

### نموذج استدرج اسعار

**التاريخ :** .....

**الرقم المتسلسل لطلب الشراء:..**

## مديرية اللوازم والعطاءات

[illegible]

المجموع :- النهائي رقما ( ) كتابة ( )

اسم و توقيع المورد: .....

.....: **ختم المورد**

التاريخ: .....

### **Ultrasonic algae control to keep ponds algae free**

The algae destroyer prevents algae growth in water farm ponds. Fights algae blue, green and thread algae up to 20 m in length. With its **sound range of up to 20 meters in turbid water**, the ultrasonic algae controller ensures that no algae are produced under normal conditions and that existing algae die within a few weeks:

- Floating algae 1 week
- Blue-green algae, green algae 3 to 4 weeks
- thread algae 6 to 8 weeks
- 2/3 biofilm layer reduction

### **Technical specifications**

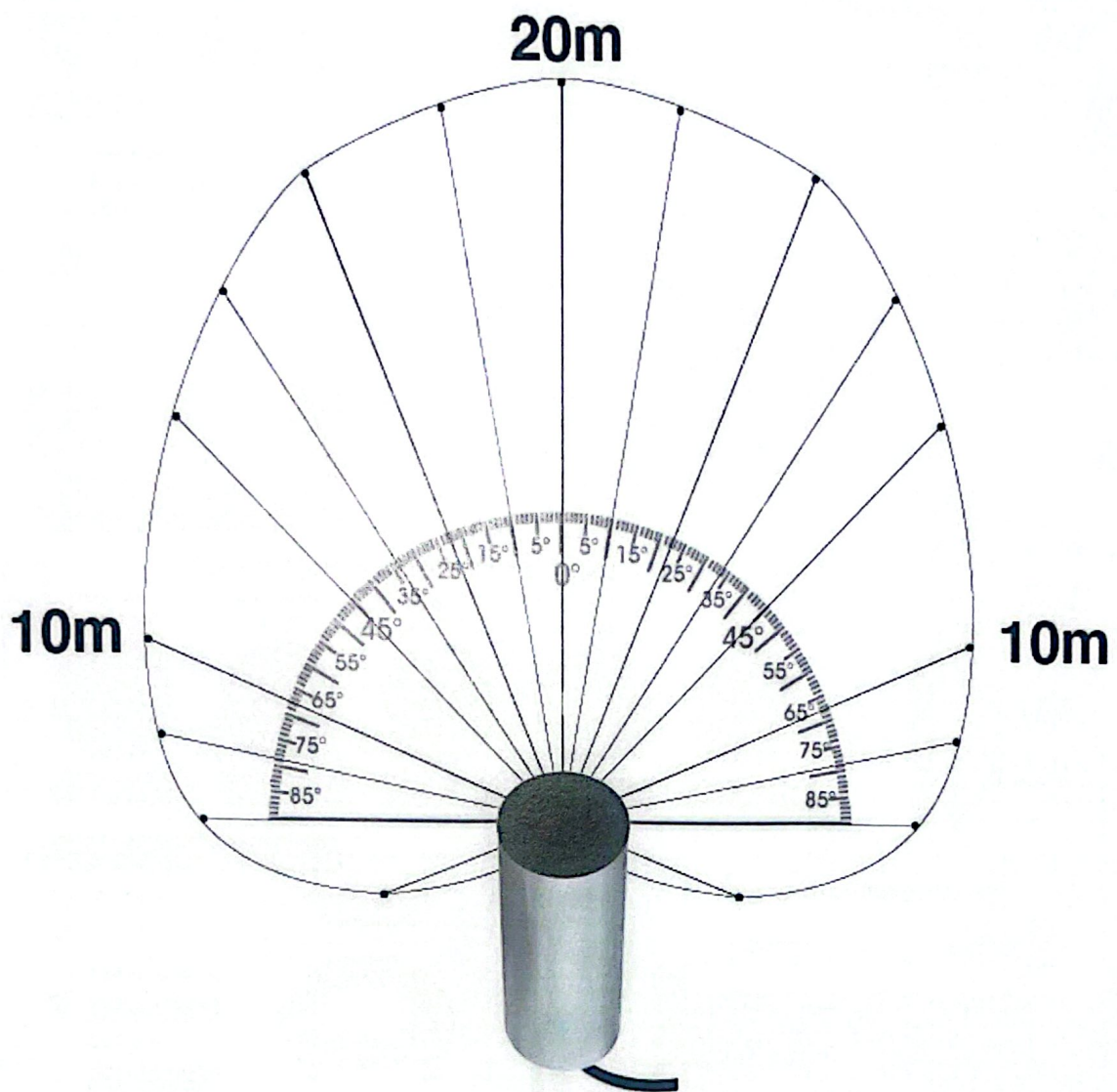
- Power consumption 22 Watt
- Power requirements:
  - 12 - 24 volt DC for battery version
  - 88 - 264 volt AC, 47 - 63 Hz for mains electricity with 1m power cord, connector
- Click generator Signal cable length 10+15 m with plug 2-pole IP68 extended to extra 15 m
- Electronics box dimensions (L x W x H) 130x130x60 mm (IP67, Fibox PC 125/60 HG)
- Click generator stainless steel, dimensions (L x Diameter) 120x63 mm (IP 68)
- Click generator mounting
- Sound range 20 meters, 10 meters at each side

