









PROFESSIONAL MAKES PERFECT

ABOUT US

Shenzhen Tongher Technology Co.,Ltd ,also called Tongher Electric Fence,Tongher tech,is established since 2007,dedicating to provide professional products,solutions and services of electric fence system for perimeter security and agricultural livestock fields to lots of companies and governments in more than 20 provinces in China domestic market and foreign countries,such as Australia,New Zealand,South east Asia,etc.

With a experienced and active-minded R&D team and in-house quality management, more than 50 countries' customers have worked together with us for our product quality and professional solutions.

Tongher offers electric fence energizers, fence posts, wires and cables, insulators, tensioners, warning signs and more products available to different needs of customers.

The energizers are approved by ISO 9001,CMA, and CE certificate,at the same time,they conforms to IEC 60335,2-76 international standard and AS/NZS CISPR14-1.And they are non lethal to animals and people who are touching the electrified wires.

To meet different customer's need, we design solutions according to different situations. So far, these solutions are widely used in communities, residential areas, governments, schools, plants, garages, prisons, military bases, water and gas distributor, farmlands and poultry areas.

We also offer OEM/ODM service for energizer or accessories.



Design and installation
Professional solution
Custom-made product
Integrate With other security systems
24/7 Technical support
On line Training &On site supervision









What Are Clients Saying About Us

Let our clients do the talking!

Client Testimonials —



Thanks for your visit,i hope we could have more business together

EA Solar Nakornsawan CEO(Asia)



After long time testing your system performance,we decide to introducing your system to our market.

Pergau Hatchery(Malaysia)



Your energizer is helping our many poor farmers to protect their crops from wild aniamls

Ministry of Agriculture and Forest(Bhutan)



Ok,muchas gracias,excelente trabajo

David Layana(Chile)

SECURITY ENERGIZER

Perimeter security single zone electric fence energizer, generating high voltage pulse of 5-14kv to intruders touching the fence wires, establishes a phycical and psychological barrier to prevent invasions.

MULTI-FUNCTION ENERGISER



TH- SAFER 2/5

SPECIFICATION

- 1.INPUT: AC110-240V OR DC18V OR DC12V 2.OUTPUT PEAK VOLTAGE:2KV-10KV (ADJUSTABLE)
- 4.PULSE DURATION: ≤0.1S 5.PULSE INTERVAL TIME: 1.3S
- 6.MAX ENERGY OF OUTPUT: 2.0 / 5.0J

- New generation energizer that can be used as a simple security fencing energizer, but can also be a alarm panel, there is alarm input for gate magnetic contacts or Infrared detector or other kind of sensor and detector with NO/NC output.
- 2. LCD or LED indicate the zone ID\ the working state \ the voltage of live wire.
- 3. The intelligent fault detection system (FD tech),LCD shows the energizer problem directly, make the warranty more easy.
- Different voltage switch manually (0,2,5,8,10kv), longdistance equipment auto switch function.
- 5. RS 485 communication protocol offer long distance management solution.
- 6. Remote control (wireless) makes the arming or disarming easily from any place.
- 7. Mobile massage control (SMS) is available (module option).
- 8. DC12V, NC/NO dry contact alarm output can work with other modern security products.
- 9. Spacious space is enough for 4 Ah back up lead acid battery. Intelligent battery management will protect battery effectively.
- 10. Multi power supply function make the energizer working at all kind of poor power condition,

Mains AC110-240V or Battery or Solar panel with DC12V (Need to customize).

11. Water/fire proof casing.



TH-SK

SPECIFICATION

Password operation Arming and disarming Zone number alter



SPECIFICATION

Arm/disarm the energizer Deactivate and Activate alarm output

BI-POLAR ENERGISER

With Bi-polar technology, every wire of the fence is electrified, enhance the power shock generating. While the fence wires are cut, shorted or the energizer is tampered, the energizer will generate alarms.

