



ANIMAL MANAGEMENT AND CONTROL



25 years of designing and manufacturing innovative electric fencing solutions

NEMTEK
Electric Fencing Products



introduction

NEMTEK... A PIONEER IN ITS FIELD

The Nemtek group manufactures a full range of energizers and fencing hardware and has become a globally known and well respected company.

Nemtek's electric fencing solutions have become the products of choice. This has been achieved by Nemtek's continuous innovation, fast response to ever-changing market needs, the reliability of its products and its continuous support, service and close working relationship with its clients.

This brochure offers you an overview of the electric fencing products that Nemtek designs and manufactures for the Agricultural, Equine and Pet markets, which include a comprehensive range of energizers and a complete range of fencing hardware. The Nemtek range addresses many types of fencing needs, ranging from small enclosures to large farms and game reserves.

Nemtek's experience in the security field has revolutionised the way game farm and animal farm energizers are designed. Not only does Nemtek keep animals safely enclosed, but they now also offer security experience and communication techniques to combat the theft of animals by poachers.

For more details and information on Nemtek's products visit www.nemtek.com.

THE REASONS FOR USING AN ELECTRIC FENCE

A high-voltage shock with a physical barrier will deter animals from leaving a controlled environment and venturing out. Wild animal and vermin movement can also be controlled by either keeping them inside a controlled area or outside and separate from another group of animals.

Electric fencing is more affordable than most conventional and traditional barriers in controlling animals. Electric fencing is easily transported. The shock also keeps the animals away from the fence, reducing damage to the fence. Portable fences can be erected quickly and smaller areas can be demarcated for grazing rotations.

NEMTEK SERVICE SUPPORT

Nemtek offers a free support and advice service that includes:

- expert advice on the design of your fence and choice of hardware
- assistance with the choice of energizer
- fault finding and correct earthing assistance.

agriculture


Nemtek's extensive range of quality and innovative Agricultural electric fencing products help ensure the safety and wellbeing of your animals.

Nemtek's agricultural energizers are designed to suit the needs of various property sizes, from small hobby farms, larger farming properties, stud and cattle farms, to the larger stations. The Nemtek range of products is robustly designed and manufactured from top quality materials to ensure longevity and peak performance.

The Agricultural range of fencing products will help keep your animals safe and secure, providing you with peace of mind.



equine



Nemtek's wide range of Equine products are specifically designed and manufactured, taking into consideration the safety and wellbeing of your horses. The solutions Nemtek offers will suit the needs of any type of Equine farm, be it professional or a simple lifestyle farm.

The Equine range of fencing products will withstand the elements due to the robust designs and top quality materials used to manufacture these products.

Using Nemtek's Equine fencing systems gives you peace of mind, knowing your horse is safe from unwanted predators and free from injury from rusted barbed wire. The colours used in Nemtek's Equine range are highly visible to horses, thus reducing accidents.

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 you to monitor the condition of the fence at the energizer without having to patrol the fence regularly, thus saving time and money.

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



pet

Nemtek's state of the art PetStop kit is designed to keep animals away from flowerbeds, veggie patches and refuse areas. It also acts as a barrier to protect your pet from other animals and helps to ensure a safe environment.

The great thing about the Nemtek PetStop kit is that it is fully solar powered and comes complete with an energizer, solar panel, battery, mounting bracket, fibreglass poles, earth spike, spring clamps, 200m of polywire and a warning sign.



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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 and products conform to the standards set out by the IEC 60355-2-76, CISPR 14 and EN 6100. 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. Performance information is affected by component tolerances and settings. Variations are normal.

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 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, as well as training on all the products that it manufactures.

ENERGIZERS

ENERGIZER: MAINS AND BATTERY

The Agri range of energizers can be powered with a battery or by mains, making them handy and adaptable depending on your needs. Most of the energizers use Nemtek APT technology, which ensures maximum power is delivered to the electric fence while minimising power losses along the fence line. With APT the energizer responds to changing environmental factors (such as changes in weather and vegetation growth on the fence), and adapts to the changing needs of the fence by maximising fence power and efficiency.



* 3km

PET 3 (AE-A/PET)

The Pet energizer is designed to keep pets out of specific areas such as flowerbeds, vegetable gardens and refuse areas:

- Powers up to 3km of fence*
- Robust weather-resistant system
- Adaptable mounting options (wall, fence wire or wooden post)
- Output energy max 0.3J (stored energy 0.5J)
- Powered by battery or mains power adaptor (sold separately)
- Lightning protection
- A solar panel PetStop kit is also available



APT
* 5km

AGRI 5 (AE-A005J)

- Powers up to 5km of fence*
- Robust weather-resistant system
- Battery charge state indicator
- Energizer overload indicator
- Day/night sensor
- Output energy max 0.5J (stored energy 0.8J)
- Powered by battery or mains power adaptor (sold separately)
- Adaptable mounting options (wall, fence wire or wooden post)
- Lightning protection
- Many programmable options via the LCD handheld remote (optional accessory) including adjustment of fence voltage and pulse rate, independent day/night setting, battery voltage reporting and fence performance monitoring



APT
* 10km

AGRI 10 (AE-A010J)

- Powers up to 10km of fence*
- Robust weather-resistant system
- Battery charge state indicator
- Energizer overload indicator
- Day/night sensor
- Output energy max 1J (stored energy 1.65J)
- Powered by battery or mains power adaptor (sold separately)
- Adaptable mounting options (wall, fence wire or wooden post)
- Lightning protection
- Many programmable options via the LCD handheld remote (optional accessory) including adjustment of fence voltage and pulse rate, independent day/night setting, battery voltage reporting and fence performance monitoring



APT
* 20km

AGRI 20 (AE-A020J)



- Powers up to 20km of fence*
- Robust weather-resistant system
- Battery charge state indicator
- Energizer overload indicator
- Day/night sensor
- Output energy max 2J (stored energy 3.3J)
- Powered by battery or mains power adaptor (sold separately)
- Adaptable mounting options (wall, fence wire or wooden post)
- Lightning protection
- Many programmable options via the LCD handheld remote (optional accessory) including adjustment of fence voltage and pulse rate, independent day/night setting, battery voltage reporting and fence performance monitoring



APT
* 20km

EQUINE 20 (AE-A/EQ)



- Powers up to 20km of fence*
- Robust weather-resistant system
- Battery charge state indicator
- Energizer overload indicator
- Day/night sensor
- Output energy max 2J (stored energy 3.3J)
- Powered by battery or mains power adaptor (sold separately)
- Adaptable mounting options (wall, fence wire or wooden post)
- Lightning protection
- **Includes LCD handheld remote** to programme and monitor energizer functions, such as adjustment of fence voltage and pulse rate, independent day/night setting, battery voltage reporting and fence performance monitoring

* The distances that can be powered are a guideline only and apply to optimal fence conditions. Factors such as the resistance of the fence wire, the type of fence wire, the installation of the fence, proximity of the live fence wire to other earth wires, the amount of vegetation touching the fence and earthing of the fence system will influence the distance that can be powered. For more information please refer to www.nemtek.com.



APT
* 30km

AGRI 30 (AE-A030J)



- Powers up to 30km of fence*
- Robust weather-resistant system
- Battery charge state indicator
- Energizer overload indicator
- Day/night sensor
- Output energy max 3J (stored energy 4.4J)
- Powered by battery (sold separately) or mains power adaptor (included)
- Adaptable mounting options (wall, fence wire, wooden post and also slides onto Y-picket post)
- Lightning protection
- Many programmable options via the LCD handheld remote (optional accessory) including adjustment of fence voltage and pulse rate, independent day/night setting, battery voltage reporting and fence performance monitoring



APT
* 50km

AGRI 50 (AE-A050J)



- Powers up to 50km of fence*
- Robust weather-resistant system
- Battery charge state indicator
- Energizer overload indicator
- Day/night sensor
- Output energy max 4.6J (stored energy 6.5J)
- Powered by battery (sold separately) or mains power adaptor (included)
- Adaptable mounting options (wall, fence wire, wooden post and slides onto Y-picket post)
- Lightning protection
- Many programmable options via the LCD handheld remote (optional accessory) including adjustment of fence voltage and pulse rate, independent day/night setting, battery voltage reporting and fence performance monitoring



MAINS POWER ADAPTOR 12VDC (AEE-A/CHR/EUR, AEE-A/CHR/AU)

- 240V charger for energizers
- Plugs into energizer and mains. 240V when available
- European and Australian plugs

TAG (EE-WIZ4/MAGNET)

- Switches the energizer on and off
- Fits onto a keyring
- Included and used with the AGRI 30, AGRI 50 mains energizers and also with the AGRI 10 SOLAR, AGRI 25 SOLAR, AGRI 50 SOLAR and the DRUID 114 energizers



ENERGIZER: MAINS WITH BATTERY BACK-UP OR SOLAR

The Druid 114 LCD single-zone energizer is the ideal choice for long-distance, parallel electric fencing systems that require monitoring such as game farms, animal parks, cattle farms and nature reserves. This energizer is ideal for controlling game and wild animals such as elephants, lions, tigers, rhino, buffalo, bears, warthog, hippo, buck and deer.

