire modulus bracket onto a wall
- Upright or at an angle as required

MODULUS BASE
(EMOD-BB)

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FENCE WIRE, CABLE AND ACCESSORIES

FENCE WIRES

Nemtek offers a variety of wires to address different electric fencing requirements. The type of wire needed will depend on environmental factors, mechanical strength and electrical resistance.

Nemtek aluminium wire has the lowest resistance allowing long fences to be powered up, reducing the number of energisers needed. Nemtek stainless steel wire is recommended for corrosive and coastal environments. Nemtek galvanised wire offers good electrical conductivity and mechanical strength.

WIRE RANGE AND DESCRIPTION	WIRE DIAMETER	SPOOL SIZE	RESISTANCE OHMS/KM	CORROSION GUIDELINE*			
				INLAND	COASTAL	INDUSTRIAL	DISTANCE FROM THE COASTLINE
GALVANISED							
Stranded wire (EW-T12/BB)	1.2mm	680m	175	Yes			+50km
Stranded wire (EW-T12)	1.2mm	2 990m	175	Yes			+50km
Stranded wire (EW-T16)	1.6mm	1 560m	100	Yes			+50km
Stranded wire (EW-T20)	2.0mm	1 000m	60	Yes			+50km
Solid light galvanised (EW-G2.24)	2.24mm	1 650m	50	Yes			+50km
Solid heavy galvanised (EW-G2.24HG)	2.24mm	1 650m	50	Yes	Yes	Yes	+0.5km
STAINLESS STEEL 304							
Stranded 304 (EW-TSS304/8)	1.2mm	800m	700	Yes			+50km
Stranded 304 (EW-TSS304/16)	1.2mm	1 600m	700	Yes			+50km
Solid wire 304 (EW-SS1/304)	1.0mm	1 985m	1 000	Yes			+50km
Solid wire 304 (EW-SS12/304)	1.2mm	1 375m	700	Yes			+50km
STAINLESS STEEL 316							
Stranded 316 (EW-TSS316)	1.2mm	800m	700	Yes	Yes	Yes	+0.1km
Solid wire 316 (EW-SS1/316)	1.0mm	1 985m	1 000	Yes	Yes	Yes	+0.1km
Solid wire 316 (EW-SS12/316/7)	1.2mm	770m	700	Yes	Yes	Yes	+0.1km
Solid wire 316 (EW-SS12/316)	1.2mm	1 375m	700	Yes	Yes	Yes	+0.1km
Solid wire 316 (EW-SS16/316)	1.6mm	770m	390	Yes	Yes	Yes	+0.1km
Solid wire 316 (EW-SS20/316)	2.0mm	495m	250	Yes	Yes	Yes	+0.1km
ALUMINIUM ALLOY WIRE							
Stranded wire (EW-AL16/S)	1.6mm	1 000m	31	Yes	Yes		+5km
Stranded wire (EW-AL20/S)	2.0mm	1 000m	18	Yes	Yes		+5km
Solid wire (EW-AL16)	1.6mm	1 000m	27	Yes	Yes		+5km
Solid wire (EW-AL20)	2.0mm	1 000m	14	Yes	Yes		+5km
Solid wire (EW-AL20/1500)	2.0mm	1 500m	14	Yes	Yes		+5km
Solid wire (EW-AL25/1200)	2.5mm	1 200m	9	Yes	Yes		+5km

* This table serves as a guideline only. For more accurate information, please seek professional advice on the corrosion environment and local conditions.

CABLES (HT CABLES)

Nemtek offers a range of high-voltage cables to use with your energizer and for all other insulated high-voltage transmissions. The high-voltage cables have been designed for a long-life expectancy and are double insulated.

