

Reef Systems & Devices

The Ultimate Reef Keeping Experience



Red Sea REEF-SPEC®

Red Sea MAX® True REEF-SPEC® Specifications for a successful reef



REEF-SPEC® lighting

Current research into the photobiology of corals has provided new insights into the definition of Reef-Spec lighting and is the basis for the lighting configurations used in all MAX aquarium systems.

Based on Red Sea's research, the optimal light for sustainable coral growth in MAX reef systems (including the most demanding SPS coral species) has a PUR (Photosynthetic Utilized Radiation) value of approximately 450 micromoles per square meter per second at the water surface and 90 at the bottom of the tank.

The PUR is a combination of the relevant wavelengths required for corals and is only a small part of the PAR readings of the full visible spectrum (400-700nm). PAR readings, which are typically used to indicate the strength of reef lighting therefore does not guarantee their suitability for corals.

Red Sea's all-new ReefLED™ units provide a REEF-SPEC lighting spectrum with a true PUR output of between 80% to 100% of the PAR according to the selected color settings, guaranteeing strong growth and coloration of even the most delicate SPS corals.

REEF-SPEC® filtration

The heart of the Red Sea MAX filtration is the protein skimmer, which removes the vast majority of the waste produced by the aquarium inhabitants, as well as thoroughly oxygenating the water. Red Sea defines a REEF-SPEC skimmer as being one which will pass the aquarium's water volume through the skimmer 3 times per hour, and with an air:water ratio of 1:2. This skimmer specification sets MAX filtration apart from other systems and is necessary in order to provide the water quality required by delicate SPS corals. In addition, all MAX systems are equipped with full size mechanical and chemical filtration.

REEF-SPEC® circulation

Sufficient water flow is crucial to provide corals and other sessile invertebrates with the nutrients and minerals (e.g. calcium) necessary for growth. Turbulence of the water surface is necessary to prevent the accumulation of a bio-film that reduces both light penetration and efficient gas exchange.

Red Sea's REEF-SPEC circulation defines a required turnover of 10-15 times per hour of the total water volume. Accordingly, MAX systems are equipped with a full-size surface skimmer and powerful circulation pumps, all housed discreetly within the design ensuring the beauty of the aquarium is not compromised.

Red Sea MAX[®]

Complete Plug&Play[®] Reef Systems



The MAX[®] Concept

In the ocean, healthy coral reefs flourish only where specific natural conditions prevail, such as sufficient light, adequate current, stable temperature and water clarity. The Red Sea MAX system provides these conditions, allowing you to keep a thriving, healthy reef aquarium in your own home.

MAX is a true REEF-SPEC[®] system, taking away the worry and cost of retro-fitting additional equipment in order to achieve your desired results. It also guarantees the complete compatibility of the components built in to the aquarium. Therefore, your time can be spent enjoying the fish and corals living in your aquarium, while being reassured by the knowledge that the MAX system is providing the conditions required for the long term success of your own piece of living coral reef.

Behind every MAX aquarium is the guarantee that the entire system has been designed, and is fully supported, by Red Sea, a market leader in the development of coral reef systems and reef care products.

Creating Reef Conditions in your aquarium

The Red Sea MAX REEF-SPEC is the result of years of research into the sustainable growth of all corals including the most delicate “SPS” corals in an artificial reef environment and forms the base specification in the design of all MAX complete coral reef systems.



MAX[®] NANO

Complete Plug&Play[®] Open Top Reef Systems

Fully featured REEF-SPEC[®] open top 75 liter (20 gal) reef aquarium

Contemporary, rimless design with state-of-the-art reef technology that supports even the most delicate SPS corals.

The fully-featured REEF-SPEC MAX NANO provides everything necessary to enjoy the beauty and diversity of your own piece of thriving coral reef with all of the features developed for the largest of the MAX range of complete reef aquarium systems.

MAX NANO includes the all new Red Sea ReefLED™ 50 lighting with Wi-Fi control, REEF-SPEC filtration and circulation systems, and includes an Automatic Top-Off with RO reservoir.

Setting up and maintaining a NANO reef or marine system has never been easier!



MAX NANO

MAX NANO

MARINE-SPEC Cabinet

The MAX NANO is available with an optional black or white marine-spec laminate cabinet fronted with weatherproof epoxy painted doors.

Color Choice



Black

White

MAX[®] NANO Configuration

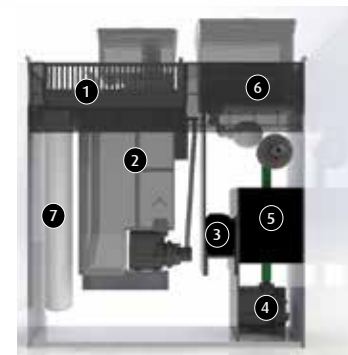
The MAX NANO is a 45cm (18") rimless cube constructed from Ultra-Clear glass with smart beveled edges giving the ultimate viewing experience. The rear of the aquarium houses a fully equipped rear sump, with all of the equipment hidden from view by a rotatable/removable screen.

A constant water level is maintained in the system by the built-in ATO with a RO reservoir sufficient for approximately 3 days of evaporation. Feeding is made easy with the conveniently located switches for the skimmer and circulation pumps.

REEF-SPEC[®] Filtration and circulation

- ✓ REEF-SPEC NANO protein skimmer - Consuming just 5W this newly developed Nano skimmer pump is both cool-running and virtually silent.
- ✓ 950 l/h (240g/h) Eco pump - Provides a positive water flow throughout the entire aquarium and circulates the entire water volume 12 times an hour through the filter system.
- ✓ Surface skimmer - Removable for easy cleaning, the unique design directs all of the surface water directly through the micron filter bag.
- ✓ Mechanical Filtration - 225 micron filter bag, REEF-SPEC activated carbon, coarse sponge bubble-trap.

1. Detachable Surface Skimmer
2. Protein Skimmer
3. Carbon
4. Circulation Pump
5. Bubble trap sponge
6. Automatic Top Up
7. Micron Filter Bag



MAX® NANO Features

- ✓ 45cm (18") rimless cube constructed from Ultra-Clear glass
- ✓ Red Sea ReefLED 50 lighting with Wi-Fi control
- ✓ Fully equipped rear sump with REEF-SPEC filtration and circulation systems
- ✓ Automatic Top-Off with RO reservoir
- ✓ Conveniently located on/off switches for the skimmer and circulation pumps

Plug&Play®, REEF-SPEC® LED lighting

The MAX Nano incorporates the all-new Red Sea ReefLED™ 50 light which is designed to ensure optimal coral growth and maximum rendition of their vibrant colors.

At the heart of the unit is a compact Led array that provides a reef-safe range of REEF-SPEC light through a single REEF-SPEC Blue (23,000 Kelvin) channel that consists of an optimum combination of ultraviolet, violet and blue LEDs and an 8,000 Kelvin white channel. In addition, it has a separate dedicated 3W Moonlight channel to provide the low levels of light for reef-safe nighttime viewing.

The ReefLED includes a single optical-glass, hollow lens that creates a homogenous light giving a dramatic coral coloration and a gentle shimmer throughout the aquarium. ReefLED is controlled by Red Sea's ReefBeat® App which provides a wide range of easy to use functions such as random clouds, acclimation for new installations and a lunar cycle for the moonlights.

The LED unit is firmly bolted to the aquarium and can be rotated to give easy access to the rear sump for all of regular maintenance requirements or for reefscaping.

See ReefLED page for full spec



MAX® E-Series 170 | 260

Complete Plug&Play® Open Top Reef Systems

Fully featured REEF-SPEC® open top reef aquariums

The MAX E-series combines a contemporary, rimless design with state of the art technology.