Using the Adaptive Power Technology (APT), pioneered by Nemtek, this energizer offers a new and unique method in detecting how much power a fence can accept and handle before it starts to arc and waste energy, thus maximising the power on the fence.



APT

* 130km

DRUID 114 (E-DRUID/114/LCD)



- Large energizer powers up to 130km of fence*
- Ideal choice for long fences that require monitoring
- Built-in alarm that sounds if there is fence tampering or a fence fault
- LCD display makes information quick and easy to read
- Easy-to-use tag switch included for controlling the energizer
- Output energy max 13.8J (stored energy 21J)
- Powered by 220V mains and includes built-in battery for back-up power
- 140 watt solar panels and external 12V 15A regulator with a larger 100Ah battery that can be added when mains power is not available
- Adaptable mounting options (wall or cabinet)
- Lightning protection
- The energizer can be controlled remotely by linking it to up to two keypads

* The distances that can be powered are a guideline only and apply to optimal fence conditions. Factors such as the resistance of the fence wire, the type of fence wire, the installation of the fence, proximity of the live fence wire to other earth wires, the amount of vegetation touching the fence and earthing of the fence system will influence the distance that can be powered. For more information please refer to www.nemtek.com.

ENERGIZER: SOLAR WITH INTERNAL BATTERY

The Agri solar energizers include an attached large solar panel and a built-in environmentally friendly Lithium iron battery (LiFe). The environmentally friendly battery offers a much longer life span than traditional lead acid batteries. These Agri solar energizers with the advanced battery technology are ready to use and easy to install.



LiFe
BATTERY

*
1km

5W
SOLAR
PANEL

AGRI 1 SOLAR (AE-SB001)

- Powers up to 1km of fence*
- Large 5W solar panel for quick charge
- Robust solar bracket and weather-resistant housing
- On/off TAG to switch the energizer on and off
- Output energy max 0.1J (stored energy 0.125J)
- Battery charge state indicator
- Solar panel charge state indicator
- Deep sleep mode for battery safe-mode storage
- Day/night sensor
- Y-picket mounting
- Lightning protection



LiFe
BATTERY

*
3km

5W
SOLAR
PANEL

AGRI 3 SOLAR (AE-SB003)

- Powers up to 3km of fence*
- Large 5W solar panel for quick charge
- Robust solar bracket and weather-resistant housing
- On/off TAG to switch the energizer on and off
- Output energy max 0.26J (stored energy 0.33J)
- Battery charge state indicator
- Solar panel charge state indicator
- Deep sleep mode for battery safe mode storage
- Day/night sensor
- Y-picket mounting
- Lightning protection



LiFe
BATTERY

*
5km

10W
SOLAR
PANEL

AGRI 5 SOLAR (AE-SB005)

- Powers up to 5km of fence*
- Large 10W solar panel for quick charge
- Robust solar bracket and weather-resistant housing
- On/off TAG to switch the energizer on and off
- Output energy max 0.47J (stored energy 0.55J)
- Battery charge state indicator
- Solar panel charge state indicator
- Deep sleep mode for battery safe mode storage
- Day/night sensor
- Y-picket mounting
- Lightning protection

2-YEAR
factory
warranty
on battery



1. Large solar panel for quick charge
2. Robust solar mounting bracket
3. Robust weather-resistant housing
4. Mountable onto a Y picket. Can also be used as an earth (hot dip galvanised)
5. Heavy-duty screw-on knobs
6. Energizer status indicator
7. Battery charge status indicator
8. Solar panel charge state indicator
9. Internal environmentally friendly LiFe battery



LiFe
BATTERY

*
8km

10W
SOLAR
PANEL

AGRI 8 SOLAR (AE-SB008)



- Powers up to 8km of fence*
- Large 10W solar panel for quick charge
- Robust solar bracket and weather-resistant housing
- On/off TAG to switch the energizer on and off
- Output energy max 0.68J (stored energy 0.825J)
- Battery charge state indicator
- Solar panel charge state indicator
- Deep sleep mode for battery safe mode storage
- Day/night sensor
- Y-picket mounting
- Lightning protection

ENERGIZER: SOLAR AND BATTERY

The Agri solar range of energizers includes a solar panel, which is used to charge a battery during the day to power the energizer. Solar panels are usually provided with a separate solar regulator, but the Nemtek Agri solar range of energizers has a built-in solar regulator. This makes the energizer more portable and makes connecting of the energizer easier. The built-in regulator has a smart management system to maximise battery life and ensure efficient power management to the fence. These energizers also come with built-in polarity protection for the battery and the solar system to protect them in the event of an incorrect connection. The energizers use Nemtek APT technology, which ensures maximum power is delivered to the electric fence while minimising power losses along the fence line. With APT the energizer responds to changing environmental factors (such as changes in weather and vegetation growth on the fence), and adapts the changing needs of the fence to maximise fence power and efficiency.



AGRI 10 SOLAR (AE-S010)



- Powers up to 10km of fence*
- Robust weather-resistant system
- Battery charge state indicator
- Energizer overload indicator
- Output energy max 1J (stored energy 1.4J)
- Powered by 10 watt solar panel (included) and 12Ah battery (sold separately)
- Built-in solar regulator with power management system for easier connection and portability
- Built-in battery polarity protection
- Day/night sensor
- Y-picket mounting
- Lightning protection
- Many programmable options via the LCD handheld remote (optional accessory) including adjustment of fence voltage and pulse rate, independent day/night setting, battery voltage reporting and fence performance monitoring

APT

* 10km

10W
SOLAR
PANEL



AGRI 25 SOLAR (AE-S025)



- Powers up to 25km of fence*
- Robust weather-resistant system
- Battery charge state indicator
- Energizer overload indicator
- Output energy max 2.3J (stored energy 3.1J)
- Powered by 20 watt solar panel (included) and 28Ah battery (sold separately)
- Built-in solar regulator with power management system for easier connection and portability
- Built-in battery polarity protection
- Day/night sensor
- Y-picket mounting
- Lightning protection
- Many programmable options via the LCD handheld remote (optional accessory) including adjustment of fence voltage and pulse rate, independent day/night setting, battery voltage reporting and fence performance monitoring

APT

* 25km

20W
SOLAR
PANEL



APT

* 50km

40W
SOLAR
PANEL**AGRI 50 SOLAR** (AE-S050)

- Powers up to 50km of fence*
- Robust weather-resistant system
- Battery charge state indicator
- Energizer overload indicator
- Output energy max 4.6J (stored energy 6.5J)
- Powered by 40 watt solar panel (included) and 50Ah battery (sold separately)
- Built-in solar regulator with power management system for easier connection and portability
- Built-in battery polarity protection
- Day/night sensor
- Angle-adjustable solar mounting bracket included (mounting pole not included)
- Energizer Y-picket mounting
- Lightning protection
- Many programmable options via the LCD handheld remote (optional accessory) including adjustment of fence voltage and pulse rate, independent day/night setting, battery voltage reporting and fence performance monitoring

**LCD ENERGIZER PROGRAMMER** (AE-A/KCREM)

The Agri energizers can also be programmed and have their power and efficiency levels monitored using the LCD energizer programmer. This remote allows you to perform and monitor a number of fence functions when you use it with the energizer. Some of the functions that can be monitored or programmed using the remote are:

- Adjusting fence voltage
- Adjusting pulse rate
- Independent day/night setting of fence voltage and pulse rate
- Fence voltage control that can be switched between conventional and APT methods
- Adjusting energizer overload warning threshold
- Accurate battery voltage reporting
- Nemtek security lock energizer theft deterrent
- Memory of lowest-recorded fence voltage
- Memory of highest-recorded energizer effort

* The distances that can be powered are a guideline only and apply to optimal fence conditions. Factors such as the resistance of the fence wire, the type of fence wire, the installation of the fence, proximity of the live fence wire to other earth wires, the amount of vegetation touching the fence and earthing of the fence system will influence the distance that can be powered. For more information please refer to www.nemtek.com.