CABLES (S-SERIES)
- The S-Series high-voltage cables can be used with all the Nemtek galvanised and stainless steel wires
- Available in black 30m (EH-BS030S),100m (EH-BS100S), 200m (EH-BS200S), 500m (EH-BS500S) and 1 000m spools (EH-BS1000S)
- Available in white 30m (EH-WS030S), 100m (EH-WS100S) and 200m (EH-WS200S)
- The multi core S-Series makes the installation faster and neater
- Available in black 100m spools; three-core (EH-3BS100), four-core (EH-4BS100) and five-core (EH-5BS100)

UNDERGATE CABLE (U-SERIES)
- The U-Series high-voltage cable is used with galvanised, aluminium and stainless steel wires
- Available in 1.6mm heavy galvanised inner conductor; 25m (AH-UC1.6/25), 50m (AH-UC1.6/50), 100m (AH-UC1.6/100)
- Available in 2.5mm heavy galvanised inner conductor; 25m (AH-UC2.5/25), 50m (AH-UC2.5/50), 100m (AH-UC2.5/100), 200m (AH-UC2.5/200), 500m (AH-UC2.5/500)

ALUMINIUM CABLE (A-SERIES)
- The A-Series high-voltage cables can be used with all the Nemtek aluminium wires
- Available in 1.6mm solid inner aluminium alloy conductor in 100m (EH-AS100), 200m (EH-AS200), 500m (EH-AS500) and 1 000m (EH-AS1000)

WIRE TENSIONING SYSTEMS

WIRE TENSIONERS – PLASTIC

The Nemtek engineering plastic wire tensioners can be used with any type of fencing wire. The plastic material eliminates galvanic reaction between the tensioner and the wire, reducing rust.

COMPRESSION SPRING 1 (ES-CNT)
- Can tension up to 1.2mm wire
- Stainless steel spring maintains constant tension on the fence
- Silver spring
- Available in white (ES-CNTW)

COMPRESSION SPRING 2 (ES-CNT2)
- Can tension up to 1.6mm wire
- Stainless steel spring maintains constant tension on the fence
- Gold spring
- Available in white (ES-CNT2W)

HEAVY DUTY COMPRESSION SPRING 3 (ES-CNT3)
- Can tension up to 2.24mm galvanised and stainless steel wire
- Can tension up to 2.5mm aluminium wire
- Stainless steel spring maintains constant tension on the fence

HYBRID COMPRESSION SPRING 1 (ES-CNTHB)
- Can tension up to 1.2mm wire
- Combination of a compression spring and a tensioner
- Silver spring

HYBRID COMPRESSION SPRING 2 (ES-CNT2HB)
- Can tension up to 1.2mm galvanised and stainless steel wire
- Can tension up to 1.6mm aluminium wire
- Combination of a compression spring and a tensioner
- Gold spring

HYBRID COMPRESSION SPRING 3 (ES-CNT3HB)
- Can tension up to 1.6mm galvanised and stainless steel wire
- Can tension up to 2mm aluminium wire
- Combination of a compression spring and a tensioner

MINI-NYLON TENSIONER (ES-DT/MN)
- Can tension up to 1.2mm galvanised and stainless steel wire
- Can tension up to 1.6mm aluminium wire

COMBO TENSIONER HYBRID (ES-CTNTBB)
- Can tension a 1.2mm to 2.5mm wire, making it very versatile
- Engineered plastic material eliminates galvanic reaction between dissimilar metals, thus eliminating rust
- Can be used with any type of wire

WIRE TENSIONERS – METAL

	STANDARD TENSIONER (ES-DT) • Galvanised permanent fence wire strainer • Can tension a 1.2mm to 2.2mm wire • Only use with galvanised wires to avoid galvanic reaction	
	COMBO TENSIONER – STANDARD (ES-CTS) • Galvanised permanent fence wire strainer with built-in insulator (plastic) • Can tension a 1.2mm to 2.2mm wire • Only use with galvanised wires to avoid galvanic reaction	
	COMBO TENSIONER – PORCELAIN (ES-CTP) • Galvanised permanent fence wire strainer with built-in insulator (porcelain) • Can tension a 1.2mm to 2.2mm wire • Only use with galvanised wires to avoid galvanic reaction	
	WIRE STRAINER – HEAVY DUTY (AS-WS/HD) • Galvanised permanent fence wire strainer • Can tension a 1.6mm to 3mm wire • Only use with galvanised wires to avoid galvanic reaction	
	WIRE STRAINER – INSULATED – HEAVY DUTY (AS-WSI/HD) • Galvanised permanent fence wire strainer with built-in insulator (hardened plastic) • Can tension a 1.6mm to 3mm wire • Only use with galvanised wires to avoid galvanic reaction	
	WIRE STRAINER – PORCELAIN – HEAVY DUTY (AS-WSP/HD) • Galvanised permanent fence wire strainer with built-in insulator (porcelain) • Can tension a 1.6mm to 3mm wire • Only use with galvanised wires to avoid galvanic reaction	