Feature:

Deter:electric safe shock to stop the invasions

Prevention: physical, electrical perimeter electric fence resists invasions effectively

Alarm:wires cut or short,tamper alarms

Unique BI-polar technology

Equipped with 4AH backup battery(optional)

Specification

1.Input: AC110-240V or DC18V or DC12V

2.Output peak voltage: 2KV --10KV (Adjustable)

3. Pulse interval time: 1.3s

4.Max energy of output: 2.0 /5.0 Joules



APP ENERGIZER(WIFI)

Remote on/off

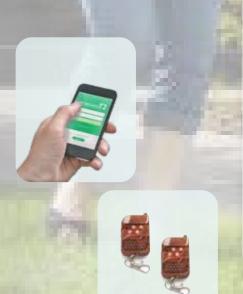
CONTROL IN THE PALM OF YOUR HAND

Controllable from anywhere inthe world with internet access

Easily connects through your existing home Wi-Fi network

WIFI ENERGISER

- 1. New generation energizer that can be used as a simple security fencing energizer, but can also be a alarm panel, there is alarm input for gate magnetic contacts or Infrared detector or other kind of sensor and detector with NO/NC output.
- 2. LCD or LED indicate the zone ID\ the working state \ the voltage of live wire.
- 3. The intelligent fault detection system (FD tech), LCD shows the energizer problem directly, make the warranty more easy.
- 4. WIFI/ Remote control(wireless) makes the arming or disarming easily from any place.
- 5. DC12V, NC/NO dry contact alarm output (Relay output), can work with other modern security products.
- 6. Spacious space is enough for 4 Ah back up lead acid battery. Intelligent battery management will protect battery effectively.
- 7. Multi power supply function make the energizer working at all kind of poor power condition,
- a) Mains AC110-240V, Battery or Solopanel with a
- 8. Water/fire proof casing .





ENERGISER



- 1. There is alarm input for gate magnetic contacts or Infrared detector or other kind of sensor and detector with NO/NC output.
- 2.LED indicate the zone ID\ the working state \ the voltage of live wire.
- 3.Remote control(wireless) makes the arming or disarming easily from any place.
- 4.DC12V, NC/NO dry contact alarm output (Relay output), can work with other modern security products.
- 5. Spacious space is enough for 4 Ah back up lead acid battery. Intelligent battery management will protect battery effectively.
- 6.Multi power supply function make the energizer working at all kind of poor power condition, Mains AC110-240V, Battery or Solar panel with DC12V (Need to customize).

Specification

1.Input: AC110-240V or DC18V or DC12V

2.Output peak voltage:12KV 3.Pulse interval time: 1.3s

4.Max energy of output: 2.0 /4.0 Joules



ANIMAL FENCING ENERGISER

Generating the electric shock to the fence wires.

It meets the needs of all animal management or protection and rotational crop grazing requirement. It is easy to install and the power options include AC(110V-240V) mains power, 12 volt (V) deep cycle lead-acid/gel battery or in conjunction with a (10-60 watt) solar panel, making this a suitable system for larger scale settings where mains power is either unavailable or impractical.

As a combination, fixed or portable system, the Electric Fence Energiser provides flexibility with pasture management and is the ideal solution for short or long-term animal control or rotational crop grazing.

0.2-1.5 JOULES ENERGIZER



DC/Solar/mains power energiser TH-TE X 0.5~1.5 Joules

- 1. Powered by:
 - a) AC mains power (using adaptor)
- b) 12V deep cycle lead-acid/gel battery (not included)
- c) 15W or above solar panel (not included) in conjunction with a 12V battery
- 2. Max output energy: 0.5 1.5 Joules (10-12Kv)
- 3. Pulse intervals: 1.5 seconds
- 4. LED display shows the status of the fence



DC/Solar/mains power energiser TH-0200 0.2 Joules

- 1. Input voltage: DC 8 12 V (Mains adapter or Battery or solar panel);
- 2. Output voltage: 8-9 KV;
- 3. Powered by **8XAA alkaline or rechargeable batteries** not included
- 4. Powered by lead-acid battery and solar panel;
- 5. Working length: up to 2,000 m;
- 6. Stored energy: 0.2 Joules
- 7. Pulse intervals period: 1.4-2.4(depend on the input voltage)
- 8. **Battery casing** for AA battery Lr6X8 pcs or suitable Lithium Battery



DC/Solar/mains power energiser TH-SEE 0.5~1.5 Joules

- 1. Input voltage: DC 5- 12 V (Mains adapter or Battery or solar
- 2. Output voltage: 10-12 KV;
- 3. Powered by 8XAA alkaline or rechargeable batteries not included
- 4. Battery casing , portable use
- 5. Powered by lead-acid battery and solar panel;
- 6. Button for energizer ON/OFF
- 7. Button for full energy/ reduced energy mode
- 8. Low battery alarm
- 9. Working length: up to 5,000 m;
- 10. Output energy: 0.5-1.5 Joules 11. Pulse period: 1.3 sec / 2.5sec