The fully-featured REEF-SPEC MAX-E system provides everything necessary in order to enable you to enjoy the beauty and diversity of your own piece of thriving coral reef, rather than worrying about component selection, suitability and compatibility.

The E-Series features the very latest in reef-keeping technology including Red Sea's new ReefLED™ 90 lighting with WiFi control, REEF-SPEC filtration and circulation systems, a modular sump system and a one-plug control panel.

Selecting a Red Sea MAX E-Series makes reef-keeping easier than ever before.



MAX E-170



MAX E-260

Plug&Play®, REEF-SPEC® LED lighting

The MAX E-Series incorporate the all-new Red Sea ReefLED 90 lights which are designed to ensure optimal coral growth and maximum rendition of their vibrant colors.

At the heart of the unit is a compact Led array that provides a reef-safe range of REEF-SPEC light through a single REEF-SPEC Blue (23,000 Kelvin) channel that consists of an optimum combination of ultraviolet, violet and blue LEDs and an 8,000 Kelvin white channel. In addition, it has a separate dedicated 3W Moonlight channel to provide the low levels of light for reef-safe nighttime viewing.

The ReefLED includes a single optical-glass, hollow lens that creates a homogenous light giving a dramatic coral coloration and a gentle shimmer throughout the aquarium. ReefLED is controlled by Red Sea's ReefBeat® App which provides a wide range of easy to use functions such as random clouds, acclimation for new installations and a lunar cycle for the moonlights.

[See ReefLED page for full spec](#)

Modular Sump system

Dual sump options for total flexibility. The MAX E-Series feature a unique sump system, enabling simple conversion of the integrated rear sump into a fully operational stand alone in-cabinet sump.

Start your reef with the built-in rear sump that houses the complete REEF-SPEC filtration and circulation systems. If you decide to add additional equipment such as a calcium reactor, the modular filtration system can easily be expanded by installing an optional Red Sea in-cabinet sump.

Red Sea's unique overflow system, with its fully regulated silent-flow downpipe (as used in the top-of-the-range S-Series), easily connects to the integrated multipoint bulkhead without the need for any cutting, gluing or emptying of the entire aquarium.

The optional sump conversion kit includes a customized glass sump with a dedicated constant height skimmer chamber, a flow-regulated overflow system and an integrated automatic top up.

Color Choice



Black

White

Main REEF-SPEC® Features MAX® E-170

The MAX E-170 is a fully featured 170 liter (45 gallon) open top REEF-SPEC system, making it the ideal choice for setting an advanced thriving reef in a limited space.

- ✓ LED lighting – single unit Red Sea's ReefLED™ 90 (90W)
- ✓ REEF-SPEC filtration including a professional MSK-900 adjustable protein skimmer 250 lph (66 gph) air
- ✓ REEF-SPEC circulation of 2150 lph/570 gph supplied by 1 X 2150 lph/570gph submersed professional eco pumps

Main REEF-SPEC® Features MAX® E-260

The ultimate open top 260 liter (69 gallon) fully featured REEF-SPEC system. The elegant look and high specification make this the perfect choice for anyone seeking a mid-size reef aquarium.

- ✓ LED lighting – Twin units Red Sea's ReefLED 90 (180W)
- ✓ REEF-SPEC filtration including a professional MSK-900 adjustable protein skimmer 250 lph (66 gph) air
- ✓ REEF-SPEC circulation of 4300 lph/1140 gph supplied by 2 X 2150 lph/570gph submersed professional eco pumps



Integrated Power Center

The MAX E-Series incorporates the one-plug MAX concept and feature a power center with easy access to 7 individually switched power sockets for all system electrical sub-components. The power center is conveniently located in the cabinet and enables safe and easy control of all of the MAX sub-systems.



MAX[®] S-Series 400 | 500 | 650

Ultimate Full Size Plug&Play[®] Reef Systems

Fully featured reef aquariums up to 650 liters

Owning a thriving piece of coral reef has never been easier than with Red Sea's MAX S-Series range of aquariums.

Carefully designed to support even the most delicate stony (SPS) corals, the MAX S-Series seamlessly integrates all of the necessary systems and components with contemporary style.

Total reefkeeping solution

The MAX S-Series is Red Sea's flagship reef system and features the very latest in reef-keeping technology.

Red Sea's ReefLED[™] lighting, REEF-SPEC[®] filtration and circulation systems, customizable fascia and a one-plug control center allow you to focus on the beauty and diversity of your own piece of coral reef, rather than worrying about component selection, suitability and compatibility.

Choosing the Red Sea MAX S-Series makes reefkeeping easier than ever before.

Plug&Play[®], REEF-SPEC[®] LED lighting

The MAX S-Series incorporate the all-new Red Sea ReefLED 90 lights which are designed to ensure optimal coral growth and maximum rendition of their vibrant colors.

At the heart of the unit is a compact Led array that provides a reef-safe range of REEF-SPEC light through a single REEF-SPEC Blue (23,000 Kelvin) channel that consists of an optimum combination of ultraviolet, violet and blue LEDs and an 8,000 Kelvin white channel. In addition, it has a separate dedicated 3W Moonlight channel to provide the low levels of light for reef-safe nighttime viewing.

The ReefLED includes a single optical-glass, hollow lens that creates a homogenous light giving a dramatic coral coloration and a gentle shimmer throughout the aquarium. ReefLED is controlled by Red Sea's ReefBeat[®] App which provides a wide range of easy to use functions such as random clouds, acclimation for new installations and a lunar cycle for the moonlights.

[See ReefLED page for full spec](#)



MAX S-400



MAX S-500



MAX S-650

Elegance & durability combined

MAX S-Series aquariums are constructed from 12-15mm ultra clear (low iron) glass supported by saltwater resistant plastics and a marine spec anodized aluminum frame. Designed for simple home assembly, all of the gluing, sawing and wiring has already been done for you.

The saltwater-resistant colour trim around the top and bottom of the aquarium is long-lasting and can be replaced at any time should a different colour scheme be preferred.

Color Choice



Black

Pearl White

Total Reef Filtration

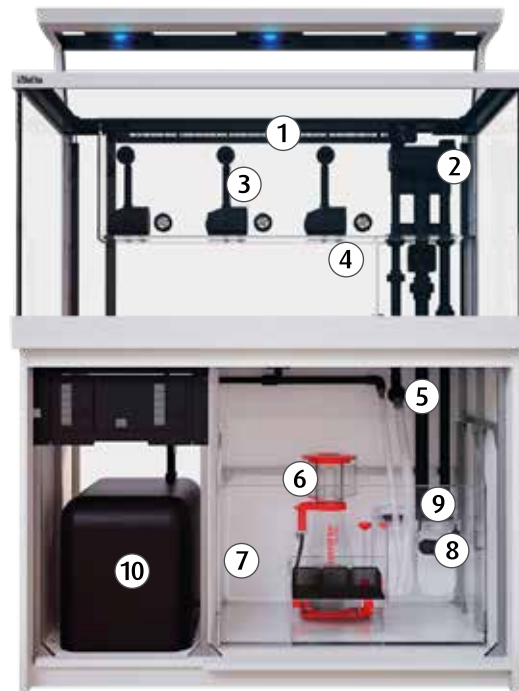
The complete reef filtration system starts with the surface skimmer that feeds the water to the in-cabinet sump via a flow-regulated, silent flow downpipe. The filtered water is returned to the aquarium by a main system pump that also supplies water to all of the filtration systems such as the protein skimmer, an optional chiller and/or reactors.

Connection between the aquarium and sump is via standard union connectors so no plumbing is required.