TENSIONER AND INSULATOR HOOKS

MODULUS AND JURASSIC HOOK (ES-HK/MOD)
- Stainless steel hook for long life expectancy
- Quick fit onto the Nemtek Modulus slide insulator and the Jurassic insulator

LARGE TAIL HOOK (ES-H/LT)
- Stainless steel hook for long life expectancy
- Large tail to fit the Nemtek range of tensioning devices
- Quick fit onto the Nemtek round and flat bar insulator
- **Heavy duty 2.5mm large tail hooks available** (ES-H/LT/2.5)

HOOK BOLT (ES-HB)
- Electro galvanised hook bolt for inland use
- Adjustable nut for finer adjustment

S-HOOK (ES-HK/EP)
- Hot-dip galvanised for long life expectancy
- Heavy duty durable design
- Suitable for angled and round corner poles

90 DEGREE S-HOOK (ES-HK/EP/90DEG)
- Hot-dip galvanised for long life expectancy
- Heavy duty durable design
- Suitable for Omega brackets

180 DEGREE S-HOOK (ES-HK/EP/DS)
- Hot-dip galvanised for long life expectancy
- Heavy duty durable design
- Suitable for Omega brackets

THROUGH HOLE S-HOOK (ES-HK/THR/HDG)
- Hot-dip galvanised for long life expectancy
- Heavy duty durable design

U-HOOK (ES-HK/UH304)
- Stainless steel hook for long life expectancy
- Heavy duty durable design

WIRE AND CABLE CONNECTORS

LINE CLAMP BOLT TYPE 6mm and 8mm
- Electro galvanised 6mm (EA-LC6)
- Stainless steel 6mm (EA-LC6/SS)
- Coastal finish 8mm with wave washer (EA-LC8/D)
- Can connect after the wire has been installed

LINE CLAMP U-TYPE 8mm (EA-LC8/MG)
- The line clamps are used for the larger wire diameters
- Can connect after the wire has been installed
- 8mm mechanically galvanised for long life

ALUMINIUM FERRULE
- 6mm (EA-F6AFT) used with the 1.6mm aluminium wire
- 10mm (EA-F10AFT) used with the 2.0mm aluminium wire

TINNED COPPER FERRULE
- 6mm (EA-F6S) used with the galvanised 1.2mm wire
- 10mm (EA-F10) used with the galvanised 1.6mm and 2.0mm wire
- 16mm (EA-F16) used with the earth wire

STAINLESS STEEL FERRULE
- 6mm (EA-F6S/SS) used with 1mm and 1.2mm stainless steel wire
- 10mm (EA-F10S/SS) used with 1.6mm and 2mm stainless steel wire

BRIDGING WIRES
- Reduces installation time, with an aesthetic and neat finish
- Available in galvanised finish 100mm (EA-BW/1.8x100HD) and 200mm (EA-BW/1.8x200HD)
- Available in stainless steel finish 100mm (EA-BW/1.6x100SS) and 200mm (EA-BW/1.6x200SS)

WIRE DISPENSERS

LARGE WIRE DISPENSER (EW-JENNY)
- Portable design
- For 2.2mm, 2.5mm and 3mm wire
- Up to 50kg roll coil dispenser

BRAIDED WIRE REEL HOLDER (EW-T/RH)
- Hot-dip galvanised wire dispenser
- For 1mm, 1.2mm, 1.6mm and 2mm spools of wire

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INSULATORS

PORCELAIN INSULATORS

BOBBIN – PORCELAIN (EI-BPFL)
- Fireproof and long lasting
- Large design to reduce power loss
- Available in boxes of 10 units (EI-BPFL10)