ENERGIZER SELECTION TABLE

MAINS AND BATTERY							
MODEL	PET	Agri 5	Agri 10	Agri 20	Equine 20	Agri 30	Agri 50
Product code	AE-A/PET	AE-A005J	AE-A010J	AE-A020J	AE-A/EQ	AE-A030J	AE-A050J
Maximum fence length (optimal multi wire fence)*	3km	5km/ 7 acres/2.8ha	10km/ 16 acres/6.4ha	20km/ 32 acres/12.8ha	20km/ 32 acres/12.8ha	30km/ 50 acres/20ha	50km/ 80 acres/32ha
Stored energy (Joules)	0.5J	0.8J	1.65J	3.3J	3.3J	4.4J	6.5J
Maximum output energy (Joules)	0.3J	0.5J	1.0J	2.0J	2.0J	3.0J	4.6J
Voltage output circuit	7.5kV	8.5kV	9kV	9kV	9kV	9kV	9kV
Voltage output @ 1 000ohms	4kV	4kV	6.5kV	6.5kV	6.5kV	8.5kV	8.5kV
APT technology included	No	Yes	Yes	Yes	Yes	Yes	Yes
Main power adaptor 12VDC (sold separately)	Optional	Optional	Optional	Optional	Optional	Included	Included
Battery (AGM) 12VDC (sold separately, battery leads included)	2.2Ah = 30 hours	7Ah = 108 hours	7Ah = 54 hours	7Ah = 42 hours	7Ah = 42 hours	28Ah = 96 hours	50Ah = 96 hours
Remote LCD display energizer programmer	No	Optional	Optional	Optional	Yes	Optional	Optional
Keyring on/off tag	No	No	No	No	No	Yes	Yes
Day/night sensor	No	Yes	Yes	Yes	Yes	Yes	Yes
Mounting options	Wall, fence wire, wooden post	Wall, fence wire, wooden post	Wall, fence wire, wooden post	Wall, fence wire, wooden post	Wall, fence wire, wooden post	Wall, fence wire, wooden post, Y-picket post	Wall, fence wire, wooden post, Y-picket post
Internal lightning protection	Yes	Yes	Yes	Yes	Yes	Yes	Yes

	SOLAR INTERNAL BATTERY				SOLAR EXTERNAL BATTERY			MAINS WITH BATTERY BACK-UP OR SOLAR
MODEL	Agri 1 Solar	Agri 3 Solar	Agri 5 Solar	Agri 8 Solar	Agri 10 Solar	Agri 25 Solar	Agri 50 Solar	Druid 114
Product code	AE-SB001	AE-SB003	AE-SB005	AE-SB008	AE-S010	AE-S025	AE-S050	E-DRUID/114/LCD
Maximum fence length (optimal multi wire fence)*	1km	3km	5km	8km	10km/16 acres/6.4ha	25km/40 acres/16ha	50km/80 acres/32ha	130km/200 acres/82ha
Stored energy (Joules)	0.12J	0.33J	0.55J	0.82J	1.4J	3.1J	6.5J	21J
Maximum output energy (Joules)	0.1J	0.26J	0.47J	0.68J	1.0J	2.3J	4.6J	13.8J
Voltage output circuit	7.1kV	10kV	12kV	12kV	8kV	9kV	9kV	9kV
Voltage output @ 1 000ohms	3.7kV	5kV	6kV	6.4kV	7.5kV	8.5kV	8.5kV	8.5kV
APT technology included	No	No	No	No	Yes	Yes	Yes	Yes
Solar panel size	5 watt	5 watt	10 watt	10 watt	10 watt	20 watt	40 watt	Can also be solar powered
Battery	LiFe internal	LiFe internal	LiFe internal	LiFe internal	12Ah	28Ah	50Ah	Includes a 7Ah battery
					AGM 12VDC (sold separately)			
Remote LCD display energizer programmer	No	No	No	No	Optional	Optional	Optional	Keypad optional
Keyring on/off tag	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Day/night sensor	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Mounting options	Y-picket post	Y-picket post	Y-picket post	Y-picket post	Y-picket post	Y-picket post	Y-picket post	Wall or cabinet type
Internal lightning protection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

* The distances that can be powered are a guideline only and apply to optimal fence conditions. Factors such as the resistance of the fence wire, the type of fence wire, the installation of the fence, proximity of the live fence wire to other earth wires, the amount of vegetation touching the fence and earthing of the fence system will influence the distance that can be powered. For more information please refer to www.nemtek.com.

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 animal will receive at any point along the fence by simulating the animal. This helps to ensure that the voltage and the energy is sufficient along the entire fence to deliver an appropriate shock to the animal.
- **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.

PET KIT

PetStop KIT (AA-PET/KIT)







A complete user-friendly kit used to keep pets out of areas such as flowerbeds and refuse areas. The 24m kit is powered by a battery and solar panel. Accessories are available for larger fencing needs.













1. **Earth spike – PetStop**
(EA-EAG/PET)
2. **24 x 8mm spring clips**
(AA-PS/SPR/8R)
3. **Warning sign**
(EA-WRS2/N)
4. **3W regulated solar panel**
(SOL-SYS3W/PS)
5. **12V-2Ah battery**
(BAT-B02)
6. **Pet energizer**
(AE-A/PET)
7. **Solar panel mounting bracket**
(AA-PSB)
8. **200m polywire Ecostop SS3**
(AW-PWSS3/200M)
9. **8 x fibreglass rods (8mm x 850mm)**
(AA-FR/8/850)













INSULATOR RANGE

PORCELAIN INSULATORS

	<p>BOBBIN – PORCELAIN (EI-BPFL)</p> <ul style="list-style-type: none"> • Fireproof and long lasting • Large design to reduce power loss 	
	<p>STRAIN – PORCELAIN (EI-STFP)</p> <ul style="list-style-type: none"> • Fireproof and long lasting • Large design to reduce power loss • Suitable for long runs • Can withstand high tension 	
	<p>BOBBIN INSULATOR CLIP (AA-PIFC)</p> <ul style="list-style-type: none"> • Stainless steel clip with galvanised nut and bolts • Fasten the bobbin – porcelain and the tension bobbin insulator onto the Y picket 	

PLASTIC INSULATORS






	<p>TENSION BOBBIN INSULATOR (EI-BTL)</p> <ul style="list-style-type: none"> • Heavy-duty large insulator • Used with offset bracket where fire is not a concern • Black 	
	<p>STRAIN INSULATOR – ULTRA (EI-STB/R)</p> <ul style="list-style-type: none"> • Suitable for fences using up to 2.0mm wire • Larger tracking distance to reduce arcing • Suitable for medium-tensioned fences • Black 	
	<p>STRAIN INSULATOR – HARDENED ULTRA (EI-STB/R/H)</p> <ul style="list-style-type: none"> • Suitable for fences using up to 3.0mm wire • Larger tracking distance to reduce arcing • Suitable for high-tensioned fences • Black 	
	<p>PICKET INSULATOR (EI-PI)</p> <ul style="list-style-type: none"> • Used with Nemtek Y picket • Double tracking fin to reduce arcing • Quick-fit design clip • Black 	
	<p>Y STANDARD INSULATOR (EI-YB)</p> <ul style="list-style-type: none"> • Quick-fit design – easy to replace when required • Suitable for Y-standard brackets • Black 	

	<p>NAIL-ON INSULATOR (EI-N0B)</p> <ul style="list-style-type: none"> • Large clips for thicker wires • Larger clearance to eliminate power leakage • Black 	
	<p>THICK WIRE-AND-ROPE INSULATOR</p> <ul style="list-style-type: none"> • Heavy duty • Suitable for thick wire or polyrope (6mm) • Can be screwed or nailed into post • Black (AI-TWRI/B) and white (AI-TWRI/W) 	
	<p>RING INSULATOR SCREW 40MM (AI-RI40)</p> <ul style="list-style-type: none"> • Screw into wooden post • Large clearance to eliminate power leakage • Black 	
	<p>RING INSULATOR LONG-ARM SCREW 190MM (AI-RI/L190)</p> <ul style="list-style-type: none"> • Screw into wooden post • 190mm long arm • Black 	
	<p>SCREW-ON INSULATOR (AI-S0B)</p> <ul style="list-style-type: none"> • Screw onto round bar • Fits 8mm–12mm round bar • Black 	
	<p>GUM-POLE SLEEVE (AA-SP/WI)</p> <ul style="list-style-type: none"> • Insulated tube inner diameter (4.5mm) and thick external diameter (10mm) • 10m roll • Black 	







	<p>PICKET CAP FOR STEEL POST (AA-P/CAP)</p> <ul style="list-style-type: none"> • Can be used with steel wire, 12mm, 20mm, 40mm tape, and 6mm rope • Heavy-duty design • Fits most types of pickets and Y posts • White for high visibility
	

* All plastic insulators are UV stabilised for long life.

