



# ELECTRONIC FOULING CONTROL

## Product Kits



## How it works

EFC uses pulses of Ultrasonic frequencies to deter micro organisms from attaching themselves to your motor boat or sail boats hull. The removal of these micro organisms is important in the antifouling process as their presence create a habitat / food source for larger aquatic organisms such as barnacles.

The Ultrasonic frequencies are delivered to the boats hull through a series of transducers that are attached to the inside of the bilge area meaning no through hull drilling is required.

The transducers are then connected to a control unit that is intelligently controlled to ensure the optimum power (12v/24v or 110V - 240V) is supplied for maximum cleaning efficiency.

The pulsing of the transducers creates areas of negative and positive pressure resulting in micro jets surrounding the boats hull leading to the destruction of the single cell micro organisms (Algae). This pulsing effectively creates an invisible shield around the boats hull protecting it from these micro organisms commonly referred to as Bio-foul. This Bio-foul is the first stage in the overall marine food chain and the removal of such Bio-foul results in the removal of the food source for larger aquatic wildlife such as barnacles.

The ultra high frequencies are not harmful to humans, fish, plant life or any other marine based life forms.

UK Designed, Developed and Manufactured.

Disclaimer

The system does not remove the requirement for boat maintenance and the system has a return to base warranty. Existing antifoul or bottom paint applied will deteriorate over time and repainting may still be required.



# Electronic Fouling Control

## EFC100



### Includes:

- 1 x Intelligent IP65 Rated Control Unit
- 1 x 50W IP69 Transducers
- 2 Year Return to UK base Warranty

### Electronic Fouling Control - EFC100 Installation Kit

- 1 x 6M H05RN Silicon Transducer Cable with IP69 Plug and Play connectors
- 1 x 12v / 24v H05RN Silicon DC Power Cable
- 1 x Araldite Rapid Epoxy Kit
- 1 x Blade Fuse and Holder
- 1 x Installation Manual
- Sandpaper, Gloves, Cables Ties

£ **1,257.50** +VAT

### Optional Solar Kit:

- PV Logic Solar Power
- 2 x STPVF020 – 20wp solar panel
- 2 x 4m Cable (attached)
- 2 x 10A Charge Control
- 2 x Fuse
- 12 x Ring Terminals
- 2 x Simson 70-03 Adhesive
- 1 x Waterproof Cable feed gland
- 8 x Stainless steel fixing screws
- 1 x Instruction Sheet
- 1x MPPT Pro Charge Controller

£ **358.33** +VAT

Complete Kit Price  
With All Options:

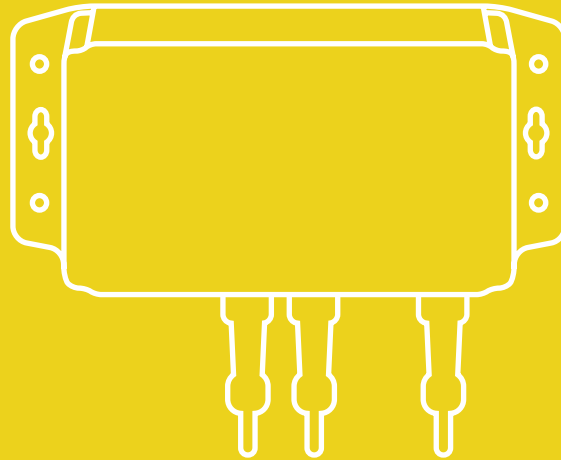
£ **1,615.83** +VAT

# EFC100

## Dimensions

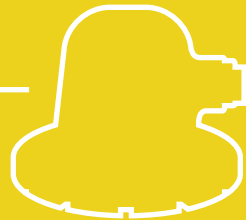
### Control Unit

Height (mm)	90
Width (mm)	200
Depth (mm)	65



### Transducer

Diameter (mm)	45
Height (mm)	65



### Transducer with ring

Diameter (mm)	90
Height (mm)	65

## Voltage & Consumption

### AC Input

N/A

### DC Input

12-30VC DC

### Consumption @ 12v DC

0.4 Amps/HR

## Certification

CE, FCC & ULC

## Transducer Output

### Power

50W Peak per transducer

### Frequency

auto ranging 20-40Khz

## Safety Features

- Internal Temperature Control with auto shutoff
- Over voltage protection
- reverse polarity protection
- Output monitoring