STRAINER – PORCELAIN (EI-STFP10)
- Fireproof and long lasting
- Large design to reduce power loss
- Suitable for long runs
- Can withstand high tension
- Comes in a box of 10 units

PLASTIC INSULATORS

ROUND BAR INSULATOR
- Available in black (EI-BRBB) and white (EI-BRBW)
- Used with the 10mm roundbar
- Flexible inner core for increased clearance

FLAT BAR INSULATOR
- Available in black (EI-BFBB) and white (EI-BFBW)
- Quick fit clips on the top and bottom for faster installation
- Feed through clip option built-in
- Easy to change and maintain

NAIL ON INSULATOR
- Available in black (EI-NOB) and white (EI-NOW)
- Large clips for heavy duty applications with thicker wires
- Larger clearance to eliminate power leakage

Y-STANDARD INSULATOR
- Available in black (EI-YB) and white (EI-YW)
- Quick fit design – easy to replace when required
- Suitable for Y-standard brackets
- Anti-climb shear pin

OMEGA INSULATOR
- Available in black (EI-OB)
- Double tracking fin to reduce tracking and arcing
- Quick fit design for the Omega bracket
- Anti-climb version available (EI-OB/C)

OMEGA PULL THROUGH INSULATOR (EI-BTL2)
- Heavy duty and durable design
- Large clearance distance to reduce power loss and arcing
- Black only

POP THROUGH HOLE INSULATOR
- Available in black (EI-POPEM\B\ULT) and white (EI-POPEM\W\ULT)
- Secure through insulator
- Larger clearance distance to reduce power loss and arcing

STRAIN INSULATOR – JUMBO
- Available in black (EI-STB/J) and white (EI-STW/J)
- Suitable for fences using up to 2.0mm wire
- Larger clearance distance to reduce power loss and arcing
- Suitable for low- to medium-tensioned fences

STRAIN INSULATOR – ULTRA
- Available in black (EI-STB/R) and white (EI-STW/R)
- Suitable for fences using up to 2.5mm wire
- Larger clearance distance to reduce power loss and arcing
- Suitable for medium-tensioned fences

STRAIN INSULATOR – HARDENED ULTRA
- Available in black (EI-STB/R/H)
- Suitable for fences using up to 3.0mm wire
- Suitable for high-tensioned fences

PICKET INSULATOR
- Available in black (EI-PI)
- Used with Nemtek Y-Picket
- Double tracking fin to reduce tracking and arcing
- Quick fit design clip

JURASSIC INSULATOR – SLOTTED
- Available in black (EI-JIB6.20/S) and white (EI-JIW6.20/S)
- Wire slot for quick installation
- Larger clearance distance to reduce power loss and arcing

JURASSIC INSULATOR – THREAD THROUGH
- Available in black (EI-JIB6.20) and white (EI-JIW6.20)
- For high security
- Larger clearance distance to reduce power loss and arcing

SHIELD INSULATOR
- Available in black (EI-SI)
- For high security
- Larger clearance distance to reduce power loss and arcing

TENSION BOBBIN INSULATOR
- Available in black (EI-BTL)
- Heavy duty large insulator
- Used with offset bracket where fire is not a concern

BUSBAR INSULATOR (EI-SBI)
- Suitable for electrically separating two steel items

SELF TAPPER HOOK (EA-JSTH)
- Used with the Shield and Jurassic insulators
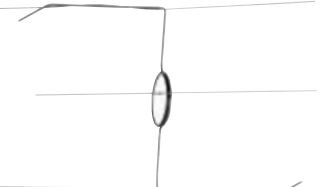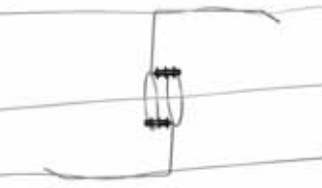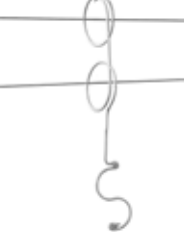- Available in a long version (EA-JSTH/L)