2~6 Joules energiser DC/Solar/mains power energiser TH-Mars 2~6

Powered by: AC mains power or 12v deep cycle lead-acid/gel battery (not included) 30-60w solar panel (not included) in conjunction with a 12v battery as above (Connectors included for mains power and battery)

5 operating modes:

Full Energy—pulses every 1.2 seconds

Reduced Energy—output power is reduced 25%, energizer pulses every 1.2 seconds

Short-day/Long-night—daytime pulse every 1.2 seconds, 2 seconds at night. Best used for day grazing with low predator pressure.

Long-day/Short-night—daytime pulse every 2 seconds, night pulse every 1.2 seconds. Use with well-trained livestock exposed to heavy predator pressure at night.

Battery Saving—output power reduced 25% and pulses occur every 2 seconds. Best for well-trained livestock and low predator pressure.

2 different pulse intervals of 1.2 seconds and 2.0 seconds 2 different max output of full and half energy LCD display for output voltage and battery condition LED display the energizer working states, power/on/shock Waterproof and dustproof IP44

Output voltage: 7-12 kv Pulse width: < 1/1000 second Stored energy: 2~6 joules Consumption(Max): Mars 2: 1.92~3 watt







The Alarm energiser include Siren alarms and/or Strobe lights. It notifies you if the voltage on the fence drops to

an insufficient level(we can set the alarm voltage value), due to fence faults or wire breakages

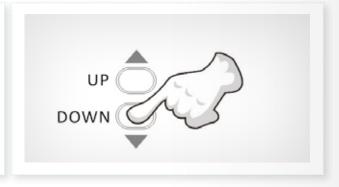


TIMER FUNCTION WITH TH-MARS ENERGISER

TIMER: we can control the energiser voltage output by setting the energiser timer, daily/weekly/monthly

Mon 20:59 Tue 20:59

12 1.5s kv 12.1v





Electric Prodder (TH-EP)

- With automatic cut-off mechanism
 Complies to regulations of animal transport and slaughtering
 Electronic control and very durable
 Operates on 2 pcs rechargeable lithium battery(included)

- Exclusively for use in animal husbandry as per applicable animal protection legislation



Digital voltmeter (TH-VMC)

- Auto on/off
- Dry battery power supply100-12,000V detect range
- Designed for electric fence



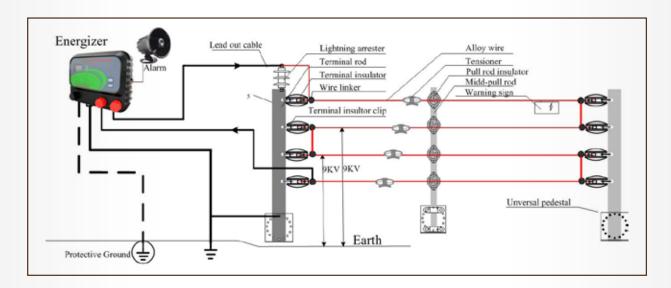
LED voltmeter (TH-VME)

- Detect range:2000-8000V
- Metal probe
- No battery neededLight weight

SECURITY FENCING SOLUTION

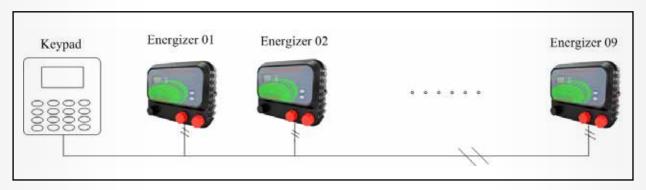
How to control the energizer and the different types of installation according to different circumstances,from small houses to large industrial projects.

Self control solution



In this solution, you could arm/disarm the energizer by your hand. This is suitable for small houses or villas, the energizer is usually installed inside the houses or the villas. When the wires are cut or shorted, the energizer will alarm, which will trigger the siren to indicate there is an invasion.