- IP69 Transducer
- IP68 Enclosure
- Marine Grade Silicon H05RN Cabling
- IP69 rated connectors

## System Functions

- Power off on low voltage
- Over voltage / temperature shut down
- Individual Transducer output monitoring for over and under current

- Intelligent power monitoring for optimal performance
- Sleep functionality

## Optional Solar Kit



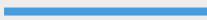



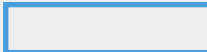


### Includes

- PV Logic Solar Power
- 2 x STPVF020 – 20wp solar panel
- 2 x 4m Cable (attached)
- 2 x 10A Charge Control
- 2 x Fuse
- 12 x Ring Terminals
- 2 x Simson 70-03 Adhesive
- 1 x Waterproof Cable feed gland
- 8 x Stainless steel fixing screws
- 1 x Instruction Sheet
- 1x MPPT Pro Charge Controller

### Dimensions

Height	505 (mm)
	(Junction box 10mm)
Width	345 (mm)
Depth	3 (mm)

### 7 Layer construction

	ETFE sheet
	EVA
	Cell circuit
	EVA
	Aluminium sheer powder coated
	EVA
	TPE sheet

\*\* Based on 6 hours of average daily peak sunlight hours

# Electronic Fouling Control EFC200



## Includes:

- 1 x Intelligent IP65 Rated Control Unit
- 2 x 50W IP69 Transducers
- 2 Year Return to UK base Warranty

## Electronic Fouling Control - EFC200 Installation Kit

- 1 x 6M H05RN Silicon Transducer Cable with IP69 Plug and Play connectors
- 1 x 8M H05RN Silicon Transducer Cable with IP69 Plug and Play connectors
- 1 x 12v / 24v H05RN Silicon DC Power Cable
- 1 x Araldite Rapid Epoxy Kit
- 1 x Blade Fuse and Holder
- 1 x Installation Manual
- Sandpaper, Gloves, Cables Ties

£ **1,382.50** +VAT

## Optional Solar Kit:

- PV Logic Solar Power
- 2 x STPVF020 – 20wp solar panel
- 2 x 4m Cable (attached)
- 2 x 10A Charge Control
- 2 x Fuse
- 12 x Ring Terminals
- 2 x Simson 70-03 Adhesive
- 1 x Waterproof Cable feed gland
- 8 x Stainless steel fixing screws
- 1 x Instruction Sheet
- 1x MPPT Pro Charge Controller

£ **358.33** +VAT

Complete Kit Price  
With All Options:

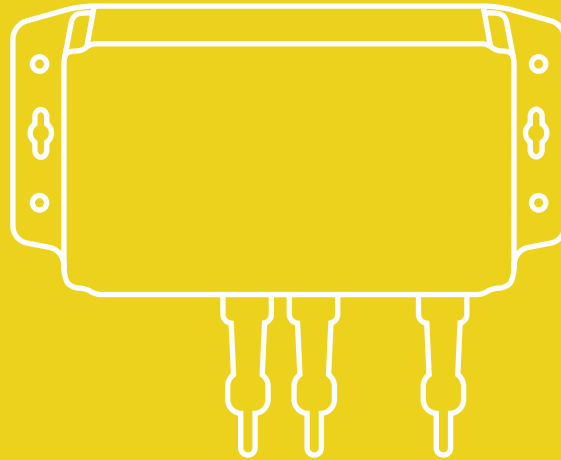
£ **1,740.83** +VAT

# EFC200

## Dimensions

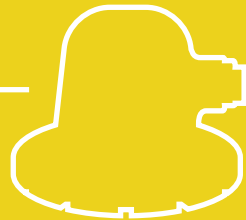
### Control Unit

Height (mm)	90
Width (mm)	200
Depth (mm)	65



### Transducer

Diameter (mm)	45
Height (mm)	65



### Transducer with ring

Diameter (mm)	90
Height (mm)	65

## Voltage & Consumption

### AC Input

N/A

### DC Input

12-30VC DC

### Consumption @ 12v DC

0.4 Amps/HR

## Certification

CE, FCC & ULC

## Transducer Output

### Power

50W Peak per transducer

### Frequency

auto ranging 20-40Khz

## Safety Features

- Internal Temperature Control with auto shutoff
- Over voltage protection
- reverse polarity protection
- Output monitoring
- IP69 Transducer