The MAX® S-System is supplied with the main system pump, the new Red Sea, REEFER™ Skimmer, mechanical and carbon filtration media and all piping including preparation to connect a chiller and auxiliary reactors.

Filtration System

1. Full width surface skimmer
2. Silent flow downpipe with overflow protection
3. Concealed rear circulation pumps
4. Built in freshwater reservoir+automatic top up system
5. Union joint connected internal piping including flow valves
6. REEFER Skimmer
7. Dedicated sump compartment for additional reactors
8. MAX S main pump
9. Dual micron filter
10. Chiller (Optional)



* Red Sea MAX S-500

REEFER™ Series NANO | 170 | 250 | 350

Reef-Ready Systems for advanced hobbyists

REEFER™ Concept

Red Sea's REEFER series of Reef Systems, provide advanced hobbyists with a solid foundation for building a fully featured reef or marine aquarium. The REEFER Series combines a contemporary, rimless, ultra-clear glass aquarium with a stylish cabinet and a comprehensive water management system, including a professional sump with integrated automatic top-up, and Red Sea's unique silent down-flow system.

The REEFER series is designed for ease of operation while enabling the advanced hobbyist to install an unlimited choice of lighting, filtration, circulation and controllers to create a uniquely customized system.

REEFER aquariums are constructed from thick, beveled-edge, ultra-clear glass to support their elegant and modern rimless design. The aquarium sits on a recessed base that "floats" it above the cabinet, which seamlessly follows the contour of the glass.

REEFER™ Cabinet

The marine-spec laminated cabinet that houses the sump, (and in the larger models also includes a dedicated, vented space for chillers) is smartly finished with weatherproof, epoxy-painted doors.

REEFER™ Water Management System

The comprehensive water management system provides the base for excellent water quality.

Surface water from all sides of the aquarium is actively fed to the sump through the regulated silent-flow downpipe. Removable surface-skimming combs surround the top of the centrally located overflow box that houses the downpipe, sump return pipe and the discreet multi-directional "eyeball" return outlet nozzle.

In the event of a blockage in the regulated downpipe, an additional emergency overflow pipe provides an unrestricted free flow of aquarium water directly to the sump. On entering the sump the water passes through 225 micron mechanical filter bags, before entering the filtration compartment with an adjustable height skimmer chamber* enabling you to set the water height for optimal skimmer performance. In order to remove any air bubbles that may have escaped from the skimmer, the water passes through a bubble-stripping cascade on its way to the return pump chamber.

Integrated Automatic Top-up

To ensure a constant water level in the pump compartment, all REEFER sumps include an integrated automatic freshwater top-up unit, guaranteeing a constant, stable water flow throughout the complete system.

New Sumps now include:

- ✓ An adjustable height skimmer chamber, enabling you to set the water level between 17-23cm (6.7"-9") for optimal skimmer performance.*
- ✓ A "Refugium Ready" sump allows you to dedicate part of the skimmer chamber for a refugium with a removable divider wall.*
- ✓ 1 micron Filter Bag + 1 Filter Media Cup.
- ✓ RO reservoir that can be slid aside when necessary for pump maintenance.

* Not available for REEFER 170

Red Sea REEFER™ Features:

- ✓ Rimless, ultra-clear, beveled edge glass aquarium
- ✓ Elegant Marine-Spec cabinet
- ✓ Professional Reef Sump
- ✓ Silent, regulated down-flow system with emergency overflow
- ✓ Integrated Automatic top-up system with reservoir
- ✓ Assembly-ready piping – no gluing required

Color Choice



Black

White



REEFER NANO



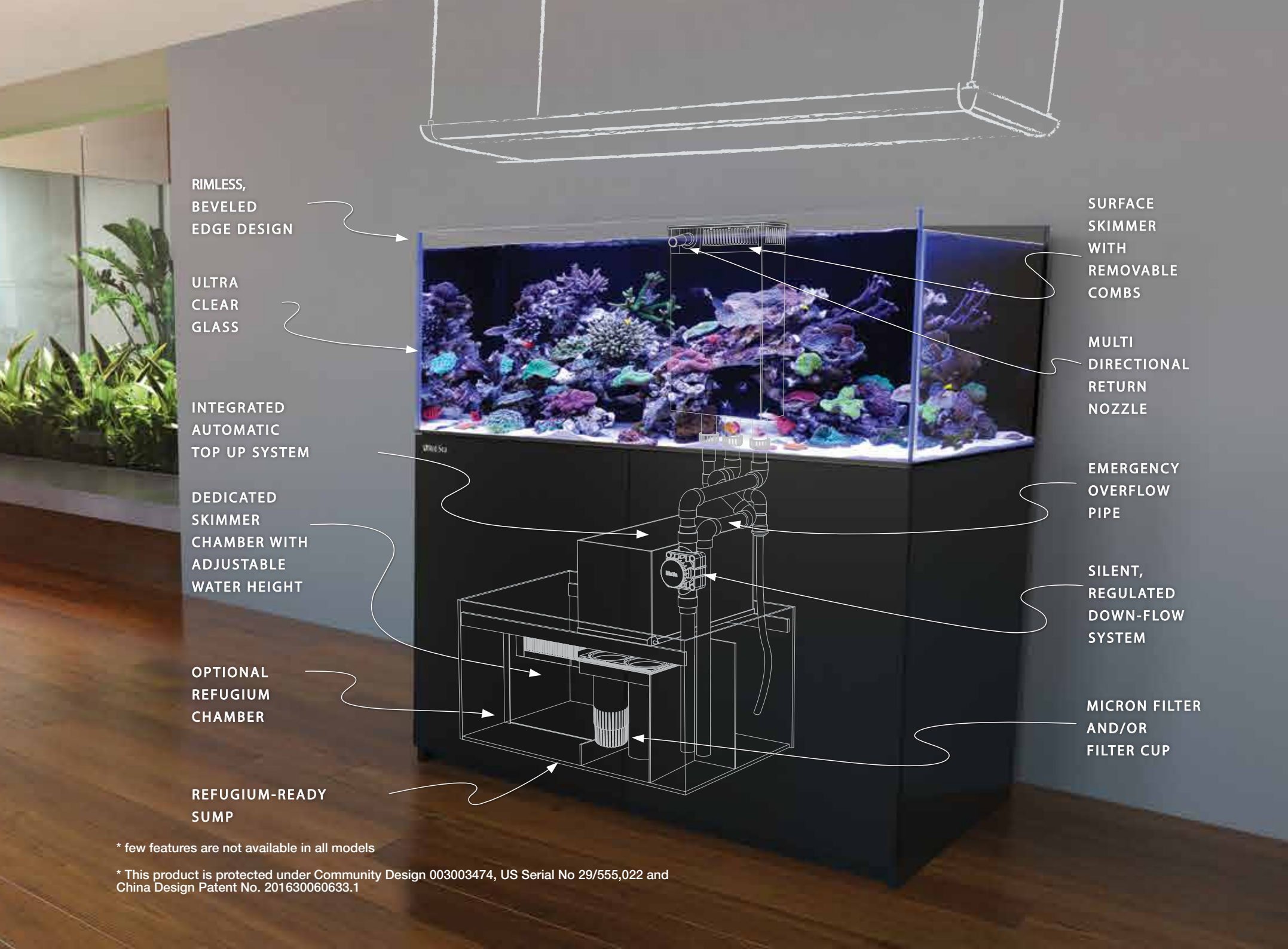
REEFER 170



REEFER 250



REEFER 350



RIMLESS,
BEVELED
EDGE DESIGN

ULTRA
CLEAR
GLASS

INTEGRATED
AUTOMATIC
TOP UP SYSTEM

DEDICATED
SKIMMER
CHAMBER WITH
ADJUSTABLE
WATER HEIGHT

OPTIONAL
REFUGIUM
CHAMBER

REFUGIUM-READY
SUMP

SURFACE
SKIMMER
WITH
REMOVABLE
COMBS

MULTI
DIRECTIONAL
RETURN
NOZZLE

EMERGENCY
OVERFLOW
PIPE

SILENT,
REGULATED
DOWN-FLOW
SYSTEM

MICRON FILTER
AND/OR
FILTER CUP

* few features are not available in all models

* This product is protected under Community Design 003003474, US Serial No 29/555,022 and China Design Patent No. 201630060633.1

REEFER™ XL 425 | 525 & REEFER™ XXL 625 | 750

Extra Large Reef-Ready Systems

REEFER™ Extra Large Systems

The larger format REEFER XL & XXL now includes 4 sizes that give you the freedom to create more expansive, intricate and diverse reefscapes without the constraints of smaller tanks. These tanks sit on extra durable HPL coated plywood Marine Spec cabinets for greater water resistance, with fully adjustable feet for perfect leveling on any surface.