GENERAL ACCESSORIES

FENCE ACCESSORIES

WARNING SIGNS (EA-WRS2/N)
- Custom-made warning signs are available on order
- Wire clips on the warning sign reduce installation time

FENCELIGHT
- Fencelight galvanised wire (inland use) (SR-FL/HVL4)
- Fencelight stainless steel wire (coastal use) (SR-FL/HVL4SS)
- Install it on your electric fence to indicate power status for peace of mind
- Installed between any earth and live wires

CUT OUT SWITCH (AA-COS)
- Isolates a section of the fence to allow for easy maintenance and fault finding

FLOOD GATE CONTROLLER (AA-FGC)
- Limits energy on a section of fence in areas where flooding or heavy foliage occurs

SINGLE POLE LIGHTNING PROTECTION (EA-LID)
- Lightning-protection system inhibits lightning and diverts the voltage spikes caused by lightning
- Stainless steel components for long life

DOUBLE POLE LIGHTNING PROTECTION (EA-LIDII)
- Lightning-protection system inhibits lightning and diverts the voltage spikes caused by lightning
- Stainless steel components for long life

SIREN 15 WATT (SR-10)
- 15 Watt dual tone siren (12VDC)

SIREN 30 WATT (SR-30)
- 30 Watt dual tone siren (12VDC)

STROBE LIGHT (SR-STR)
- Strobe light (12VDC)
- Strobe bracket available (SR-STR/MB)

EARTH LOOPS

Earth loops are used to enhance the level of security offered by an electric fence by detecting attempted separation of fence wires and leaving just enough room for natural movement of the live wire. When a wire touches the loop, a connection or short is made and the alarm will sound.

	IN-LINE LOOP • Installed onto the fence wire, generally between the earth wires • Available in galvanised finish (EY-1LOOP) • Available in stainless steel (EY-1LOOP/SS)	
	EARTH LIVE LOOP (EY-1LOOP/EL) • Installed onto the fence wire, generally on the live wires • Available in galvanised finish	
	WALL-MOUNTED EARTH LOOPS • Installed onto the wall protecting the bottom wires on a wall-top fence • They offer protection against lifting of the fence wires • Available in stainless steel, angled or straight depending on the type of Nemtek bracket used • Angled (EA-WML/A) • Straight (EA-WML/S)	
	GROUND ANTI-CREEP LOOP (EY-ANTICREAP) • Used in the freestanding applications to reduce the possibility of lifting of the fence • Concreted for maximum stability • Hot-dip galvanised finish for a long life	

EARTH SPIKES

HOT-DIP GALVANISED 1M LONG (EA-EAG1)	**HOT-DIP GALVANISED 1.2M LONG** (EA-EAG12)	**COPPER CLAD 1M LONG** (EA-EAN)	**COPPER CLAD 1.2M LONG** (EA-EAN/L)

• Hot-dip galvanised or copper-clad earth spikes with nuts and washers
• Available in both 1.0m and 1.2m lengths
• Earthing kit available, to be used in areas where the earthing conditions are not good. These kits include a conductive earth compound (EA-CEC)
• The double nut and washer allow for a good electrical connection with the HT cables

GATE SYSTEMS

The Nemtek gate contacts have a robust construction and use stainless steel and brass, making it suitable for most environmental conditions.

GATE CONTACT (EA-SGC07)
- Used for series wiring of a gate
- Suitable for sliding gates
- Lug connectors

GATE CONTACT (EA-SGC13)
- Used for series wiring of a gate
- Suitable for sliding gates
- Brass connectors
- Available with earth plate
  (EA-SGC13/EARTH)

GATE MOUNTING BRACKET
(EA-SGC07ZB/HDG)
- Heavy duty design
- Hot-dip galvanised

FENCING TOOLS

COMPACT HEAVY DUTY CUTTER
(TL-MNHW)
- Designed for high-tensile wire cutting, up to 3.5mm wire

DISTANCE MEASURING WHEEL
(TL-DMW)
- Quick, walk along distance-measuring tool

KNIPPEX WIRE CUTTER
(TL-MN)
- Designed for high tensile wire cutting, up to 2.5mm wire