### **Ultra sonic device extension cable 15m 3Pin specification**

Extension cable to extend the signal cable to the click generator. The special signal cable with the waterproof plugs (IP68) offer a high protection against dust, humidity and excellent resistance against UV radiation, alkaline earths. Several extension cables can be connected together.

- Signal cable length: 15 m
- 3 pin plug
- Plug diameter: 19 mm





# ULTRASONIC ALGAE CONTROL

## KEEP FARM PONDS ALGAE FREE

The ultrasonic algae destroyer prevents algae growth in water farm ponds. It fights blue-green algae, green algae and thread algae up to 20 meters in length.



CHEMICAL  
FREE



SAFE FOR FISH  
& PLANTS

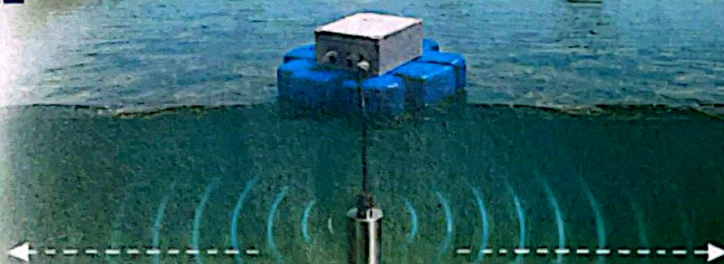


IMPROVES  
WATER QUALITY



LOW POWER  
CONSUMPTION

With its sound range of up to 20 meters in turbid water, the ultrasonic algae controller ensures that no algae are produced under normal conditions and that existing algae die within a few weeks.