Keypad control solution

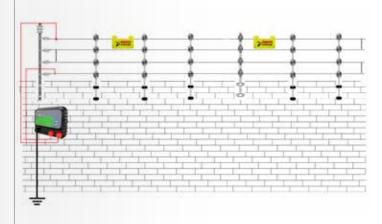


This is for large perimeter or high-level security places, with multi energizers working on the site, controlling with one keypad.

The keypad can control the energizers arming/disarming, and it is usually installed inside the control room or office room, with password protection.

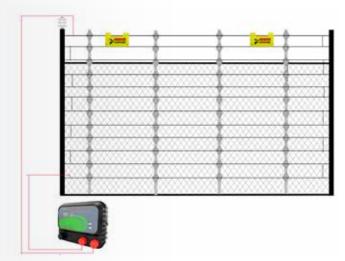
Each energizer has a zone ID, when any one of the energizers alarms, the keypad will show the alarming zone ID, with alarm type(break, shorted, alarm in).

On top of the wall installtion



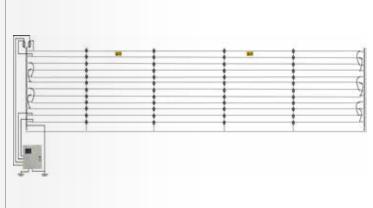


Attaching the existing fence installation



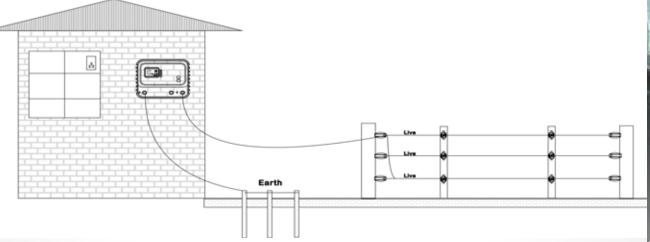


Stand alone installation





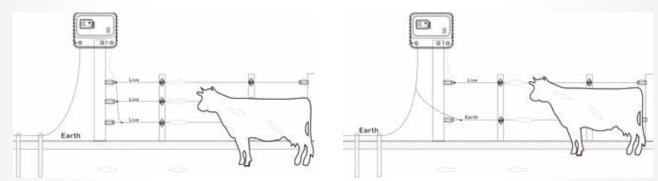
AGRICULTURE INSTALLATION



INDOOR INSTALLATION

- 1.An appropriate place for fixing the energizer
- 2.Out of touch of children and animals
- 3.Link the black grouding icon with clip to grounding
- 4.Link the red pulse output icon with clip to wire
- 5.connect with transformer and choose the mode

Notice: the power adapter could replace the battery to provide power to energizer. If the customer do not have special requirement



OUTDOOR INSTALLATION

- 1.In most cases, the energizer should be fixed on the wooden bar
- 2.Link the black grouding icon with clip to grouding
- 3.Link the red pulse output icon with clip to wire.
- 4. Connect with transformer and shoose the mode

Notice: the energizer could be powered by lead-acid,12V DC solar panel

TYPICAL SOLUTIONS:

If the conductivity of grounding is not good because of dry soil or sand. The pulse circuit will not form even when animal touches the wire.

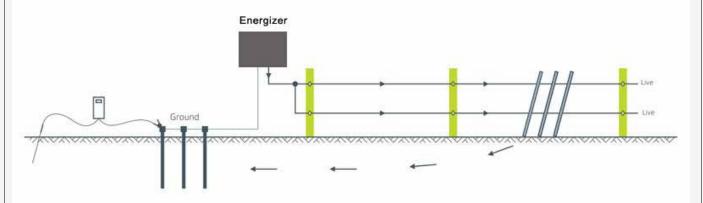
Then we make adjustment of fixing the earth wire to bars also. By doing so, the system could work as efficiently as it does in common cases besides, the line design will very greatly due to animal height, weight, and trait difference, please check bellow typical line design for different animals.

GROUNDING CONNECTION

Stick two steel bars into grounding. Make sure the length between two bars is more than 300mm, then connect the red pulse icon with the other, put on the power and shoose the mode. If the right number is less than 4kv. The grounding connection is good.