PLASTIC INSULATOR – MULTI-FUNCTION

	<p>DUAL PIN PICKET INSULATOR (AI-DPI)</p> <ul style="list-style-type: none"> • Used with the Y picket • Multi-function: can secure 12mm, 20mm, 40mm polytape, polyrope and steel wires • Large design for heavy-duty use • Black 				
					
<p>40MM TAPE WITH ROPE</p>	<p>40MM TAPE WITH 20MM TAPE</p>	<p>40MM TAPE SYSTEM</p>			
					

TAPE INSULATORS – WOODEN POST

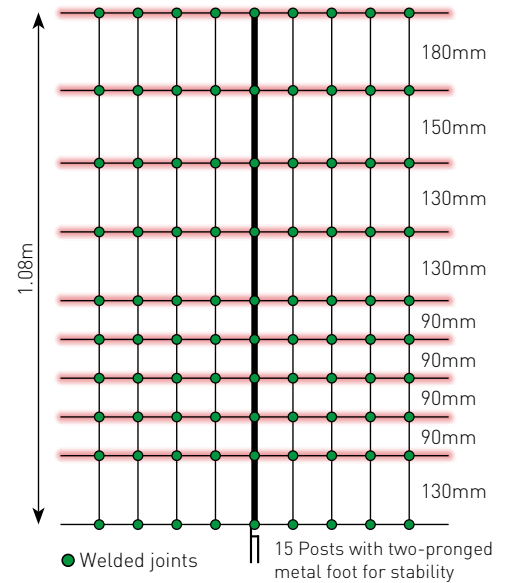
	<p>END AND CORNER POST INSULATOR (AI-CI/PT/W)</p> <ul style="list-style-type: none"> • Used to secure the equine electric fence polytape in place • To be used at the beginning, end, and when the equine fence changes direction • Suitable for 12mm, 20mm and 40mm tape • White 	
	<p>INTERMEDIATE POST INSULATOR (AI-I/PT/W)</p> <ul style="list-style-type: none"> • Rubber pad to secure tape and increase life span • Used to secure the electric fence polytape in place • Suitable for straight runs • White 	
	<p>WOODEN POST TAPE INSULATOR (AI-TI)</p> <ul style="list-style-type: none"> • Screw into wooden post • Suitable for 20mm and 40mm tape • Black 	

NETTING

ELECTRIC FENCE NETTING

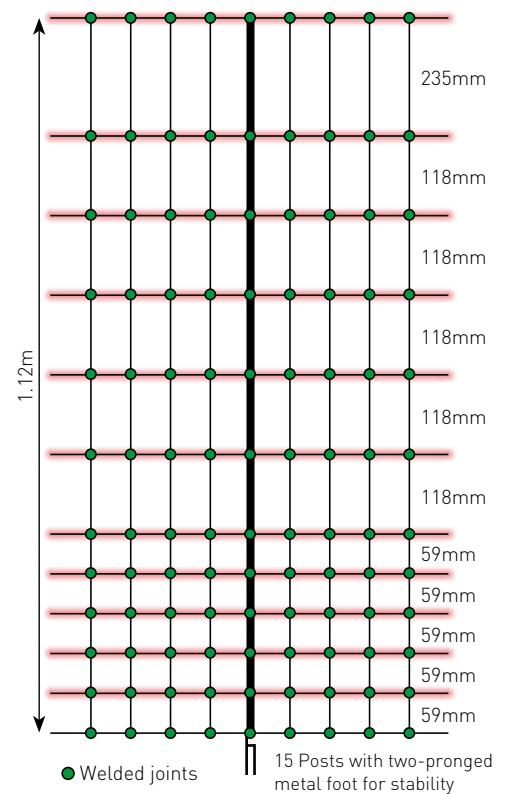
SHEEP AND GOAT (AA-NET108)

- Heavy-duty UV-stabilised polywires
- 3 x 0.20mm stainless steel conductors per horizontal fence line
- A total of 10 horizontal fence lines of which 9 are electrified. The bottom wire is not electrified as it touches the ground
- Metal clip to join multiple nets together
- Two-pronged metal foot for stability
- Repair kit and corner-post tie-downs included
- Multiple nets are easily connected



POULTRY (AA-NET112)

- Heavy-duty UV-stabilised polywires
- 3 x 0.20mm stainless steel conductors per horizontal fence line
- A total of 12 horizontal fence lines of which 11 are electrified. The bottom wire is not electrified as it touches the ground
- Metal clip to join multiple nets together
- Two-pronged metal foot for stability
- Repair kit and corner-post tie-downs included
- Multiple nets are easily connected









NEMTEK ENERGIZER MINIMUM REQUIREMENTS

- For one net use a 0.25 joule energizer
- For two nets use a 0.50 joule energizer
- For three nets use a 0.75 joule energizer
- For four nets use a 1.0 joule energizer with APT
- For more than four and up to ten nets use a 2.5 joule energizer with APT

FENCING WIRES, CABLES AND ACCESSORIES

WIRE, ROPE AND TAPE

		VOLTAGE AT START OF FENCE	VOLTAGE AT 200m	VOLTAGE AT 500m	VOLTAGE AT 2 000m	VOLTAGE AT 5 000m
	<p>POLYWIRE ECOSTOP SS3 (AW-PWSS3/200M)</p> <ul style="list-style-type: none"> For small, short fences 3 stainless steel conductors 13 300 Ω/km Strength 40kg (±10%) 	8 500	1 340	590	300	60
	<p>POLYWIRE VARIO SS6 (AW-PWSS6/400M)</p> <ul style="list-style-type: none"> For small, short fences 6 stainless steel conductors 4 000 Ω/km Strength 64kg (±10%) 	8 500	3 260	1 700	940	200
	<p>POLYWIRE BLUE MIX3</p> <ul style="list-style-type: none"> Available in 200m (AW-PWBMIX3/200M) and 400m (AW-PWBMIX3/400M) rolls For small- to medium-sized fences 3 stainless steel and conductive strands for better electrical conductivity 380 Ω/km Strength 80kg (±10%) 	8 500	7 370	6 150	4 830	1 770
	<p>POLYWIRE BLUE MIX6 (AW-PWBMIX6/400M)</p> <ul style="list-style-type: none"> For medium- to large-sized fences 6 stainless steel and conductive strands for better electrical conductivity 190 Ω/km Strength 90kg (±10%) 	8 500	7 900	7 140	6 150	2 930
	<p>POLYROPE WHITE MIX6 (AW-PRBMIX6/200M)</p> <ul style="list-style-type: none"> High visibility 6 stainless steel and highly conductive strands for better electrical conductivity 190 Ω/km Strength 410kg (±10%) 	8 500	7 900	7 140	6 150	2 930
	<p>POLYTAPE MIX 12MM</p> <ul style="list-style-type: none"> Available in 200m (AW-PTMX12MM/200) and 400m (AW-PTMX12MM/400) rolls Bright blue for high visibility to animals 5 stainless steel and highly conductive strands for better electrical conductivity 180 Ω/km Strength 112kg (±10%) 	8 500	7 920	7 200	6 250	3 030



		VOLTAGE AT START OF FENCE	VOLTAGE AT 200m	VOLTAGE AT 500m	VOLTAGE AT 2 000m	VOLTAGE AT 5 000m
	POLYTAPE MIX 20MM <ul style="list-style-type: none"> Available in 200m (AW-PTMX20MM/200) and 500m (AW-PTMX20MM/500) rolls 20mm tape: white and blue for higher visibility 6 stainless steel and highly conductive strands for better electrical conductivity 170 Ω/km Strength 150kg (±10%) 	8 500	7 960	7 260	6 340	3 140
	POLYTAPE MIX 40MM (AW-PTM40MM/200) <ul style="list-style-type: none"> 40mm high visibility to horses Thick plastic edges to increase life and reduce wear 8 stainless steel and highly conductive strands for better electrical conductivity 160 Ω/km Strength 190kg (±10%) 	8 500	7 900	7 320	6 430	3 270
	FLEXI ROPE 8MM (AA-EEC/50M) <ul style="list-style-type: none"> Flexible conductive rope that can be used in gateways UV stabilised for long life Expands up to twice its original length 					
	ALUMINIUM SOLID WIRE 2MM/500M (AW-AL20/500) <ul style="list-style-type: none"> Ideal for permanent fencing Easy to join, flexible and lightweight Excellent electrical conductivity for longer fencing Good corrosion resistance 14 Ω/km Strength 96kg (±10%) 	8 500	8 450	8 380	8 040	7 450
	ALUMINIUM STRANDED WIRE 2MM/500M (AW-AL20/500/STR) <ul style="list-style-type: none"> Reusable for portable and temporary fencing Easy to join, flexible and lightweight Good corrosion resistance 18 Ω/km Strength 65kg (±10%) 	8 500	8 430	8 350	7 920	7 200
	SOLID GALVANISED HIGH-TENSILE WIRE 2.24MM <ul style="list-style-type: none"> Standard medium-galvanised finish (EW-G2.24) Heavy-galvanised finish (EW-G2.24HG) Available in 50kg rolls (1 650m) Ideal for permanent fencing 50 Ω/km Strength 450kg (±10%) 	8 500	8 330	8 100	7 080	5 670

* All polywires, polyropes and polytapes are UV stabilised for long life.