- IP68 Enclosure
- Marine Grade Silicon H05RN Cabling
- IP69 rated connectors

## System Functions

- Power off on low voltage
- Over voltage / temperature shut down
- Individual Transducer output monitoring for over and under current

- Intelligent power monitoring for optimal performance
- Sleep functionality

## Optional Solar Kit



### Includes

- PV Logic Solar Power
- 2 x STPVF020 – 20wp solar panel
- 2 x 4m Cable (attached)
- 2 x 10A Charge Control
- 2 x Fuse
- 12 x Ring Terminals
- 2 x Simson 70-03 Adhesive
- 1 x Waterproof Cable feed gland
- 8 x Stainless steel fixing screws
- 1 x Instruction Sheet
- 1x MPPT Pro Charge Controller

### Dimensions

Height	505 (mm)
	(Junction box 10mm)
Width	345 (mm)
Depth	3 (mm)

### 7 Layer construction

ETFE sheet
EVA
Cell circuit
EVA
Aluminium sheer powder coated
EVA
TPE sheet

\*\* Based on 6 hours of average daily peak sunlight hours



## Electronic Fouling Control

# EFC300



### Includes:

- 1 x Intelligent Control Unit
- 3 x 50W IP69 Transducers
- 1 x 110-240V AC Power Supply Unit
- 1 x UK Plug
- 2 Year Return to UK base Warranty

### Electronic Fouling Control - EFC300 Installation Kit

- 1 x 6M H05RN Silicon Transducer Cable with IP69 Plug and Play connectors
- 2 x 8M H05RN Silicon Transducer Cable with IP69 Plug and Play connectors
- 1 x 12v / 24v H05RN Silicon DC Power Cable
- 1 x Araldite Rapid Epoxy Kit
- 1 x Blade Fuse and Holder
- 1 x Installation Manual
- Sandpaper, Gloves, Cables ties etc

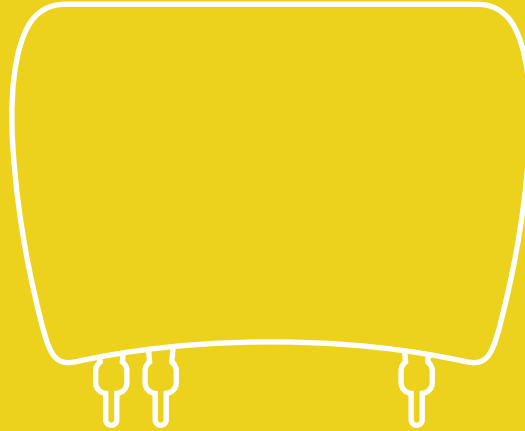
**£1,757.50** +VAT

# EFC300

## Dimensions

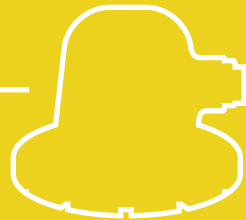
### Control Unit

Height (mm)	150
Width (mm)	220
Depth (mm)	60



### Transducer

Diameter (mm)	45
Height (mm)	65



### Transducer with ring

Diameter (mm)	90
Height (mm)	65

## Voltage & Consumption

### AC Input

110-240AC 50/60Hz

### DC Input

12-30V DC

### Consumption @ 12v DC

0.4 Amps/HR

## Certification

CE, FCC & ULC

## Transducer Output

### Power

50W Peak per transducer

### Frequency

auto ranging 20-40Khz

## Safety Features

- Internal Temperature Control with auto shutoff
- Over voltage protection
- reverse polarity protection
- Output monitoring

- IP69 Transducer
- IP65 Enclosure
- Marine Grade Silicon H05RN Cabling
- IP69 rated connectors

## System Functions

- Power off on low voltage
- Over voltage / temperature shut down
- Individual Transducer output monitoring for over and under current

- Intelligent power monitoring for optimal performance
- Sleep functionality

## Electronic Fouling Control

# EFC600



### Includes:

- 1 x Intelligent Control Unit
- 6 x 50W IP69 Transducers
- 1 x 110-240V AC Power Supply Unit
- 1 x UK Plug
- 2 Year Return to UK base Warranty