The REEFER XL models are 57.5cm (22.6") wide and 55cm (21.6") high and are available in 120cm (47") long/425 liter (112 gal) capacity or 150cm (59") long/525 liter (140 gal).

The REEFER XXL models are 65cm (25.6") wide and 60cm (23.6") high and are available in 150cm (59") long/625 liter (166 gal) capacity or 180cm (71") long/750 liter (200 gal).

Color Choice



Black

White



REEFER 425



REEFER 525



REEFER 625



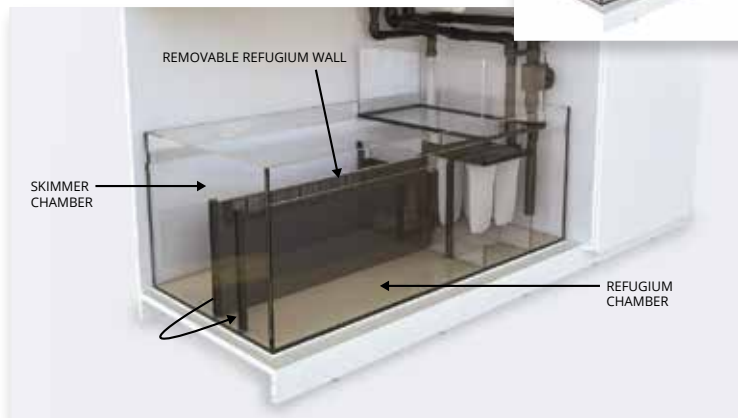
REEFER 750

Comparison of REEFER™ ranges

	REEFER	REEFER XL	REEFER XXL
Aquarium Length	60-150cm (23.6-59")	120/150cm (47-59")	150/180cm (59-71")
Aquarium Height	50-55cm (20-22")	55cm (22")	60cm (23.6")
Aquarium Depth	50cm (20")	57.5cm (22.6")	65cm (25.6")
Micron Filter Bags	1	2	2
Filter Media Cup	1 in 250/350	2	2
Refugium Ready Sump	250/350	✓	✓
Leveling Feet on Cabinet		✓	✓

Sumps include exciting new features:

- ✓ An adjustable height skimmer chamber, enabling you to set the water level between 17-23cm (6.7"-10.6") for optimal skimmer performance.
- ✓ A "Refugium Ready" sump with two pre-set positions allows you to decide how much of the sump you want for your skimmer and other reactors and how much as a dedicated refugium chamber.
- ✓ Micron filter bags and filter media cups
- ✓ RO liter reservoir that can be slid aside when necessary for pump maintenance.



Refugium-Ready Sump



REEFER™ Peninsula 500 | 650

Reef Ready Systems in a room-divider format

REEFER™ Peninsula systems

The new REEFER Peninsula will add the distinctive beauty and compelling presence of a Peninsula-style coral reef aquarium to your home or office space at a fraction of the cost of a custom installation.

Available in two sizes, the REEFER Peninsula offers an elegant room divider solution with all of the features of our advanced REEFER systems. A rimless, ultra-clear glass coral reef aquarium, with two long sides for viewing, gives you maximum exposure to the contents of your tank, adding complexity and intrigue to any reefscape.

	REEFER Peninsula 500	REEFER Peninsula 650
System Volumes	500L / 132gal	662L / 175gal
Aquarium Length	125cm (49.2")	160cm (63")
Aquarium Height	60cm (23.6")	60cm (23.6")
Aquarium Depth	60cm (23.6")	64cm (25.2")

These impressive aquariums are set on 1M (39.4") high stylish yet heavy duty cabinets with epoxy painted finish on both sides. The cabinet includes a dedicated ventilated compartment for chiller and control systems and the doors may be assembled on either side of the cabinet to suit the layout of the room.

The unique design of the Peninsula with the overflow system at one end of the aquarium instead of at the center also makes it ideal for a room corner installation.

Advanced Sump Features include

- ✓ An adjustable height skimmer chamber, enabling you to set the water level between 21-27cm (8.3"-10.6") for optimal skimmer performance.
- ✓ A "Refugium Ready" sump with two pre-set positions allows you to decide how much of the sump you want for your skimmer and other reactors and how much as a dedicated refugium chamber.
- ✓ 2 micron Filter Bags + 2 Filter Media Cups.
- ✓ RO reservoir that can be slid aside when necessary for pump maintenance.

REEFER™ Peninsula Deluxe

The REEFER Peninsula is also available in a Deluxe configuration incorporating the ReefLED™ 90 lights with Red Sea's customized hanging system.



REEFER Peninsula 500



REEFER Peninsula 650



REEFER Peninsula Deluxe 500



REEFER Peninsula Deluxe 650

Color Choice



Black

White



REEFER™ Deluxe

The Red Sea REEFER™ combined with an advanced LED lighting system

REEFER™ Deluxe Concept

The REEFER Deluxe incorporates the all-new ReefLED™ 90 lighting units and mounting systems into the REEFER reef ready systems in a convenient single package.

Plug&Play®, REEF-SPEC® LED lighting

At the heart of the ReefLED is a compact Led array that provides a reef-safe range of REEF-SPEC light through a single REEF-SPEC Blue (23,000 Kelvin) channel that consists of an optimum combination of ultraviolet, violet and blue LEDs and an 8,000 Kelvin white channel. In addition, it has a separate dedicated 3W Moonlight channel to provide the low levels of light for reef-safe nighttime viewing.

The ReefLED includes a single optical-glass, hollow lens that creates a homogenous light, giving a dramatic coral coloration and a gentle shimmer throughout the aquarium.

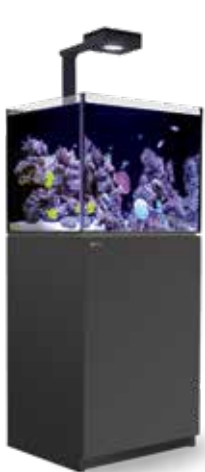
ReefLED is controlled by Red Sea's ReefBeat® App which provides a wide range of easy to use functions such as random clouds, acclimation for new installations and a lunar cycle for the moonlights.

See ReefLED page for full spec

Mounting system

The bespoke mounting system attaches firmly onto the rear wall on the tank and can be rotated to the upright position during reefscaping or other tank maintenance.

REEFER Deluxe is available in a choice of 7 models with 1, 2, 3 or 4 LED units as shown below.