PROFESSIONAL CRIMPING TOOL
(TL-CRP)
- Durable ferrule crimping tool

HALF-INCH RATCHET TENSIONER
(TL-RAT1/2)
- Used to tension the Hybrid combo tensioner

Y-STANDARD POST DRIVER
(TL-PDY)
- Used as a hammer to drive Y-standards into the ground

SOLAR POWER

SOLAR PANELS

Nemtek solar panels offer a reliable source of power for electric fence systems in remote areas or where AC power supply is unreliable.
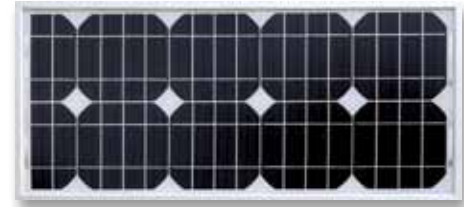
Module Characteristics	SOL-SYS10W	SOL-SYS20W	SOL-SYS40W	SOL-SYS90W	SOL-SYS140W
Maximum power (Pmax)	10 Watt	20 Watt	40 Watt	90 Watt	140 Watt
Open-circuit voltage (Voc)	21.6V	21.6V	21.6V	21.6V	21.6V
Weight	0.6kg	2.6kg	4.2kg	8kg	11.5kg
Module dimensions	384 x 252 x 30mm	520 x 360 x 30mm	610 x 510 x 30mm	970 x 670 x 35mm	1 516 x 670 x 35mm

SOLAR REGULATORS 10AMP (SOL-PCS10-24C) AND 15AMP (SOL-PCS15-24C)

Two solar regulator models are available, the 10Amp and the 15Amp. They can be set to operate on a voltage of 12VDC or 24VDC. The 10Amp regulator is used with solar panels of up to 120 Watts and the 15Amp regulator with solar panels of up to 180 Watts.

These efficient Nemtek LCD solar controllers will minimise power losses when regulating the voltage while charging the battery. The regulator is equipped with various devices to protect its electronics and will record and display information such as battery voltage, charging current, load current, battery charging and discharging on the LCD. They are ideally suited for electric fencing that requires solar panels and batteries in remote areas.

BATTERIES

MOUNTING BRACKETS (SY-SYZ040R)

Quick and easy to install onto most of Nemtek's solar panels.
• Adjustable angle: 15, 30 and 45 degrees
• Use on panel: 20W, 40W, 90W and 140W
• Made from extruded aluminium with stainless steel fasteners

Battery Characteristics	BAT-B07	BAT-B12	BAT-B28	BAT-B50	BAT-B100
Nominal voltage	12V	12V	12V	12V	12V
Nominal capacity	7Ah	12Ah	28Ah	50Ah	100Ah
Type	Sealed rechargeable battery				
Weight	2.15kg	3.4kg	9kg	16kg	29.8kg
Dimensions (l x w x h in mm)	151 x 65 x 95	151 x 99 x 101	175 x 165 x 126	229 x 138 x 213	329 x 172 x 218

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ENERGIZER ENCLOSURES

ALUMINIUM BOX (ENC-ALU/S)
- (h) 610 x (w) 450 x (d) 260
- Medium capacity to house an energizer, solar regulator and a deep cycle battery
- Ventilated aluminium box

ALUMINIUM BOX (ENC-ALU)
- (h) 610 x (w) 800 x (d) 300
- Ventilated aluminium box
- Large capacity to house double energizers, solar regulator and deep cycle batteries
- Available in shock box version (ENC-SHBOX)

ENCLOSURE STAND (ENC-KDS)
- The hot-dip galvanised stand can carry both the ENC-ALU and the ENC-SHBOX enclosures
- Optional U bracket is required when concreting
- (h) 1180 x (w) 800 x (d) 300

ENCLOSURE STAND U BRACKET (ENC–KDS/UBOLT)
- Use with concrete to secure the enclosure stand into the ground

FIBREGLASS ENCLOSURE
(ENC-EMB-A)