### Electronic Fouling Control - EFC600 Installation Kit

- 2 x 6M H05RN Silicon Transducer Cable with IP69 Plug and Play connectors
- 4 x 8M H05RN Silicon Transducer Cable with IP69 Plug and Play connectors
- 2 x 12v / 24v H05RN Silicon DC Power Cable
- 2 x Araldite Rapid Epoxy Kit
- 2 x Blade Fuse and Holder
- 1 x Installation Manual
- Sandpaper, Gloves, Cables ties etc

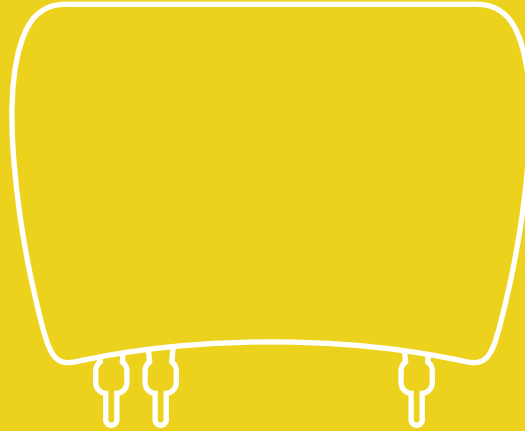
**£3,505 +VAT**

# EFC600

## Dimensions

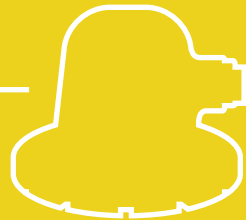
### Control Unit

Height (mm)	190
Width (mm)	240
Depth (mm)	110



### Transducer

Diameter (mm)	45
Height (mm)	65



### Transducer with ring

Diameter (mm)	90
Height (mm)	65

## Voltage & Consumption

### AC Input

110-240AC 50/60Hz

### DC Input

12-30VC DC

### Consumption @ 12v DC

0.8 Amps/Hr

## Certification

CE, FCC & ULC

## Transducer Output

### Power

50W Peak per transducer

### Frequency

auto ranging 20-40Khz

## Safety Features

- Internal Temperature Control with auto shutoff
- Over voltage protection
- reverse polarity protection
- Output monitoring

- IP69 Transducer
- IP68 Enclosure
- Marine Grade Silicon H05RN Cabling
- IP69 rated connectors

## System Functions

- Power off on low voltage
- Over voltage / temperature shut down
- Individual Transducer output monitoring for over and under current

- Intelligent power monitoring for optimal performance
- Sleep functionality

## Electronic Fouling Control

# EFC900



### Includes:

- 2 x Intelligent Control Unit
- 9 x 50W IP69 Transducers
- 2 x 110-240V AC Power Supply Unit
- 2 x UK Plugs
- 2 Year Return to UK base Warranty

### Electronic Fouling Control - EFC900 Installation Kit

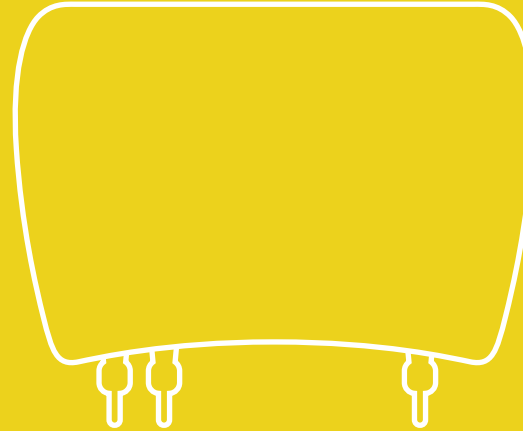
- 3 x 6M H05RN Silicon Transducer Cable with IP69 Plug and Play connectors
- 6 x 8M H05RN Silicon Transducer Cable with IP69 Plug and Play connectors
- 2 x 12v / 24v H05RN Silicon DC Power Cable
- 3 x Araldite Rapid Epoxy Kit
- 3 x Blade Fuse and Holder
- 1 x Installation Manual
- Sandpaper, Gloves, Cables ties etc