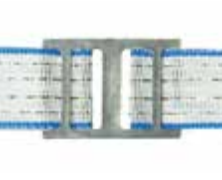




The voltage values shown along the fence are based on a single-wire fence with a load of 500 Ω to simulate and represent an animal touching the fence. The earth conditions are assumed to be perfect for the comparative voltage values shown above.

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 low resistance on permanent fencing systems in most weather conditions. All Nemtek high-voltage cables are double insulated.

	<p>CABLES (S-SERIES)</p> <ul style="list-style-type: none"> • Available in 30m (EH-BS030S) and 100m (EH-BS100S) • The S-Series high-voltage cables can be used with all the Nemtek polywires, polyropes and polytapes • Slimline design for ease of installation • Ideal for temporary fence systems
	<p>UNDERGATE CABLE (U-SERIES)</p> <ul style="list-style-type: none"> • The U-Series high-voltage cable is used with galvanised wires, aluminium wires and all polywires, polyropes and polytapes • Available in 1.6mm and 2.5mm heavy-galvanised inner conductor • 1.6mm/25m (AH-UC1.6/25) • 1.6mm/50m (AH-UC1.6/50) • 1.6mm/100m (AH-UC1.6/100) • 2.5mm/25m (AH-UC2.5/25) • 2.5mm/50m (AH-UC2.5/50) • 2.5mm/100m (AH-UC2.5/100) • 2.5mm/200m (AH-UC2.5/200) • 2.5mm/500m (AH-UC2.5/500)

WIRE, TAPE, ROPE AND CABLE CONNECTORS

	<p>LINE CLAMPS (EA-LC8/MG)</p> <ul style="list-style-type: none"> • The line clamps are used for the larger wire diameters • Can connect after the wire has been installed • 8mm mechanically galvanised for long life 	
	<p>JOINER BUCKLE (AA-J/PT)</p> <ul style="list-style-type: none"> • Joiner buckles are used to join 40mm polytapes • Zinc ensures a good electrical connection is maintained and ensures durability 	
	<p>TERMINATION BUCKLE (AA-B/PT)</p> <ul style="list-style-type: none"> • The termination buckle is used to connect 40mm polytape to the high tension cable (HT) coming from the energizer to terminate the fence • Zinc ensures a good electrical connection is maintained and ensures durability 	
	<p>ALUMINIUM FERRULE 10MM (EA-F10AFT)</p> <ul style="list-style-type: none"> • The aluminium ferrule is used to connect both the stranded and the solid aluminium wires • Good, permanent connection is ensured 	

WIRE TENSIONING SYSTEMS





	<p>HEAVY-DUTY COMPRESSION SPRING (ES-CNT3)</p> <ul style="list-style-type: none"> • Can be used with any electric fencing wire • Stainless steel spring maintains constant tension on the fence • Engineered plastic material eliminates galvanic reaction between dissimilar metals, thus eliminating rust • Can be used with any type of wire 	
	<p>COMBO TENSIONER HYBRID (ES-CTNTBB)</p> <ul style="list-style-type: none"> • 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 	
	<p>STANDARD TENSIONER (ES-DT)</p> <ul style="list-style-type: none"> • Galvanised, permanent fence wire strainer • Can tension a 1.2mm to 2.2mm wire • Only use with galvanised wires to avoid galvanic reaction 	
	<p>COMBO TENSIONER - STANDARD (ES-CTS)</p> <ul style="list-style-type: none"> • 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 	
	<p>COMBO TENSIONER - PORCELAIN (ES-CTP)</p> <ul style="list-style-type: none"> • 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 	
	<p>WIRE STRAINER - HEAVY DUTY (AS-WS/HD)</p> <ul style="list-style-type: none"> • Galvanised, permanent fence wire strainer • Can tension a 1.6mm to 3mm wire • Only use with galvanised wires to avoid galvanic reaction 	
	<p>WIRE STRAINER - INSULATED PLASTIC - HEAVY DUTY (AS-WSI/HD)</p> <ul style="list-style-type: none"> • 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 	
	<p>WIRE STRAINER - PORCELAIN - HEAVY DUTY (AS-WSP/HD)</p> <ul style="list-style-type: none"> • 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 	
	<p>S-HOOK (ES-HK/EP)</p> <ul style="list-style-type: none"> • Hot-dip galvanised for long life expectancy • Heavy-duty durable design • Suitable for angled and rounded corner poles 	

GENERAL ACCESSORIES

FENCE ACCESSORIES

		
<p>WARNING SIGNS (EA-WRS2/N)</p> <ul style="list-style-type: none"> • Custom-made warning signs are available on order • Wire clips on the warning sign reduce installation time 	<p>FENCE LIGHT</p> <ul style="list-style-type: none"> • Fence light galvanised wire (inland use) (SR-FL/HVL4) • Fence light 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 	<p>CUT-OUT SWITCH (AA-COS)</p> <ul style="list-style-type: none"> • Isolates a section of the fence to allow for easy maintenance and fault finding
		
<p>FLOOD GATE CONTROLLER (AA-FGC)</p> <ul style="list-style-type: none"> • Limits energy on a section of fence in areas where flooding or heavy growth occurs 	<p>LIGHTNING PROTECTION (EA-LID)</p> <ul style="list-style-type: none"> • Lightning protection system inhibits lightning and diverts the voltage spikes caused by lightning • Stainless steel components for long life 	<p>ENERGIZER CONNECTOR CLIPS</p> <ul style="list-style-type: none"> • Insulated battery clips with leads (black and red pair) (AEE-CL/BR) • Insulated fence clips and leads (green and red pair) (AEE-CL/GR)







EARTH SPIKES

			
<p>HOT-DIP GALVANISED 1M LONG (EA-EAG1)</p>	<p>HOT-DIP GALVANISED 1.2M LONG (EA-EAG12)</p>	<p>COPPER CLAD 1M LONG (EA-EAN)</p>	<p>COPPER CLAD 1.2M LONG (EA-EAN/L)</p>
<ul style="list-style-type: none"> • Hot-dip galvanised or copper-clad earth spikes with nuts and washers • Available in both 1.0m and 1.2m lengths • Earthing kit available for use in areas where the earthing conditions are not good. These kits include a conductive earth compound • The double nut and washer allow for a good electrical connection with the HT cables 			

WIRE, ROPE AND TAPE DISPENSERS

			
<p>REEL HOLDER GEARED 1:1 (AA-RH1)</p> <ul style="list-style-type: none"> Recommended for only <ul style="list-style-type: none"> - 100m of 40mm tape - 200m of 20mm tape - 200m of 12mm tape - 200m of polywire - 200m of 2mm aluminium stranded wire 	<p>REEL HOLDER GEARED 3:1 (AA-RH2)</p> <ul style="list-style-type: none"> Geared 3:1 for easy spooling Recommended for up to <ul style="list-style-type: none"> - 100m of 40mm tape - 200m of 20mm tape - 400m of 12mm tape - 800m of polywire - 500m of 2mm aluminium stranded wire 	<p>LARGE WIRE DISPENSER (EW-JENNY)</p> <ul style="list-style-type: none"> Portable design For 2.2mm, 2.5mm and 3mm wire Up to 50kg roll coil dispenser 	<p>BRAIDED WIRE REEL HOLDER (EW-T/RH)</p> <ul style="list-style-type: none"> Hot-dip galvanised wire dispenser 12mm, 20mm and 40mm tape dispenser





FENCING TOOLS

		
<p>DRIVER TOOL 10MM ROD (TL-PD10R)</p> <ul style="list-style-type: none"> Used to drive 8mm and 10mm fibre and steel rods into the ground 	<p>DISTANCE MEASURING WHEEL (TL-DMW)</p> <ul style="list-style-type: none"> Quick, walk along distance-measuring tool 	<p>KNIPPEX WIRE CUTTER (TL-MN)</p> <ul style="list-style-type: none"> Designed for high-tensile wire cutting
		
<p>PROFESSIONAL CRIMPING TOOL (TL-CRP)</p> <ul style="list-style-type: none"> Durable ferrule crimping tool 	<p>HALF INCH RATCHET TENSIONER (TL-RAT1/2)</p> <ul style="list-style-type: none"> Used to tension the Hybrid combo tensioner 	<p>Y-STANDARD POST DRIVER (TL-PDY)</p> <ul style="list-style-type: none"> Used as a hammer to drive Y standards into the ground






FENCING POSTS AND BRACKETS

FIBREGLASS SPRING CLIPS

	<p>SPRING CLIP 8MM (AA-PS/SPR/8R)</p> <ul style="list-style-type: none"> • For 8mm fibreglass post • Stainless steel for long life 	
	<p>SPRING CLIP 10MM – GOLD (AA-SPR/10R)</p> <ul style="list-style-type: none"> • For 10mm fibreglass post • Stainless steel for long life 	