- (h) 305 x (w) 305 x (d) 155
- Ideal for outdoor use
- Lockable with a padlock
- Ideal for the general use

FIBREGLASS ENCLOSURE
(ENC-RL6D-P)

- (h) 450 x (w) 300 x (d) 210
- Ideal for outdoor use
- Lockable with a padlock
- Ideal for the small range on energizers

FIBREGLASS ENCLOSURE
(ENC-AP3-A)

- (h) 620 x (w) 470 x (d) 265
- Ideal for outdoor use
- Lockable with a padlock
- Ideal for the larger range on energizers

METAL ENCLOSURE (ENC-SB/WIZ)

- (h) 460 x (w) 305 x (d) 230
- Powder-coated steel enclosure for indoor and inland use
- Display window for easy view
- Lockable with a padlock
- Ideal for the smaller range on energizers

METAL ENCLOSURE (ENC-SB/STEALTH)

- (h) 610 x (w) 460 x (d) 230
- Powder-coated steel enclosure for indoor and inland use
- Display window for easy view
- Lockable with a padlock
- Ideal for the larger range on energizers

GENERAL PURPOUSE ENCLOSURES

- Mini (h) 100 x (w) 100 x (d) 50 (ENC-C51)
- Small (h) 150 x (w) 110 x (d) 70 (ENC-C52)
- Medium (h) 190 x (w) 140 x (d) 70 (ENC-C53)
- Large (h) 305 x (w) 205 x (d) 110 (ENC-C54)

ELECTRIC FENCE COMPONENT CHECK LIST

ENERGIZERS	
Single-zone energizers	Wizord: W2i, W4i Merlin and Merlin Stealth: M4, M15S, M18S Druid: D13LCD, D15LCD, D18LCD, D114LCD
Two-zone energizers	Merlin Stealth: M28SX, M25S, M28S Druid: D25LCD, D28LCD
Four-zone systems	Use two Druid D25LCD or D28LCD energizers and one four-zone keypad
Multi-zone systems	Merlin Stealth Master system Merlin Fence Probe software and Sage system Druid FG system Druid Fence Probe software with FG7
Multi-zone communication	Cable: RS 485 (recommended for short runs only) Fibre optic: single mode, multi-mode Wireless: Microwave/wifi
Synchronisation module	For the Druid D25LCD/D28LCD energizers
Druid relay expansion card	Druid D25LCD/D28LCD energizer relay expansion card or a network IO card
Keypads	Merlin and Druid range
FENCING POSTS AND BRACKETS	
Wall-top brackets	Round bar, flat bar, square tubing-pole, profile poles, T-pole Stay and stay sleeves for corners Lugs and rubber clamps for the stays Hooks: Large tail hooks, Modulus and Jurassic hooks
Free-standing fencing posts	Nemtek Y-pickets Corner poles and stay Hot-dip galvanised nut and bolt Insulators: Picket, pop through, strain Hooks: S-hook, through hole S-hook, U-hook
Omega brackets	1mm bracket intermediate 2mm bracket, corner and end post Omega mounting brackets: plastic space and weld brackets Insulators: Omega double shield Pull through assembly with insulator Hooks: S-hooks/90 degree hooks/180 degree hooks
Modulus brackets	Two-way and three-way Modulus insulators: slide and spacer Hooks: Modulus and Jurassic hook Mounting bracket
Offset brackets	Single, double and triple offset bracket Ratchet tensioners Insulators: Porcelain and plastic
Bracket fasteners	Nail in anchors, hammer drives, tech screws, coach screws
FENCE WIRES AND CABLES	
Fence wires	Galvanised, stainless steel, aluminium. Solid or stranded
Cables (HT Cables)	A-series, UC-series, S-series (single- and multi-core) Communication cables for sirens and keypads
WIRE TENSIONING SYSTEMS AND CONNECTORS	
Tensioners	Spring tensioner Ratchet tensioners Spring tensioners with built in ratchet (Hybrid)
Bridging wires	100mm and 200mm bridging wires available in stainless steel and hot-dip galvanized steel
Wire and cable connectors	Line clamp: Bolt type, U-type Ferrules: stainless steel, aluminum, tinned copper
INSULATORS	
Pocelain or plastic	
GENERAL ACCESSORIES	
Warning signs	Required every 10m and on each gates. Custom warning signs available
Fence light	High voltage fence light indicator
Cut-out switch	High voltage cut out switch
Flood gate controller	For water ways and rivers
Lightning protection	Single pole and double pole lightning protection
Siren and strobe lights with bracket	Sirens 15 Watt or 30 Watt. Strobe light and bracket
Earth and live loops	Wall mount, fence mount, in ground