**£5,252.50** +VAT

# EFC900

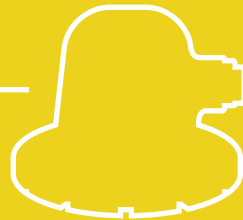
## Dimensions

Control Units	300	600
Height (mm)	150	190
Width (mm)	220	240
Depth (mm)	60	110



## Transducer

Diameter (mm)	45
Height (mm)	65



## Transducer with ring

Diameter (mm)	90
Height (mm)	65

## Voltage & Consumption

### AC Input

110-240AC 50/60Hz

### DC Input

12-30VC DC

### Consumption @ 24v DC

0.6 Amps/Hr

## Certification

CE, FCC & ULC

## Transducer Output

### Power

50W Peak per transducer

### Frequency

auto ranging 20-40Khz

## Safety Features

- Internal Temperature Control with auto shutoff
- Over voltage protection
- reverse polarity protection
- Output monitoring

- IP69 Transducer
- IP68 Enclosure
- IP65 Enclosure
- Marine Grade Silicon H05RN Cabling
- IP69 rated connectors

## System Functions

- Power off on low voltage
- Over voltage / temperature shut down
- Individual Transducer output monitoring for over and under current

- Intelligent power monitoring for optimal performance
- Sleep functionality

## Electronic Fouling Control

# EFC1200



### Includes:

- 2 x Intelligent Control Unit
- 12 x 50W IP69 Transducers
- 2 x 110-240V AC Power Supply Unit
- 2 x UK Plugs
- 2 Year Return to UK base Warranty

### Electronic Fouling Control - EFC1200 Installation Kit

- 4 x 6M H05RN Silicon Transducer Cable with IP69 Plug and Play connectors
- 8 x 8M H05RN Silicon Transducer Cable with IP69 Plug and Play connectors
- 3 x 12v / 24v H05RN Silicon DC Power Cable
- 4 x Araldite Rapid Epoxy Kit
- 3 x Blade Fuse and Holder
- 1 x Installation Manual
- Sandpaper, Gloves, Cables ties etc

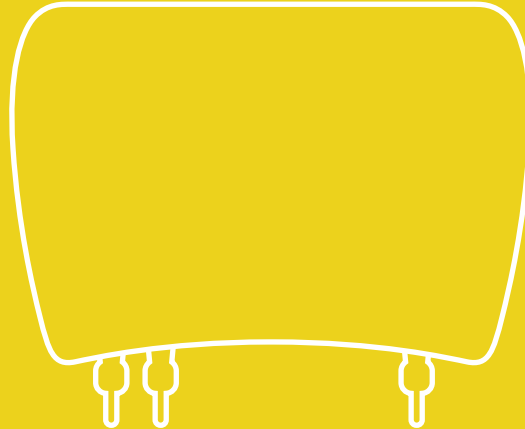
**£7,000** +VAT

# EFC1200

## Dimensions

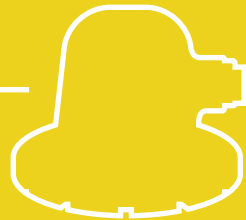
**Control Unit**      600 x2

Height (mm)	190
Width (mm)	240
Depth (mm)	110



## Transducer

Diameter (mm)	45
Height (mm)	65



## Transducer with ring

Diameter (mm)	90
Height (mm)	65

## Voltage & Consumption

### AC Input

110-240AC 50/60Hz

### DC Input

12-30V DC

### Consumption @ 24v DC

0.8 Amps/Hr

## Certification

CE, FCC & ULC

## Transducer Output

### Power

50W Peak per transducer

### Frequency

auto ranging 20-40Khz

## Safety Features

- Internal Temperature Control with auto shutoff
- Over voltage protection
- reverse polarity protection
- Output monitoring

- IP69 Transducer
- IP68 Enclosure
- Marine Grade Silicon H05RN Cabling
- IP69 rated connectors

## System Functions

- Power off on low voltage
- Over voltage / temperature shut down
- Individual Transducer output monitoring for over and under current

- Intelligent power monitoring for optimal performance
- Sleep functionality



# Boat Size Guide

Boat Size	Type	Recommended Solution
Less than 10m (32ft)	Boat	EFC200
	Catamaran	2 x EFC200
Between 10m to 20m (32ft – 65ft)	Boat	EFC300
	Catamaran	2 x EFC300
Greater than 20m (65ft)	All	Contact us to determine best solution based on individual boat
Commercial Vessels		
Sea Chest and Pipes		



# ELECTRONIC FOULING CONTROL

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[www.electronic-fouling-control.com](http://www.electronic-fouling-control.com)