TEMPORARY AND SEMI-PERMANENT FENCING POSTS

		
<p>FIBREGLASS POST</p> <ul style="list-style-type: none"> • Available in 8mm x 850mm (AA-FR/8/850) • Available in 10mm x 1 000mm (AA-FR/10/1000) • Available in 10mm x 1 250mm (AA-FR/10/1250) • Available in 10mm x 1 500mm (AA-FR/10/1500) 	<p>TREAD IN POST (PLASTIC)</p> <ul style="list-style-type: none"> • Available in white (AA-PP/W) for visibility. 1 200mm total length • Available in black (AA-PP/B) for higher UV protection. 1 200mm total length • 8 clip positions for up to 40mm of polytape, polyrope and polywires • Galvanised steel spike • UV stabilised for long life 	<p>PIGTAIL STEEL POST</p> <ul style="list-style-type: none"> • 8mm steel, powder-coated white for high visibility • Available in 1 060mm (AA-PT/800W) • Available in 1 310mm (AA-PT/1050W)

OFFSET BRACKETS AND OUTRIGGERS

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



LIVE AND EARTH HORIZONTAL OFFSET BRACKET (TRIPLE)





ANTI-DIG OFFSET BRACKET (EY-OAD)

- The triple wire bracket is placed near the bottom of the fence in order to stop animals from crawling or digging under the fence line

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.

	
<ul style="list-style-type: none"> Offset double – 225mm (EY-OD225) (excludes insulator) Offset double – 350mm (EY-OD350) (excludes insulator) 	<ul style="list-style-type: none"> 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).

	
<ul style="list-style-type: none"> Outrigger single – 230mm (AA-OUTRIGGER230) (includes insulator) Outrigger single – 340mm (AA-OUTRIGGER340) (includes insulator) 	<ul style="list-style-type: none"> Offset single – 225mm (EY-OS225) (excludes insulator) Offset single – 450mm (EY-OS450) (excludes insulator)

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 11	11 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-CPR762HD24)	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-CPR762HD30)	24	2 x 24	2.4m	Hot-dip galvanised	Round 50 x 2mm/3.0m (EY-CSR5030HD)
	Round tube 95 x 2mm/2.4m (EY-CPR9520HD24)	20	2 x 20	2.0m	Hot-dip galvanised	Round 50 x 2mm/2.4m (EY-CSR5024HD)
	Round tube 95 x 2mm/3.0m (EY-CPR9520HD30)	24	2 x 24	2.4m	Hot-dip galvanised	Round 50 x 2mm/3.0m (EY-CSR5030HD)
	Nut (EA-SCRM10NUTSHD) Bolt (EA-SCRM10X100-H)					













GATE SYSTEMS

GATE HARDWARE

			
<p>INSULATED HANDLE WITH HOOK (EA-GH/B)</p> <ul style="list-style-type: none"> • UV-stabilised gate handle • Non-slip grip 	<p>PLASTIC GATE HANDLE (EA-GH/P)</p> <ul style="list-style-type: none"> • UV-stabilised gate handle • Non-slip grip 	<p>GALVANISED SPRING 3.5M (EA-GS/W)</p> <ul style="list-style-type: none"> • Used together with the insulated handle with hook to secure a gate up to 3.5m 	<p>GATE HANDLE WITH SPRING (EA-GH/BS)</p> <ul style="list-style-type: none"> • Used to secure a gate opening up to 1.5m • UV stabilised

		
<p>3-WAY GATE CONNECTOR (AA-AT/PT3/GAS)</p> <ul style="list-style-type: none"> • 3 different connection points for flexibility • UV-stabilised plastic • Galvanised for long life • Bolt for fastening high-voltage cable 	<p>TAPE GATE HANDLE KIT (AA-GHT4)</p> <ul style="list-style-type: none"> • Used with Equine fencing • White and blue tape for higher visibility • UV stabilised • Suitable for up to 4m gate openings 	<p>FLEXI GATE HANDLE KITS</p> <p>Available for:</p> <ul style="list-style-type: none"> • 3.5m to 7m gate openings (AA-FGS/1) • 5.5m to 11m gate openings (AA-FGS/2) • Stretchable flexicord contains stainless steel strands for conductivity • High-visibility warning sign

ENERGIZER ENCLOSURES

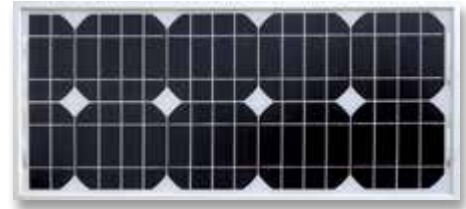
	 <p>ALUMINIUM BOX (ENC-ALU/S)</p> <ul style="list-style-type: none"> • (h) 610 x (w) 450 x (d) 260mm • Medium capacity to house an energizer, solar regulator and a deep-cycle battery • Ventilated aluminium box 	 <p>ALUMINIUM BOX (ENC-ALU)</p> <ul style="list-style-type: none"> • (h) 610 x (w) 800 x (d) 300mm • Ventilated aluminium box • Large capacity to house double energizers, solar regulator and deep-cycle batteries • Available in shock box version (ENC-SHBOX)
	<p>ENCLOSURE STANDS</p> <ul style="list-style-type: none"> • Hot-dip galvanised stands for the aluminum enclosures • Optional U bracket (ENC-KDS/UBOLT) is required when creating a concrete base • Stands 1 180mm high off the ground • Available in two sizes. Small enclosure stand (ENC-KDS/S) and a larger enclosure stand (ENC-KDS) <p>ENCLOSURE STAND U BRACKET (ENC-KDS/UBOLT)</p> <ul style="list-style-type: none"> • Use with concrete to secure the enclosure stand 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	AE-SOL-SYS10W	AE-SOL-SYS20W	AE-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 10 amp and the 15 amp. 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

GETTING STARTED WITH ELECTRIC FENCING

HOW AN ELECTRIC FENCE WORKS

In order for a fence to shock an animal an electrical circuit needs to be completed. The energizer sends a high-voltage pulse through the fence live wires. The energizer needs to be earthed.

When the animal touches the live wire, the pulse will flow from the live fence wires to the animal, then into the earth, and back to the energizer, completing the circuit. The completion of the circuit delivers a safe yet memorable, sudden and quick shock to the animal.

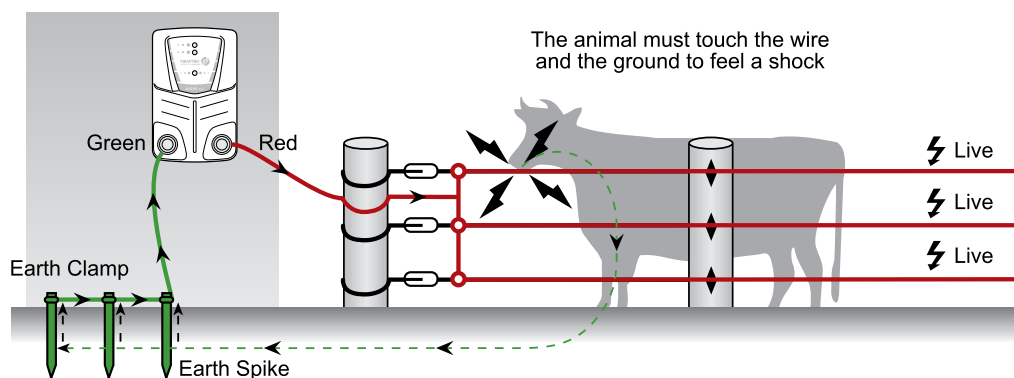
The shock creates an unpleasant memory that animals generally recall. Different animals may require different levels of voltage to create the appropriate shock depending on the thickness of their coats or hides. Sheep, goats and wild animals generally require higher voltage levels compared to horses, pigs and cows.

EARTHING THE FENCE

The earthing component of the fence is very important. Without adequate earthing, the electrical circuit from the energizer will not be completed when the animal touches the fence and the animal will receive an ineffective shock. The pulse needs to flow from the animal through the soil or other earthing system back to the energizer. Generally when there is good soil moisture you require less additional earthing components on your fence. Earthing conditions can vary depending on the season and the type of soil.

TYPICAL FENCE WITH GOOD EARTHING

If your earthing conditions are good all year round, you will only need live wires on your fence (no earth wires), and a few earth spikes in the vicinity of the energizer.