REEFER Deluxe 170



REEFER Deluxe 250 | 350 | XL 425



REEFER Deluxe XL 525 | XXL 625



REEFER Deluxe XXL 750

MAX® Series

Complete Plug&Play® Reef Systems

MAX® NANO



NANO

MAX® E Model



170



260

MAX® S Model



400



500



650

Specifications





System water volume	Combined aquarium and sump (not including optional sump for MAX E)	75 L (20 gal)	170 L (45 gal)	260 L (69 gal)	400 L (106 gal)	500 L (132 gal)	650 L (172 gal)
Aquarium volume	Display tank	62 L (16.5 gal)	140 L (37 gal)	213 L (56 gal)	330 L (87 gal)	410 L (108 gal)	520 L (138 gal)
Rear Sump volume	Rear sump (MAX E) / Circulation Pump Chamber (MAX S)	13 L (3.5 gal)	30 L (8 gal)	47 L (13 gal)	20 L (5 gal)	30 L (8 gal)	40 L (11 gal)
In-Cabinet Sump volume	Glass sump with preparation for auxiliary reactors or refugium	-	[40 L (10 gal)]*	[45 L (12 gal)]*	50 L (13 gal)	60 L (16 gal)	90 L (25 gal)
Aquarium glass thickness	Ultra clear front and side panels	8 mm (5/16")	12 mm (1/2")	12 mm (1/2")	12 mm (1/2")	12 mm (1/2")	15 mm (5/8")
Surface skimmer	Built in surface skimmer	✓	✓	✓	✓	✓	✓
LED Lighting system	Red Sea's ReefLED™	1 x ReefLED 50	1 x ReefLED 90	2 x ReefLED 90	2 x ReefLED 90	3 x ReefLED 90	4 x ReefLED 90
Lighting – standard configuration	Reef spectrum with nominal total output	50W	90W	180W	180W	270W	360W
Lighting control	WiFi based system compatible with all iOS & Android	✓	✓	✓	✓	✓	✓
Total circulation lph (gph)	Hidden circulation pumps (not including sump return)	1 x 950 (240)	1 x 2150 (570)	2 x 2150 (570)	2 x 2150 (570)	3 x 2150 (570)	4 x 2150 (570)
Main system pump lph (gph)	Sump return + optional feed to skimmer chiller reactors	-	-	-	7000 (1850)	7000 (1850)	7000 (1850)
Protein skimmer	Skimmer model	MSK NANO	MSK 900	MSK 900	REEFER Skimmer 600	REEFER Skimmer 600	REEFER Skimmer 900
	Water flow	180 Lph (46gph)	900 Lph (240gph)	900 Lph (240gph)	1500 l/h (400gph)	1500 l/h (400gph)	2000 l/h (530gph)
	Air flow	60 Lph (15gph)	250 Lph (66gph)	250 Lph (66gph)	750 l/h (190gph)	750 l/h (190gph)	900 l/h (235gph)
Chiller installation kit	Fittings for easy chiller installation	-	✓	✓	✓	✓	✓
Integrated power center	Individually switched sockets for pumps and accessories	2 Outlets	7 Outlets	7 Outlets	10 Outlets	10 Outlets	10 Outlets
Integrated A.T.O	Easy-access storage tank with in-sump float valve	1.5 L (0.4 gal)	[5.4 L (1.5 gal)]*	[8 L (2.1 gal)]*	22 L (6 gal)	29 L (7.5 gal)	38 L (10 gal)
Mechanical filtration	Micron filter bags	1	[1 x sump]*	[2 x sump]*	2	2	2
Media Rack	For rear sump	-	✓	✓	-	-	-
Chemical filtration	High grade phosphate-free activated carbon	100g (3.5oz.)	200g (7 oz.)	400g (14 oz.)	600g (20 oz.)	600g (20 oz.)	600g (20 oz.)
Cabinet frame	Marine spec anodized aluminum profile	-	-	-	✓	✓	✓
Cabinet external	Splash resistant polyurethane painted or HPL coated MDF doors & panels	✓	✓	✓	✓	✓	✓
Cabinet Compartments	Dedicated chiller compartment (not in E-170 if optional in cabinet sump installed)	-	-	✓	✓	✓	✓
Length	Display tank (MAX S Including Color Trim)	45 cm (18")	60 cm (24")	90 cm (36")	104 cm (41")	128 cm (50.5")	160 cm (63")
Width	Display tank (MAX S Including Color Trim)	45 cm (18")	57.5 cm (22.6")	57.5 cm (22.6")	70 cm (27.5")	70 cm (27.5")	70 cm (27.5")
Height	Display tank	45 cm (18")	55 cm (22")	55 cm (22")	64 cm (25")	64 cm (25")	64 cm (25")
	Total system height (excluding LED light unit)	132 cm (52")	142 cm (56")	142 cm (56")	156 cm (61")	156 cm (61")	156 cm (61")

* optional for MAX® E. Manufacturer reserves the right to change the specification without notice

REEFER™ Series

Reef-Ready Systems for advanced hobbyists

Specifications

		REEFER™ Model			
					
		NANO	170	250	350
Main Features	Ultra clear front and side glass	✓	✓	✓	✓
	Ultra clear front glass thickness (mm)	8 (5/16")	10 (3/8")	12 (1/2")	12 (1/2")
	Built in surface skimmer	✓	✓	✓	✓
	Integrated automatic top up system	✓	✓	✓	✓
System Volume	Display tank water volume (L)	77 (21 gal)	130 (34 gal)	204 (54 gal)	275 (73 gal)
	In cabinet sump water volume (L)	28 (7 gal)	35 (9 gal)	40 (11 gal)	70 (18 gal)
	Total system water volume (L)	105 (28 gal)	165 (43 gal)	244 (65 gal)	345 (91 gal)
	RO reservoir volume (L)	4.7(1.3 gal)	5.4 (1.4 gal)	10.9 (2.9 gal)	18 (4.8 gal)
System Dimensions	Display tank length (cm)	45 (18")	60 (24")	90 (36")	120 (47")
	Display tank height (cm)	45 (18")	50 (20")	53 (21")	53 (21")
	Display tank width (cm)	45 (18")	50 (20")	50 (20")	50 (20")
	Total system height with cabinet (cm)	132 (52")	137 (54")	140 (55")	140 (55")
Sump Dimensions	Water height (cm)	20 (8")	20 (8")	17-23 (6.7"-9")	17-23 (6.7"-9")
	Skimmer chamber (cm)	24 x 21 (11.8"x9.8")	30 x 25 (11.8"x9.8")	42 x 25 (16.5"x9.8")	42 x 26 (16.5"x10.2")
	Pump chamber (cm)	24 x 12 (11.8"x4.7")	30 x 12 (11.8"x4.7")	26 x 17 (10.2"x6.7")	26 x 24 (10.2"x9.4")
Return Pump	3/4" threaded hose barb - Pipe Int. Dia	16mm (5/8")	16mm (5/8")	16mm (5/8")	16mm (5/8")
	Recommended flow (lph) (pump not included)	2000 (530 gph)	2000 (530 gph)	2500 (660 gph)	3000 (790 gph)
Deluxe Series Features	Red Sea's ReefLED Lighting System	1 x ReefLED 50	1 x ReefLED 90	2 x ReefLED 90	2 x ReefLED 90
New Special Features	Adjustable Height Skimmer Chamber			✓	✓
	Refugium Ready			✓	✓
	225 micron Thin-mesh Filter Bag	1	1	1	1
	Filter Media Cup			1	1
	Quick Release cabinet door hinges	✓	✓	✓	✓