Testing the Ground System



- 1. Turn off the charger/energizer
- 2. Short-circuit the fence by leaning enough metallic rods against it about 330 ft away
- 3. Turn the energizer on. Use a fence tester/voltmeter to read the voltage on the fence. It should be below 2 kV. (Lean additional metallic rods against the fence if needed).
- 4. Insert the fence tester probe into the soil and the other end agains the last ground rod. The voltage should be less than 0.3 KV. If it is higher than 0.3KV, a better grounding system may be needed.

INSULATORS



Strain(end) insulator(TH-IDI)

- · Widely used in terminal/end post,with fixing clips to fasten the insulator on the posts

 Long creepage distance prevent arcing
- Deep grooves suitable for tensioned fences Anti-oxidation, corrosion resistance and
- anti-static Made of ABS/PP/PE(Options), color option



Screw Insulator (TH-SEI)

- · 6mm diameter
- 65mm Screws lengthGalvanized Screws
- Two installation nut
- Use for end/terminal /Corner/middle insulators
- Made of polyethylene with UV additive for extra long life



Middle insulator for round or square post (TH-IM25) with pins

- Hold the wire and reduce the pressure of post
- ABS/PP/PE/Color option
- Long creepage distance prevent arcing
- Larger clearance to eliminate power leakage
- Deep grooves suitable for water proof
- Lock pin



Screw Insulator (TH-SMI)

- 4mm diameter
- 53mm Screws length
- Galvanized Screws
- Two installation nut
- Use for middle insulators
- Made of polyethylene with UV additive for extra long life



Middle insulator for round or square post (TH-IM70)

- Hold the wire and reduce the pressure of post

- ABS/PP/PE/Color option Long creepage distance prevent arcing
 Larger clearance to eliminate power leakage • Deep grooves suitable for water proof



Square pole insulator (TH-SPI)

- Hole side: 15x15mm
- Installation screws
- Plastic, UV resistant



Middle insulator for round tube(TH-IMG21/IMB21)

- Hold the wire and reduce the pressure of post
 Gray/Blue option
- Long creepage distance prevent arcing
- Larger clearance to eliminate power leakage
 Deep grooves suitable for water proof
- Suitable for Dia.21mm round tube



Middle insulator (TH-MI65)

- Made of PP
- 65mm installation hole distance
- Green/black



Tensioner end insulator(TH-ITG/ITB32)

- Installed on terminal(end) posts, connecting the end post and electric fence wire
- Tension a wire up to Dia.2.5mm
- Suitable for Dia.32mm round tube
- Tensioner integrated



T post insulator(TH-RRTI)

- Installed on middle posts, connecting the end post and electric fence wire

 All kinds of fence wires are available
- Fastened by screws or rivets
- For T posts



Porcelain reel insulator(TH-IPR)

- · Long lifespan
- · Fire resistant
- Withstand high tension
- High quality white glaze finish



Flat post (bobbin) insulator(TH-TH-BB)

- Installed on middle posts, connecting the end post and electric fence wire
- Quick fit clips on the top and bottom for faster installation
- Easy to change and maintain
- · Any color and materies available



Porcelain Bullnose strain insulator(TH-IPB)

- Long life Fire resistant
- Long tracking distance minimises power leakage
 Withstand high tension
- · High quality white glaze finish



Spring strainer insulator(TH-SLTH)

- stainless steel spring Light and medium duty ,can tension up to

WARNING SIGNS





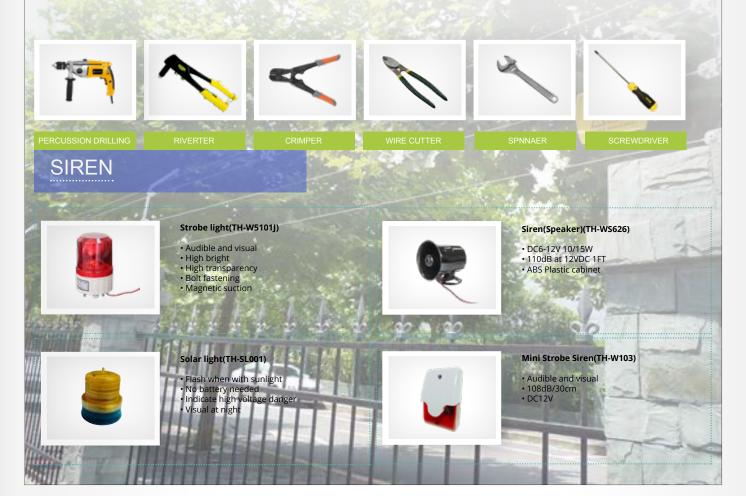
Warning sign(TH-WSF)