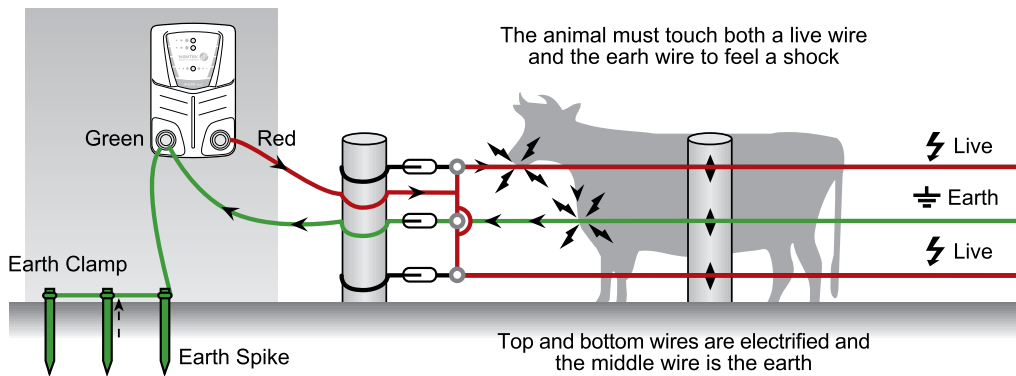
 LIVE WIRES AND CABLE  EARTH (GROUND) SYSTEM

TIPS FOR BETTER EARTHING

- Place your earth spikes in damp areas where possible.
- Earth spikes must be placed in the vicinity of the energizer. There should be at least three earth spikes, placed a minimum of two metres apart, at the beginning of the fence near the energizer.
- The earth spike connectors (at the top of the earth spike) should always be visible for maintenance and ease of connection.
- Additional earth spikes can be connected to the earth wires of the electric fence. (Ensure that the earth wires are connected to the earth input of the energizer.)
- Earth spikes must be at least 10 metres away from electrical earth systems, e.g. house mains, telephone and power lines.

TYPICAL FENCE WITH INADEQUATE EARTHING

If you have inadequate earthing due to poor soil conditions or seasonal changes in the soil moisture levels, you will require additional earthing. You will need one or more earth wires along your fence in addition to your live wires. Earth spikes will also need to be placed along the fence. By introducing these additional earthing components, you counteract any bad soil conditions to ensure that the electrical circuit back to the energizer can be completed so that the animal receives an adequate shock.

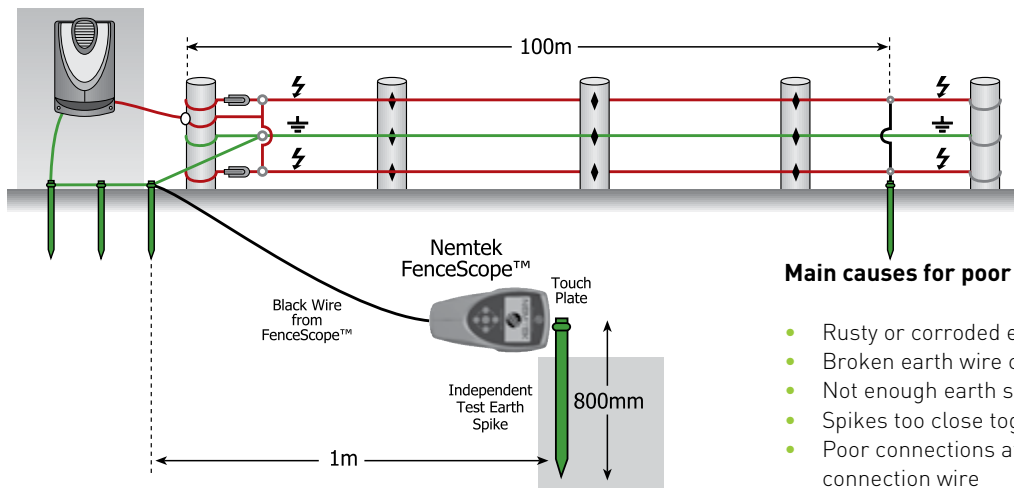


LIVE WIRES AND CABLE EARTH (GROUND) WIRES AND CABLE

TESTING THE EARTH SYSTEM

To ensure you have an adequate earth system, perform the following procedure according to these measurements: At least 100m away from the energizer earth spikes, drive an earth spike into the ground and short this spike to the fence live wires. Add additional earth spikes until the fence voltage at this point is reduced to 2 000V (2kV) or less. Using a Nemtek FenceScope (set to PROBE function) measure the voltage between the energizer earth spikes and an independent test earth spike driven into the ground one metre away. This test earth spike should be at least 800mm long. The reading, if any, should be below 300V.

If the measured voltage is greater, switch off the energizer and drive in additional earth spikes at the recommended spacing, and connect them to the existing earth system. Repeat this process until the measured voltage is reduced to an acceptable level.



Main causes for poor earth are:

- Rusty or corroded earth spikes
- Broken earth wire connecting the spikes
- Not enough earth spikes
- Spikes too close together or too short
- Poor connections at the spikes or in the connection wire

LIVE WIRES AND CABLE EARTH (GROUND) WIRES AND CABLE

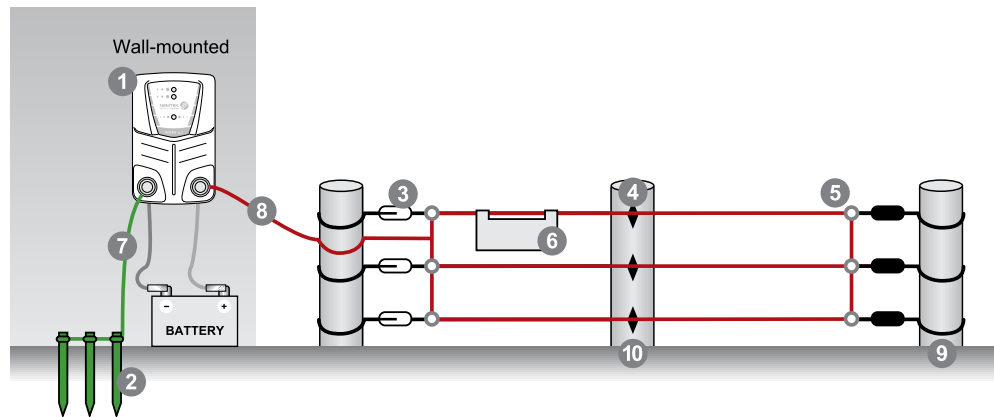
TYPES OF FENCES

Permanent electric fence

A permanent fence for game animals or livestock will require higher tensile strengths, be more robust, have a longer life span and use more durable insulators and equipment.

Animals tend to run into the fence before seeing it and they could damage the fence, especially in the dark.

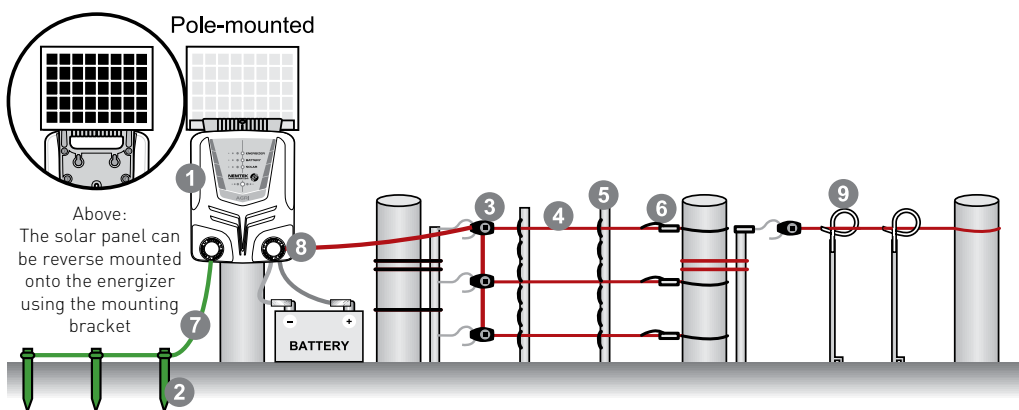
1. Energizer
2. Earth spike
3. Strain insulator
4. Post insulator
5. Wire tensioner
6. Warning sign
7. Earth (green)
8. Live (red)
9. Strain post
10. Line post



Portable electric fence

Portable fencing can be moved as required, creating temporary paddocks, strip-grazing areas, or even protecting flowerbeds and refuse areas from pets or feral animals.