GENERAL ACCESSORIES CONTINUED	
Earth spikes	Copper cladded and galvanised, 1m and 1.2m
Gate contacts and gate mounting brackets	Sliding gate contacts. Sliding gate contact with earth plate (alarm when open). Mounting bracket
Conduit and accessories	20mm and 25mm
ENCLOSURES	
Energizer enclosures	Powder-coated steel with window (indoor and inland use) Aluminium enclosure Fibre glass enclosure
Shock box enclosure	Aluminum shock box
Free-standing enclosure stand	U-bolt to secure stand in concrete
General purpose enclosures	Enclosures
SOLAR POWER	
Solar panels and mounting brackets	For the 40 Watt, 90 Watt and 140 Watt solar panels
Solar regulators	10Amp and 15Amp regulators
Deep-cycle batteries	50Ah and 100Ah
TOOLS AND TESTERS	
Fence scope multi-tool and pouch	Four-in-one (directional fault finder, joule meter, scope and noise meter). Handy tool pouch
Crimping tool	For the 6mm and 10mm ferrules
Ratchet tool	Used with the combo tensioner hybrid
Wire dispensers	Reel or coil dispenser
Wire cutters	Heavy duty, Knipex cutter
Drill bits	Steel and masonry drill bits. SDS masonry drill bits
Y-standard driver tool	For the Nemtek Y-pickets
Distance measuring wheel	Site measurement in metres

TIPS TO INCREASE YOUR SECURITY

Nemtek's worldclass products are designed and manufactured to ensure a high-security solution and offer reliability for many years. Due to the large range of products on offer, here are a few tips to ensure your system meets your security needs and operates reliably.

- Spacing between fence wires must not exceed 100mm. This will reduce attempts to part wires. Earth or live loops fitted on the fence will cause an alarm when there is an attempt to part the wire.
- The bottom fence wire, where possible, should be live and fitted with an anti-lift loop where there is a threat of lifting. The top wire must also be live.
- All electric fencing live wires must be connected in a series circuit so that a cut live wire can be detected anywhere along the fence.
- Spacing between posts must not exceed 3 metres. This will discourage attempts to part wires. In the case of freestanding fencing it is recommended that a shorter post be placed between the main posts reducing the span to 1.5m. This in-between shorter post will stop any attempts to lift the bottom wires. Ensure that the ground under the freestanding fencing is secure and not easy to dig under. The height of the freestanding fence must be at least 2m.
- The height of the bracket above the wall is important; the higher the wall brackets the more it discourages attempts to step over the fence. The wider walls will need higher and angled brackets to cover the span of the wall top and reduce any chance of standing on the wall.
- The fence wires must be under constant tension using compression springs. This will improve the aesthetics and the security of the fence.
- Alarm zone lengths should not be longer than 200 metres. The zones must be powered by independent energizer zones. This will help locate a fault faster. This is not always possible due to cost and location constraints. In high-security areas shorter zones are recommended.
- No two zones must rely on each other being intact to operate effectively and must be independently alarm monitored. This is important in the case of an attempted multi-point entry breach of the fence.
- Gates can be a weak point. Make sure that sliding gates cannot be lifted up off the rack and be slid open. In the case of swing gates, they can be forced open when they are closed. These gates can be monitored for unauthorised entry using a magnetic switch.
- Ensure that the fence is kept free of vegetation.

Frequent testing of the fence is imperative. A few points along the fence line must be tested.

NEMTEK
Electric Fencing Products

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25 YEARS
more than 25 years of designing
and manufacturing innovative
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