- Brand new materials ensure long life
 Double clips are useful for installation
 Holes make the boards more stable
- Disclaimer for electric fence system
- Custom-made content



Warning sign(TH-WSS)

- Brand new materials ensure long life
- Double clips are useful for installation
 Holes make the boards more stable
- Disclaimer for electric fence system
- Custom-made content



WIRE CONNECTOR/FERRULES/STRAINER/TENSIONER



Wire tensioner(TH-ITW)

- Penetrated with the alloy wire ,adjusting the tension of the fence wire
- POM material
- Suitable for aluminium/stainless steel /small galvanized wires
- Wire tensioner



Galvanised wire tensioner(TH-CGT1)

- Penetrated with the alloy wire ,changing the tension of the fence wire
- Hot dip Galvanized Suitable for aluminium/stainless steel /galvanized wire up to Dia. 3.0mm



Tension spring(TH-CTH)

- Allows the wire to adjust with the tempera ture changes and maintain tension
- · Eases strains on wires and corner posts



Galvanised wire tensioner(TH-CGT2)

- Penetrated with the alloy wire ,adjusting the tension of the fence wires
- Hot dip galvanized
- Suitable for aluminium/stainless steel /galva nized wire up to Dia. 3.0mm



Universal bracket(TH-CDZ)

- Holding post on the wall
- Made of Stainless steel
- Rust proof and high tension
- Angle adaptable for post installation every 22.5 degree



Concrete anchor(expansion screw)(TH-CL-B8X80)

- Fasten the braskets to concrete and masonry
 wedging-treating at the end of the anchor
 Made of stainless steel, M8X80mm



Terminal insulator hook(TH-CDD201/304)

- Penetrates the strain insulator and fit
- onto the terminal end post
 Made of stainless steel
- Withstand the pressure



Wire Join Clamp (TH-CX)

- Join and connect wire / cable permanently with good conductive
- Made of aluminium alloy
 Suitable for stainless steel/aluminium/galva nized wire
- Two level nuts is useful for multi-wire connection



Aluminium Ferrules(TH-CALC24)

- Join and connect wire / cable permanently



Aluminium Ferrules(TH-CALC24)

- · Join and connect wire / cable permanently



GATE CONTACTS



- Made of SS316 Stainless steel and POM
- · Adjust all kind of weather
- Strong and long Lifespan
 Large touch point to ensure good condution
 M6 fixed screw
- Large gasket make the installation easy
 Suitable for sliding gate



Gate connector(economy module)

- Adjust all kind of weather
 Strong and long Lifespan
 Large touch point to ensure good condution
- Suitable for sliding gate



Flexible pipes

- Suitable for swing gate Prevent over blend of the high voltage cable
- · Waterproof and rust proof



PROTECTIVE HOUSING \ ENCLOSURES

Flexible pipes

- Powder coated metal enclosureSize: 515×350×150mm



ELECTRIC FENCING WIRE

Tongher tech offers a variety of electric fence wires to meet the different applications and environmental requirements.



Aluminum alloy wire(TH-AWX)

- · Solid and stranded wire construction
- Wonderful conductive because of lowest resistance of all
- Available with dia. 1.27 to 2.5mm, and in range of lengths

Customization for size and lengths

Our standard range:

- 1.27mmx500m(solid)
- 1.6mmx500m(Solid) 1.8mmx300m(Solid)
- 1.8mmx850m(Solid)
- 2.0mmx500m(Stranded) 2.5mmx450m(Solid)



Stainless steel wire(TH-SS012K2)

- Solid and stranded wire construction in a 304 and a 316 grade
- Soft and springy with medium resistance
 Available with dia. 1.0 to 2.0mm,and in range of lengths
- Customization for size and lengths

Our standard range:

- 1.0mmx1000m
- 1.2mmx2000m(Stranded) 1.2mmx650m(Stranded)
- 1.6mmx1000m
- 2.0mmx1000m



LEAD OUT CABLE

A variety of electric fence lead out cables(we also call them high voltage/ Undergrounding cable) are available. They are used to lead out from the perimeter fence wire to energiser or between the wires.