**SOUND RANGE  
UP TO 20 METERS**  
10 METERS AT EACH SIDE



IP67

**ELECTRONICS BOX**  
(130 x 130 x 60 mm)  
IP67, Fibox PC 125/60 HG



IP68

**CLICK GENERATOR  
(STAINLESS STEEL)**  
(120 mm x Ø63 mm)  
IP68

### ALGAE REDUCTION - PROVEN PERFORMANCE

**FLOATING  
ALGAE**



1 WEEK

**BLUE-GREEN  
ALGAE**



3 - 4 WEEKS

**GREEN  
ALGAE**



3 - 4 WEEKS

**THREAD  
ALGAE**



6 - 8 WEEKS

**BIOFILM  
LAYER**



2/3 REDUCTION

### TECHNICAL SPECIFICATIONS



**POWER CONSUMPTION**  
22 Watt



**POWER REQUIREMENTS**

**BATTERY VERSION**

12 - 24 volt DC

**MAINS ELECTRICITY**

88 - 264 volt AC,  
47 - 63 Hz  
with 1m power cord,  
connector

**CLICK GENERATOR  
SIGNAL CABLE**



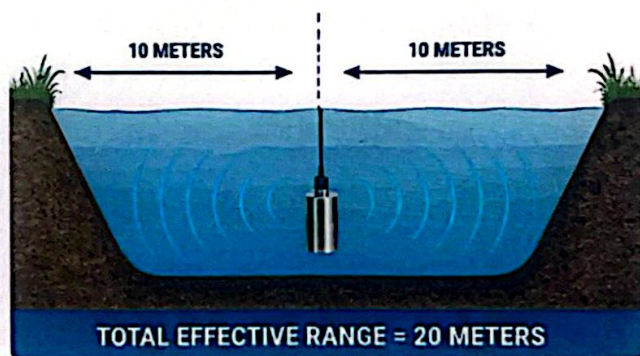
10 m + 15 m  
with 2-pole IP68 plug  
extended to extra 15 m  
(Total 25 m)

**CLICK GENERATOR  
MOUNTING**



Can be suspended  
vertically in water  
using rope or chain.

### SOUND COVERAGE DIAGRAM



**TOTAL EFFECTIVE RANGE = 20 METERS**



**PREVENTS ALGAE  
GROWTH**



**CONTROLS BLUE-GREEN,  
GREEN & THREAD ALGAE**



**IMPROVES WATER  
CLARITY & QUALITY**



**SAFE FOR FISH,  
PLANTS & LIVESTOCK**



**LOW ENERGY  
EFFICIENT**



**SUSTAINABLE SOLUTION FOR CLEAN, HEALTHY & PRODUCTIVE FARM PONDS**

## Bill of Quantities (BOQ)

### Lot 1: Ultrasonic Algae Control Devices

| Item No. | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Unit | Quantity |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|
| 1        | Supply, deliver, install, test and commission Ultrasonic Algae Control Device for algae prevention and control in water ponds, capable of controlling floating algae, blue-green algae, green algae and filamentous algae with an effective sound range of up to 20 m in turbid water. The device shall include click generator, electronics control box, mounting accessories, power supply components, signal cable and all necessary accessories for complete operation. Technical requirements: Power consumption $\leq 22$ W; power supply 12–24 V DC and/or 88–264 V AC, 47–63 Hz; electronics enclosure IP67; stainless steel click generator IP68; sound coverage up to 20 m; signal cable length minimum 25 m (10 m + 15 m extension). | No.  | 22       |

### Technical Specifications

- Ultrasonic algae control technology.
- Effective control of floating, blue-green, green and filamentous algae.
- Sound range: minimum 20 m.
- Power consumption: maximum 22 W.
- Power supply:
  - 12–24 V DC.
  - 88–264 V AC, 47–63 Hz.
- Electronics enclosure protection: IP67 or better.
- Click generator protection: IP68 or better.
- Stainless steel click generator.
- Complete mounting kit included.
- Signal cable with waterproof connectors (IP68).
- Suitable for continuous outdoor operation.

### Lot 2: Extension Cable for Ultrasonic Algae Control Device



| Item No. | Description                                                                                                                                                                                                                                                                                                                        | Unit | Quantity |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|
| 2        | Supply and deliver waterproof extension cable compatible with the ultrasonic algae control device. The extension cable shall be used to extend the signal cable between the control unit and click generator. The cable shall be suitable for outdoor use and resistant to moisture, dust, UV radiation and alkaline environments. | No.  | 22       |

### Technical Specifications

- Length: 15 m.
- Connector type: 3-pin waterproof plug.
- Protection class: IP68.
- Plug diameter: approximately 19 mm.
- UV-resistant cable jacket.
- Resistant to humidity, dust and alkaline environments.
- Multiple extension cables shall be connectable in series.
- Fully compatible with the supplied ultrasonic algae control device.

### Summary BOQ

| Item No. | Description                                               | Unit | Quantity |
|----------|-----------------------------------------------------------|------|----------|
| 1        | Ultrasonic Algae Control Device complete with accessories | No.  | 22       |
| 2        | Extension Cable, 15 m, 3-pin, IP68                        | No.  | 22       |

**Total Number of Ultrasonic Algae Control Devices: 22 Units**

**Total Number of Extension Cables (15 m): 22 Units**