REEFER™ XL | XXL

Extra Large Reef-Ready Systems

Specifications

		REEFER™ XL Model		REEFER™ XXL Model		REEFER™ Peninsula	
							
		XL 425	XL 525	XXL 625	XXL 750	Peninsula 500	Peninsula 650
Main Features	Ultra clear front and side glass	✓	✓	✓	✓	✓	✓
	Ultra clear front glass thickness (mm)	12 (1/2")	15 (5/8")	19 (3/4")	19 (3/4")	15 (5/8")	19 (3/4")
	Built in surface skimmer	✓	✓	✓	✓	✓	✓
	Integrated automatic top up system	✓	✓	✓	✓	✓	✓
System Volume	Display tank water volume (L)	332 (88 gal)	409 (108 gal)	502 (133 gal)	602 (L160 gal)	398 (105 gal)	528 (140 gal)
	In cabinet sump water volume (L)	90 (24 gal)	116 (31 gal)	123 (32 gal)	150 (40 gal)	102 (27 gal)	134 (35 gal)
	Total system water volume (L)	422 (112 gal)	525 (139 gal)	625 (165 gal)	752 (200 gal)	500 (132 gal)	662 (175 gal)
	RO reservoir volume (L)	20.8 (5.5 gal)	20.8 (5.5 gal)	28.7 (7.6 gal)	28.7 (7.6 gal)	22.2 (5.9 gal)	28.7 (7.6 gal)
System Dimensions	Display tank length (cm)	120 (47")	150 (59")	150 (59")	180 (71")	125 (49.2")	160 (63")
	Display tank height (cm)	55 (22")	55 (22")	60 (23.6")	60 (23.6")	60 (23.6")	60 (23.6")
	Display tank width (cm)	57.5 (22.6")	57.5 (22.6")	65 (25.6")	65 (25.6")	60 (23.6")	64 (25.2")
	Total system height with cabinet (cm)	142 (56")	142 (56")	148 (58.3")	148 (58.3")	160 (63")	160 (63")
Sump Dimensions	Water height (cm)	20-27 (7.9"-10.6")	20-27 (7.9"-10.6")	21-27 (8.3"-10.6")	21-27 (8.3"-10.6")	21-27 (8.3"-10.6")	21-27 (8.3"-10.6")
	Skimmer chamber (cm)	48 x 36 (19.3"x14.1")	56 x 48 (22"x19.3")	51x51(20"x20")	71x51(28"x20")	41x51(16"X20")	59x51(23.2"x20")
	Pump chamber (cm)	26 x 24 (10.2"x9.4")	26 x 24 (10.2"x9.4")	33x28(13"X11")	33x28(13"X11")	26x28(10.2"x11")	33x28(13"X11")
Return Pump	3/4" threaded hose barb - Pipe Int. Dia	25mm (1")	25mm (1")	25mm (1")	25mm (1")	25mm (1")	25mm (1")
	Recommended flow (lph) (pump not included)	4000 (1060 gph)	4000 (1060 gph)	6000 (1600 gph)	7000 (1850 gph)	6000 (1600 gph)	7000 (1850 gph)
Deluxe Series Features	Red Sea's ReefLED™ Lighting System	2 x ReefLED 90	3 x ReefLED 90	3 x ReefLED 90	4 x ReefLED 90	3 x ReefLED 90	4 x ReefLED 90
New Special Features	Adjustable Height Skimmer Chamber	✓	✓	✓	✓	✓	✓
	Refugium Ready	✓	✓	✓	✓	✓	✓
	225 micron Thin-mesh Filter Bag	2	2	2	2	2	2
	Filter Media Cup	2	2	2	2	2	2
	Quick Release cabinet door hinges	✓	✓	✓	✓	✓	✓
	Heavy Duty levelable Plywood Cabinet	✓	✓	✓	✓	✓	✓

A vibrant underwater scene featuring a variety of colorful coral reefs in shades of blue, purple, and pink. Several fish are swimming around, including a prominent blue tang with a yellow tail, a yellow tang, and several smaller blue tangs. The background is dark, making the colorful elements stand out.

Red Sea's Smart Devices

ReefBeat[®]

Your single interface for all Red Sea smart aquarium devices

The intuitive ReefBeat App allows you to set-up, monitor and control all your Red Sea smart devices on all your aquariums simultaneously from multiple smart mobile devices.

ReefBeat will guide you through a simple quick set-up for each type of device and where appropriate, automatically group them together and implement common settings. It also provides immediate action buttons for some typical aquariums activities such as Feeding and Maintenance or Emergency shutdown that will be applied to any device you select.

ReefBeat will give you Peace-of-mind. See the actual current status of all your devices on demand and receive notifications direct to your smartphone if your aquarium experiences a power failure or an internet outage.

ReefBeat works even if your devices do not have access to the internet, however certain functionalities will not be available.

Features

- ✓ One interface for all of Red Sea's connected devices.
- ✓ Easy set-up and operation.
- ✓ On-line monitoring and notifications.



ReefLED™ 50 | 90

Smart - Safe - Efficient

Reef safe & REEF-SPEC® LED lighting

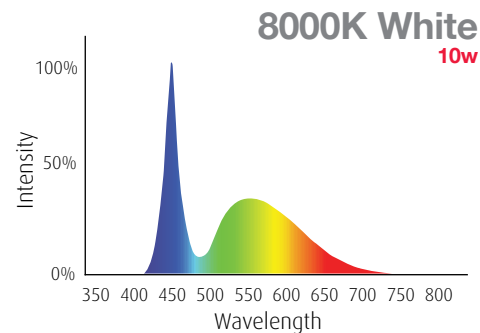
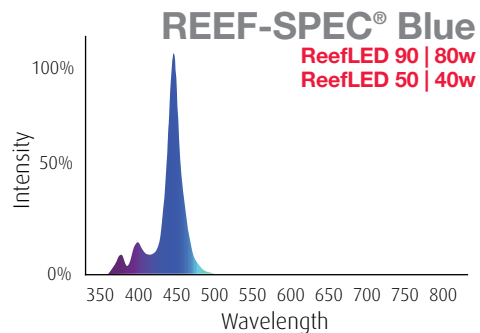
Years of research and testing are behind Red Sea's ReefLED™ smart reef lighting system. These lights have been designed to ensure optimal coral growth and dramatic coloration, while creating a gentle shimmer throughout the aquarium.

The ReefLED lights are guaranteed to be reef-safe and REEF-SPEC and are very easy to set up. The built-in Wi-Fi connects them directly to the internet, enabling you to control them from your smartphone using Red Sea's ReefBeat® smart aquarium app.

At the heart of the unit is a single, compact LED array that includes a multi-wavelength, 23,000 Kelvin "REEF-SPEC® Blue" channel (a proprietary blend of blue, violet and ultraviolet LEDs) which, together with an 8,000K White channel, provides a reef-safe range of color temperatures that enable all corals to flourish. In addition, a separate dedicated 3W moonlight channel provides low levels of light for reef-safe night-time viewing.

ReefLED also includes an optical-glass, hollow lens that ensures a homogenous light spectrum with ideal PAR values throughout the aquarium, without hotspots or areas with insufficient light for coral growth. ReefLED is controlled by Red Sea's ReefBeat® app which provides a number of preset lighting programs you can choose from as well as additional features including sunrise/sunset effects, lunar cycle moon light, random clouds and even an acclimation program for new installations. ReefBeat also provides best-practice guidelines during setup as well as useful notifications to your smartphone, for example, in the event of a power outage.