Aluminium inner conductor giving superior conductivity PE coating for great protection

Diameter range

1.6mm to 2.5mm(other customized size)

Length range of per roll:

15m to 100m (other customized size)

Our standard:

1.8mmx50m 1.8x100m

2.5mmx50m 2.5x100m





5 30M 5 50M 5 100M



Single layer insulated



Double layers insulated

STAINLESS STEEL POST



STAINLESS STEEL POST(SS201/304/316)

- Side length: 15/19/20/25/38 mm
 Thickness: 0.5-2.0mm
 Length: 0.85/1/1.2/1.5/2(Standard)
 With waterproof post cap
 Customized installation holes and size







ALUMINUM ALLOY POST



Aluminum terminal post

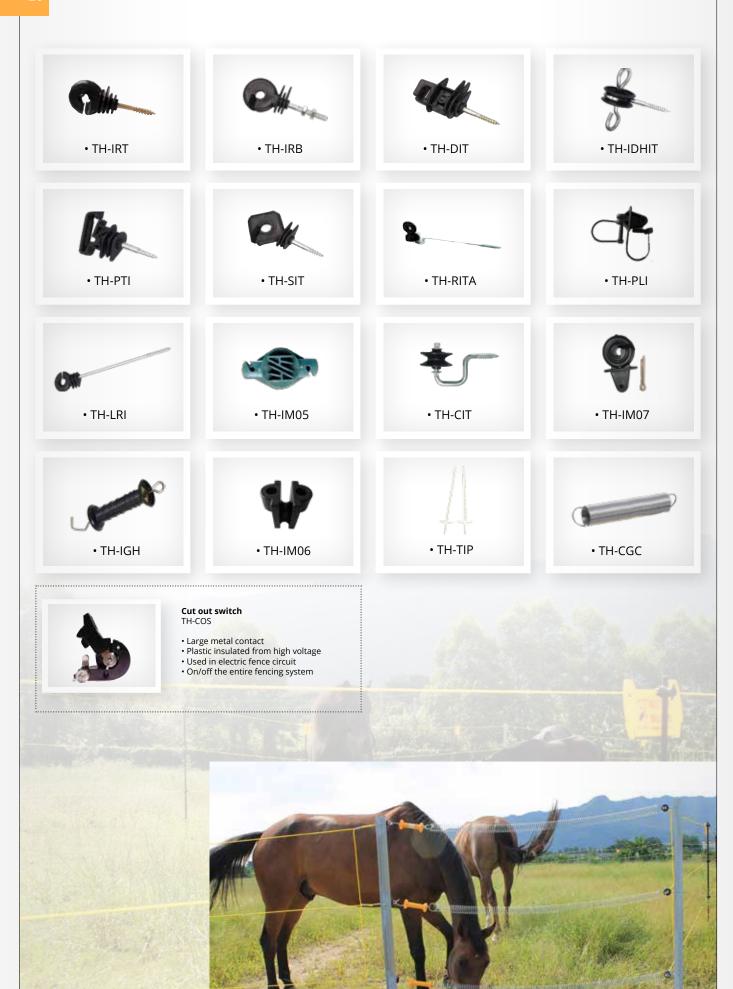
- Anti oxidation surface treatment
- 32mm diameter to hold the wire pressure
 850mm/1250mm length optional
 With waterproof post cap
 Straight/L shape available



Aluminum middle post

- Anti oxidation surface treatment
- 21mm diameter to hold the wire pressure 850mm/1250mm length optional
- With waterproof post cap
- Straight/L shape available





POLYETHYLENE TAPE/WIRE





Polyethylene tape

- Width: 13-40 mm
 Resistance:0.9-24 ohms per meter
 Strength:38-382kg
 Package:reel, carton