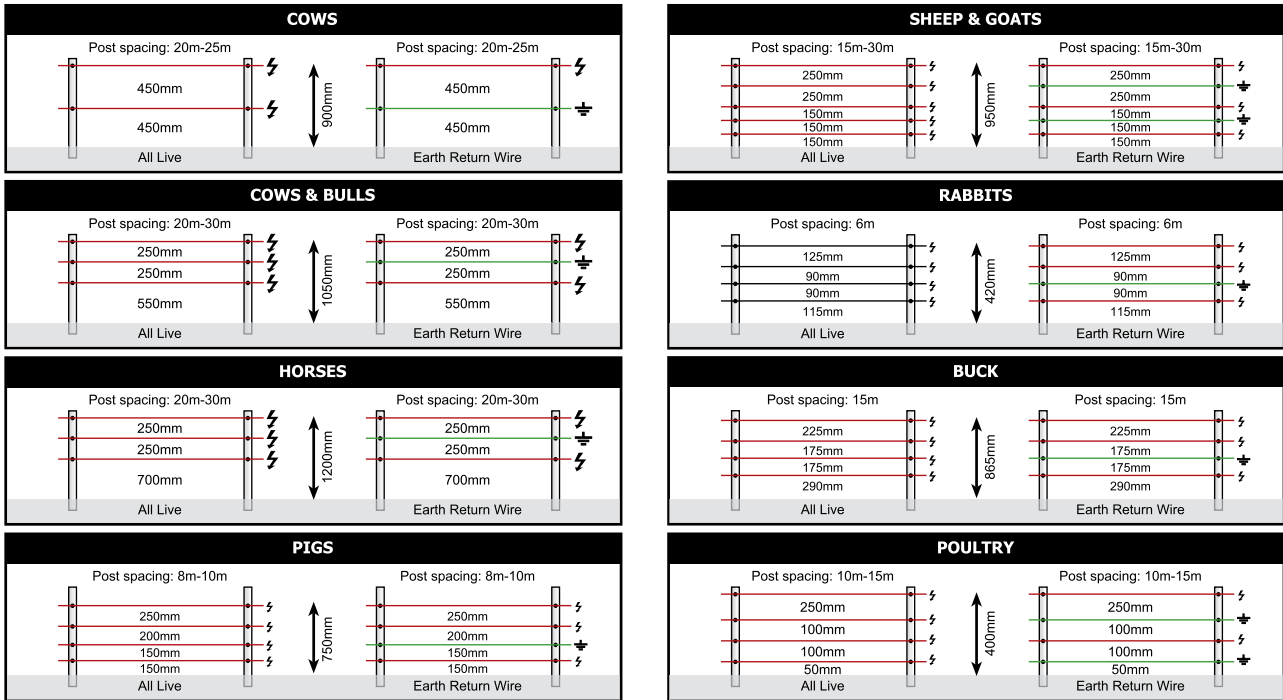
The energizers are generally smaller units that can run for many days on battery power, or can be powered with solar cells and a battery back-up.



1. Energizer
2. Earth spike
3. Nylon wire tensioner
4. Polywire/polytape
5. Tread-in post
6. Insulated handle
7. Earth (green)
8. Live (red)
9. Pigtail post

LIVE WIRES AND CABLE EARTH (GROUND) WIRES AND CABLE

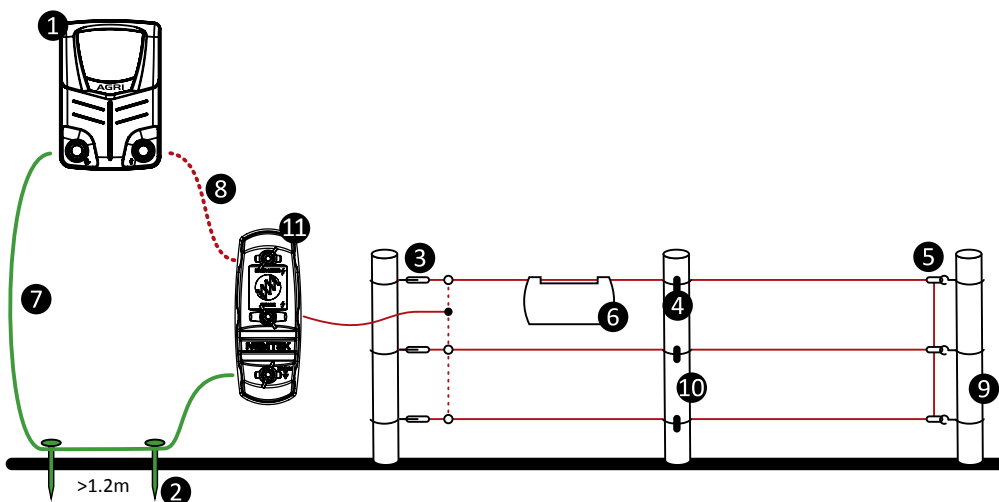
POST AND WIRE SPACING



LIGHTNING AND SURGE PROTECTION

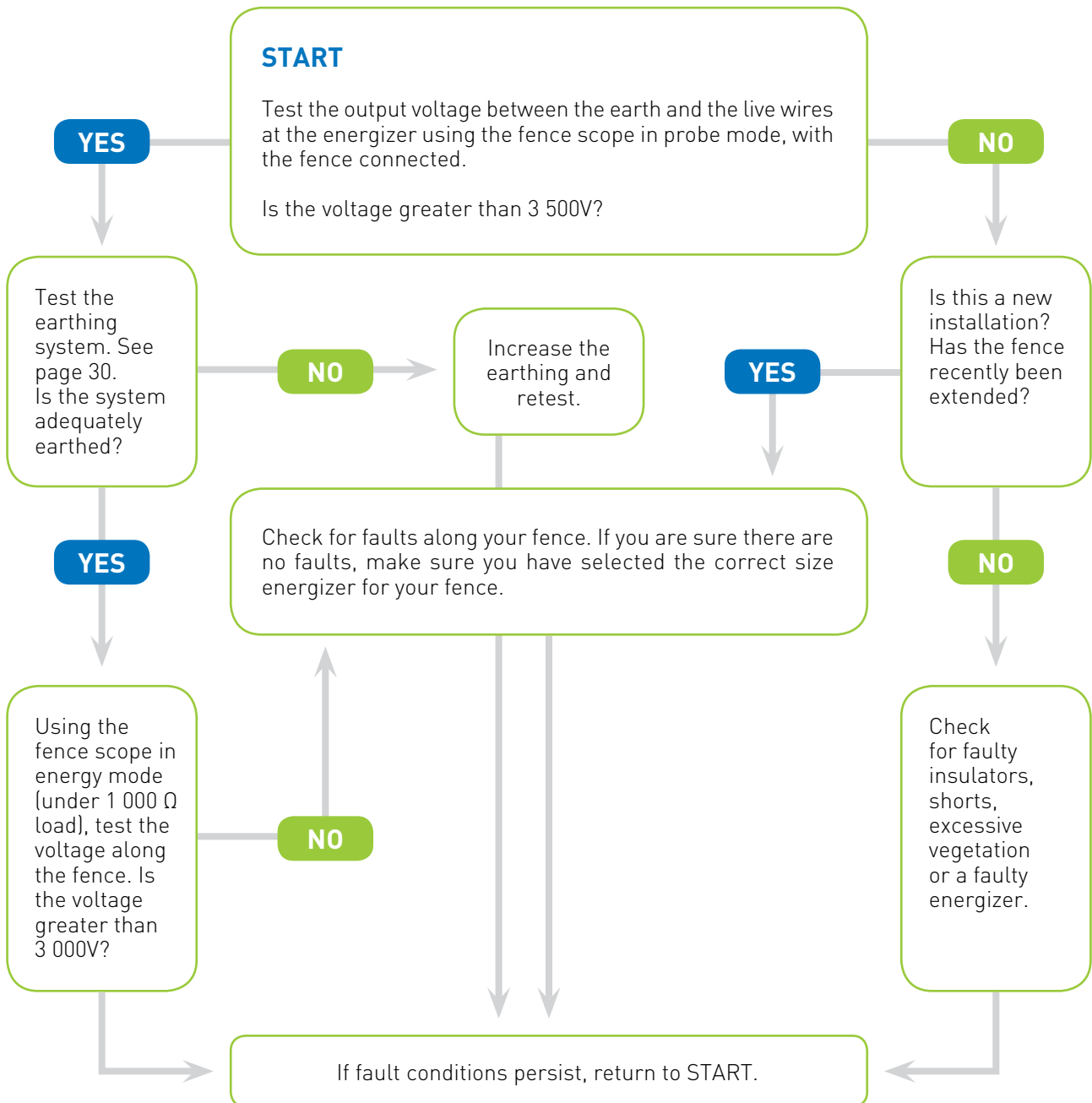
The lightning inhibitor and diverter can be used to reduce the likelihood of a power surge coming through the fence wires to the energizer as a result of lightning. It offers a two-pronged approach. First it inhibits the lightning surge from damaging the energizer, and second it diverts any lightning surge away from the energizer into the ground through the earth spikes. It can be mounted onto a flat or round surface.

Installation using an AGRI Energizer permanent fence



1. Energizer
2. Earth spike
3. Strain insulator
4. Intermediate insulator
5. Nylon wire tensioner
6. Nemtek warning sign
7. Earth (green)
8. Live (red)
9. Tension post
10. Intermediate post
11. Lightning inhibitor and diverter

FENCE FAULT-FINDING CHART





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