Channels



Features

- ✓ REEF-SPEC light output for optimal coral growth & coloration
- ✓ Homogenous light with a gentle shimmer
- ✓ Reef safe dual-channel color setting plus dedicated moonlights
- ✓ ReefBeat app for easy set-up, operation, monitoring and notifications
- ✓ Anti-glare recessed lens



Optimal Growth



Reef-safe



Easy Setup

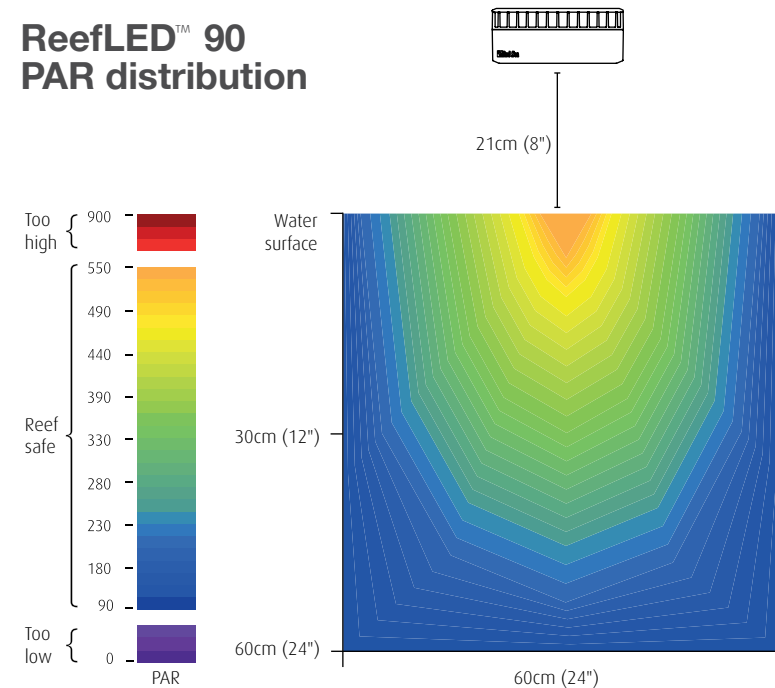


WiFi



App operated

ReefLED™ 90 PAR distribution



Wi-Fi included



ReefLED™ 50

12x12x5.2cm / 4.7x4.7x2"

50 W

Compact LED array

500 PAR

at surface

100 PAR

at 50cm (20") depth

40 W

REEF-SPEC Blue

10 W

8,000K White

3 W

Moonlight

50x50 cm

Coverage (20x20")

ReefLED™ 90

15.5x13.5x5.7cm / 6.1x6.1x2.3"

90 W

Compact LED array

500 PAR

at surface

150 PAR

at 50cm (20") depth

80 W

REEF-SPEC Blue

10 W

8,000K White

3 W

Moonlight

60x60 cm

Coverage (24x24")



ReefWave® 25 | 45

Silent - Smart - Powerful

Advanced & silent cross-flow wave pumps

Red Sea's ReefWave Wi-Fi pumps feature the unique, patented, cross-flow technology, providing an optimal REEF-SPEC® water motion for corals, wherever they are placed in your aquarium.

Developed specifically for Red Sea, the ReefWave pumps are designed to be silent, powerful, smooth running and easy to maintain while the Wi-Fi controller offers a full suite of features with simplicity of operation.

The combination of an advanced, smooth running and energy efficient sine-wave motor drive, with superior vibration damping mounts and dual bearings on all models make ReefWave a virtually silent pulsing wave pump.

Controller & ReefBeat® App

Each ReefWave pump comes with its own controller that has a wide range of on-board preset waves as well as a built-in Wi-Fi that connects it to Red Sea's ReefBeat App, seamlessly integrating ReefWave with all of Red Sea's connected devices.



Features

- ✓ Crossflow technology wave pump for a gentle, evenly distributed flow
- ✓ Silent and energy efficient Sine-Wave DC control motor
- ✓ 5 programmable wave patterns with unique Forward/Reverse/Alternating flow modes
- ✓ Easy assembly/disassembly for maintenance
- ✓ Dedicated Wi-Fi controller for each pump
- ✓ Synchronize multiple pumps of different sizes
- ✓ ReefBeat App for easy set-up, operation, monitoring and notifications



Silent



Easy Setup



Sine wave
technology



WiFi



Easy
maintenance

Wave programs



Regular



Random



Uniform



Surface



Step

Controller included



ReefWave® 25 27x7x4cm / 10.5x2.8x1.5"

7,500 LPH / 1,980 GPH

True maximum flow rate

4-25 WATT

Power consumption

60-120 CM / 2-4 FT

Recommended aquarium size

3 M / 10 FT

Cable length

15 MM / ½ INCH

Max Glass thickness

ReefWave® 45 31x8x5cm / 12.2x3.2x2"

15,000 LPH / 3,960 GPH

True maximum flow rate

8-45 WATT

Power consumption

60-200 CM / 2-6 FT

Recommended aquarium size

3 M / 10 FT

Cable length

20 MM / ¾ INCH

Max Glass thickness



REEFER™ Skimmer 300 | 600 | 900

Efficient - Quiet - Ergonomic

High performance skimmers

Our high-performance REEF-SPEC® Skimmers feature a combination of PSK pumps with proportionally sized venturi, bubble diffusor and reaction body that optimizes air-water contact time for steady waste removal.

Designed with hobbyists needs in mind, the REEFER Skimmer is whisper quiet thanks to rubber connectors which dampen the vibrations as well as a robust air silencer. With features like the FoamView™ window, built-in neck cleaner and extra-long valved waste tube, we guarantee an enhanced home reef filtration experience.

Ratings & Specifications

REEFER Skimmers are rated according to Red Sea's REEF-SPEC criteria that includes a water throughput, water to air ratio and contact time necessary to efficiently strip pollutants from the water. Powered by Sicce PSK pumps, the stated air and water flow rates are actual measurements of these pumps when running on REEFER Skimmers.

		RSK - 300	RSK - 600	RSK - 900
Rating	SPS (L/Gal)	300 / 80	600 / 160	900 / 240
	Mixed Reef (L/Gal)	600 / 160	1200 / 320	1800 / 500
	Fish Only (L/Gal)	900 / 240	1800 / 500	2700 / 740
Specifications	Sicce Pump	PSK-600	PSK-1000	PSK-1200
	Air Flow (Lph/Gph)	500 / 130	750 / 195	900 / 235
	Water Flow (Lph/Gph)	1000 / 265	1500 / 400	2000 / 530
	Height	53cm / 21"	56cm / 22"	59cm / 23"
	Recommended water height	16-20cm / 6-8"	18-20cm / 7-8"	20-24cm / 8-9"

Features

- ✓ Ergonomic diffusion chamber evenly disperses the fine bubbles created by the PSK pump across the skimmer cone without reducing air or water flow.
- ✓ Quiet operation, with vibration absorbing components and a large air intake silencer.
- ✓ 3 assembly options for flexible positioning of the pump inlet and regulation valve according to your sump.
- ✓ Foam-View window in the collection cup to easily monitor and adjust the foam height.
- ✓ Built-in manual neck cleaner.
- ✓ Precision geared valve for positive flow regulation.
- ✓ Quick release pump holder for ease of maintenance.
- ✓ Drainage port with 1m valved hose.