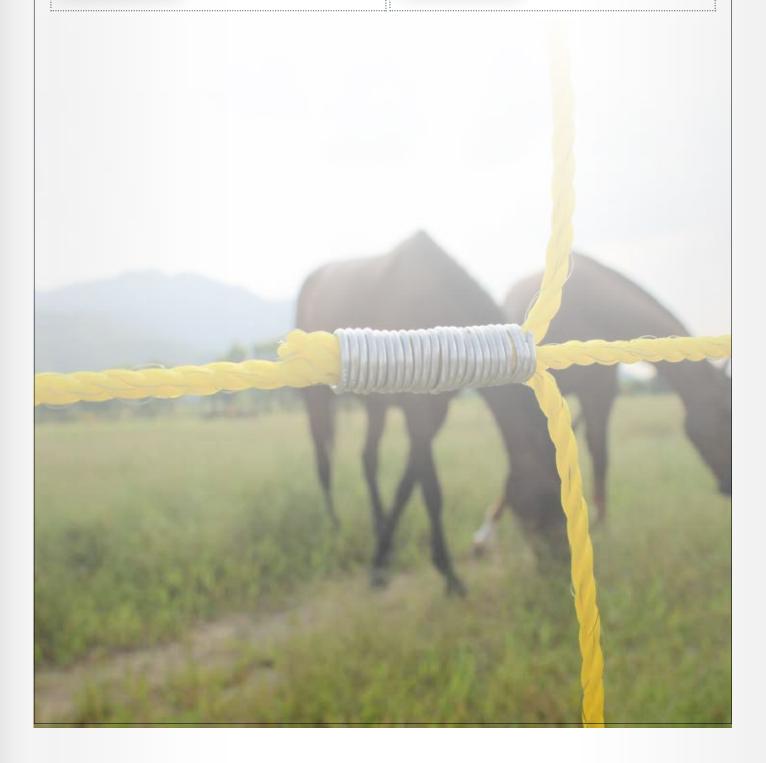
- Specifications: UV, multi strands 0.15/0.2/0.25mm stainless steel wire



Polyethylene wire

- Diameter: 2.5/5.0 mm
 Resistance:0.03-16.7 ohms per meter
 Strength:38-412kg
 Package:reel, carton

- Specifications: UV, multi strands
 3/6 pieces of stainless steel wires



GROUNDING, LIGHTNING AND SURGE PROTECTION



Lightning arrestor/ Diverter(TH-HV12K/17K)

- Protecting the fence energizer from lightning strikes(thunder) on the fence perimeter.
- This lightning arrestor creates a path of release resistance, diverting lightning surges to the ground,
- Must be separated with energizer grouding system with more than 10 meters distance



Earth grounding rod(spikes)(TH-PGR)

- Copper plating
- The earth rod is hammered into the ground and connected to the fence energiser by insulated wire
- Brass clamp to securely hold the wire against rod and does not corrode or rust.



Grounding clamp (TH-CGR)

- Easily fix the grounding cable via the clamp
- Screw on design for easy operation
- Good conductive material



SOLAR SYSTEM:

The solar fence system includes solar panel, charge regulator and battery, the energizers accept power supply of DC12V, so in the area where mains power is either unavailable or impractical ,solar power system is practical and cost effective ,especially for ranch . Mono crystalline panels provide superior conversion efficiency of sunlight to electrical current, charge regulator are engineered to high performance with minimal loss through internal circuity ,the end result is lower current consumption that minimises the drain on batteries ,meaning faster charging of batteries .A full range of solar panel sizes is available to ensure solar panel wattage can be customised to your individual requirement.

The capacity of battery depends on the consumption of energizer and it's working time, for perfect performance.

One suitable charge regulator is required to make the voltage, current steady, and protect the battery from preventing over-charging.

SOLAR PANEL



	TH-SP30W	TH-SP40W	TH-SP50W	TH-SP60W
Pm(W)	30W	40W	50W	60W
Voc(V)	21.6V	21.6V	21.6V	21.6V
Isc(A)	1.8A	2.57A	2.9A	3.5A
Vmp(V)	18V	18V	18V	18V
Imp(A)	1.66A	2.22A	2.77A	3.33A
Cell type	Mono	Mono	Mono	Mono
-0	rystalline silicon	-crystalline silicon	-crystalline silicon	-crystalline silico

SOLAR CONTROLLER



Model	TH-SC	TH-SCW
System voltage	12V/24V Auto	12V/24V Auto
System current	10A	10A
Solar energy input voltage	< 55V	< 55V
Overload and short circuit protection	YES	YES
Working temperature	-35-to +65	-35 to +65
Protection level	IP68	IP30
Weight	140g	106g

I FAD ACID BATTERY



- Deep cycle marine type
- 12V 60AH/80AH/120AH
- Charge/discharge many times
- Overload protection



SHENZHEN TONGHER TECHNOLOGY

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