Quiet



High Efficiency



PSK pump



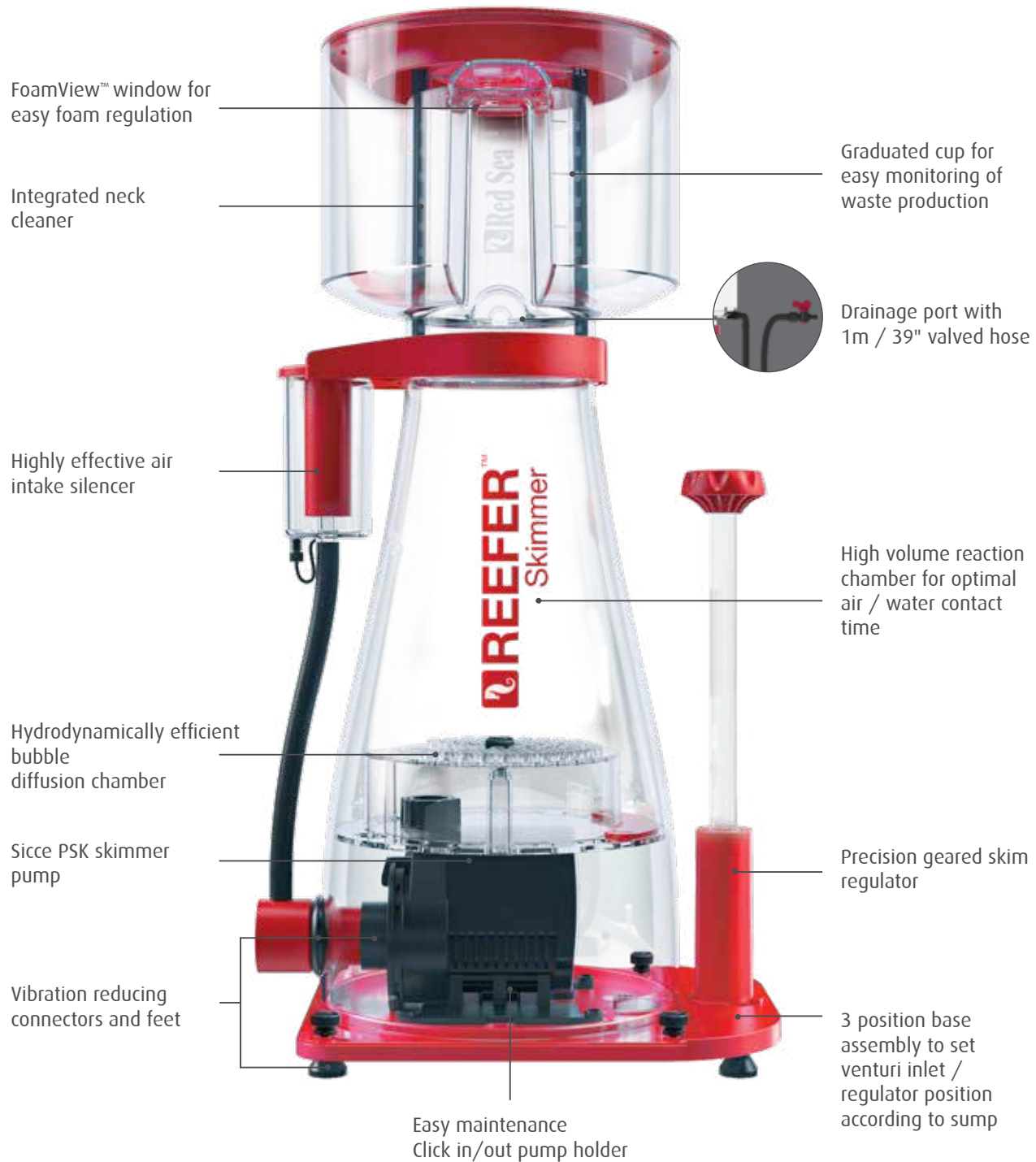
Easy maintenance



Easy Setup

3 Assembly options to suit your sump





FoamView™ window for easy foam regulation

Integrated neck cleaner

Graduated cup for easy monitoring of waste production

Drainage port with 1m / 39" valved hose

Highly effective air intake silencer

High volume reaction chamber for optimal air / water contact time

Hydrodynamically efficient bubble diffusion chamber

Sicce PSK skimmer pump

Precision geared skim regulator

Vibration reducing connectors and feet

3 position base assembly to set venturi inlet / regulator position according to sump

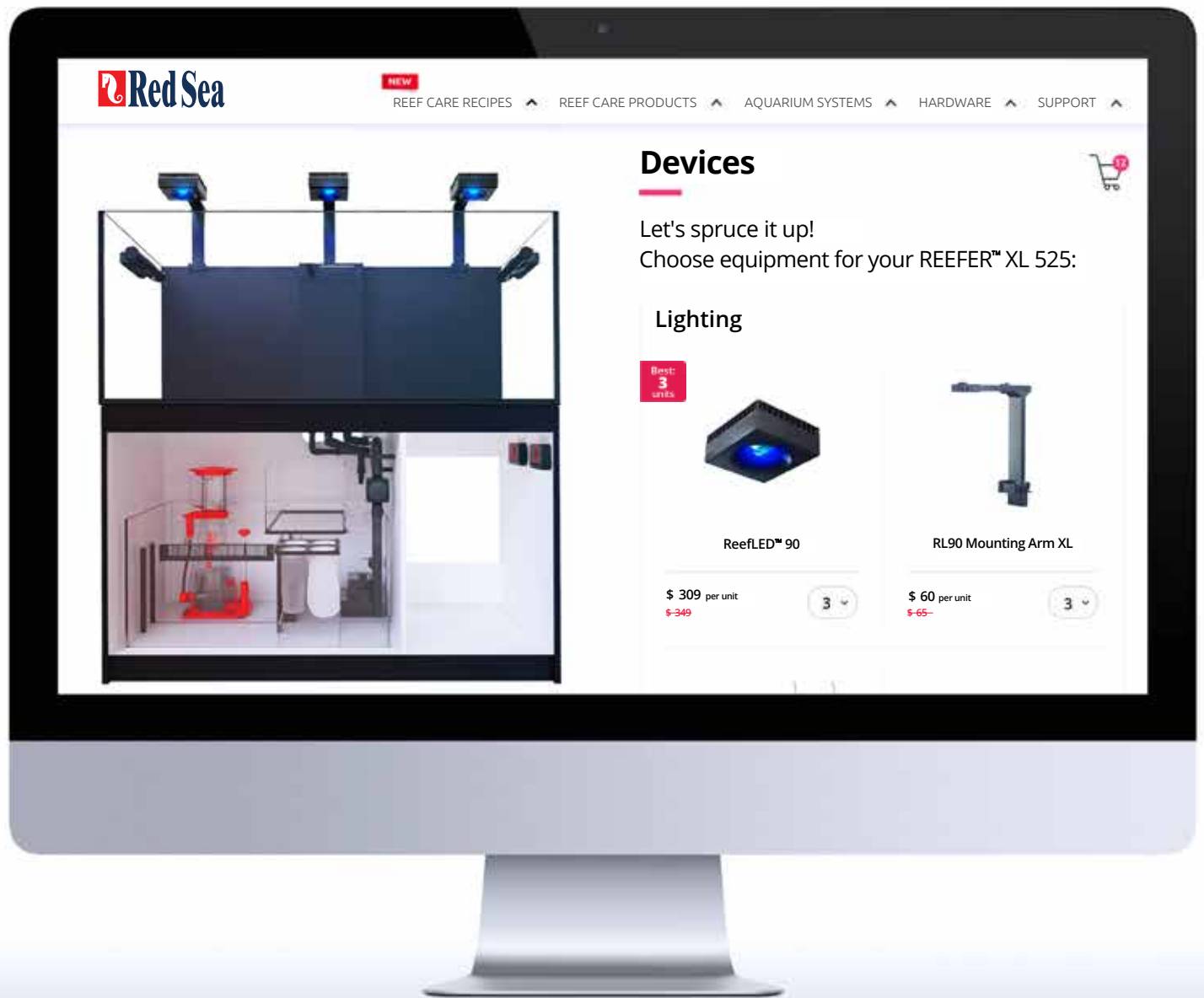
Easy maintenance
Click in/out pump holder



Now on www.redseafish.com

Build your own REEFER™ system

Add Red Sea's smart devices & watch your savings grow!



Join our Facebook group:
Red Sea MAX/REEFER owners

R99536_ENG_V19b

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