
Orphek OR4 iCon Product Brief



OR4 iCon LED Bars Proprietary Technologies & Features:

- **New!** Groundbreaking Sun & Moon Synchronization.
 - **New!** iCon technology that allows you to program, control, monitor and dim your OR4 Reef Aquarium LED Bars and integrate them with all other Orphek iCon LED solutions.
 - **New!** Unmatched 10,000% dimming control technology.
 - **New!** Game-changing Orphek 6 watt Mixed Colors Dual-Chip Power LEDs. /New proprietary 70° reflectors.
 - **New!** The all-in-one groundbreaking Orphek power supply - Orphek customized dim power supply (most advanced technology /best electricity transfer & stability).
 - **New!** Incredible new Orphek App compatible with IOS & Android/ iCloud support, free of charge.
 - Exceptional Easy setup & Plug and Play technology.
 - Full customization: Compatible with Osix Smart Device - With Osix you can combine up to 6 OR4 LED Bars of your choice to create your own fixture.
 - The jaw-dropping spectrums ever achieved.
 - Maximum photochemical efficiency & blending perfection.
 - Safe maintenance: Top opening capacity for lens adjustment and LEDs substitution, without losing its waterproof protection.
 - Exceptional durability – An IP67 certificated LED BAR made of high quality aluminum alloy, 8mm acrylic top cover and silicon gasket, excelling in performance even in extreme humid environments, salinity, and complete protection against ingress of dust and airborne particles.
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Applications

- SPS/LPS coral coral growth, color and illumination.
- Reef salted water tanks/ Planted freshwater aquariums.
- Designed to enhance beauty of both natural and synthetic compositions.
- Replace T5/T8 lighting technology for aquariums.
- Public venues / Private aquariums.
- Indoors/ opened or closed areas or canopies, such as gallery displays.
- Perfect for coral shops, coral farming, educational facilities, research centers, nurseries, refugium.

Best for:

- Achievement of your desired light spectrum.
- Customization - Create your own light fixture by choosing up to 6 LED Bars.
- Supplemental light coverage.
- Boost of coral color pop, health & growth.
- Boost fluorescent color.
- Boost photosynthesis.
- Perfect for coral spawning; micro/macro-biology and biological clock correction; and stabilization.

OR4 iCon LED Bars Series - LED Configuration for Each Model:

OR4 30 iCon: Featuring 9 LEDs / offering 15 watts of power for each LED.

OR4 60 iCon: Featuring 18 LEDs / offering 30 watts of power for each LED.

OR4 90 iCon: Featuring 24 LEDs / offering 40 watts of power for each LED.

OR4 120 iCon: Featuring 36 LEDs / offering 60 watts of power for each LED.

OR4 150 iCon: Featuring 42 LEDs / offering 75 watts of power for each LED.

OR4 180 iCon: Featuring 48 LEDs / offering 80 watts of power for each LED.

What's in the box



1. OR4 60 iCon light unit
 2. Power cable from light unit to power supply featuring waterproof connectors
 3. Fanless IP65-rated Power Supply with power cords featuring waterproof connectors
 4. Hanging Kit
 5. Mounting Brackets
- * The displayed photograph serves as a reference for the OR4 60, but all models of the OR4 series are equipped with identical components.

Specifications

Color /Materials

Light Unit Body Material: Black acrylic front panel/ Silver Aluminum back cover.

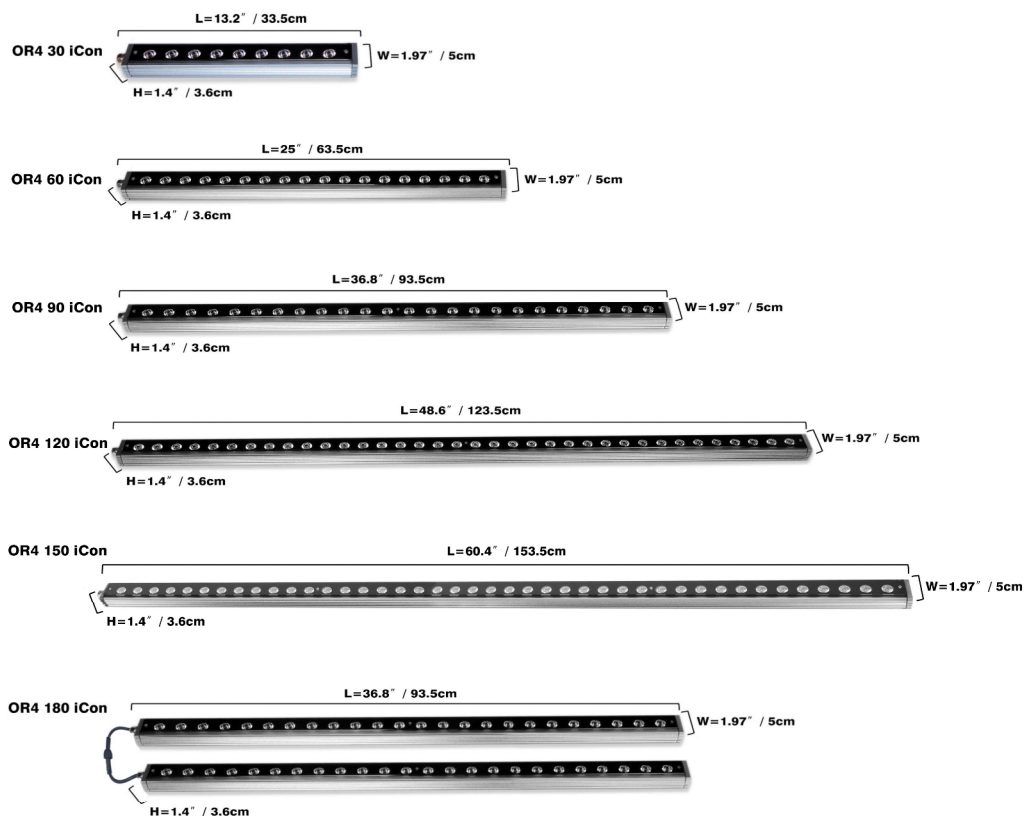
Electrical Information

Model	OR4 30 iCon	OR4 60 iCon	OR4 90 iCon	OR4 120 iCon	OR4 150 iCon	OR4 180 iCon
Power Consumption	15W	30W	40W	60W	75W	80W
Input Voltage	AC 100V-230V	AC 100V-230V	AC 100V-230V	AC 100V-230V	AC 100V-230V	AC 100V-230V
Frequency	50-60Hz	50-60Hz	50-60Hz	50-60Hz	50-60Hz	50-60Hz
Power Factor	95%	95%	95%	95%	95%	95%
Input Voltage/Current	AC 110V/0.2A AC 220V/0.1A	AC 110V/0.28A AC 220V/0.14A	AC 110V/0.37A AC 220V/0.18A	AC 110V/0.56A AC 220V/0.27A	AC 110V/0.64A AC 220V/0.32A	AC 110V/0.73A AC 220V/0.37A
Output Voltage/Current	DC 20-30V/0.5A	DC 40-58V/0.5A	DC 20-40V/1A	DC 40-58V/1A	DC 26-50V/1.5A	DC 24-40V/2A

Cords

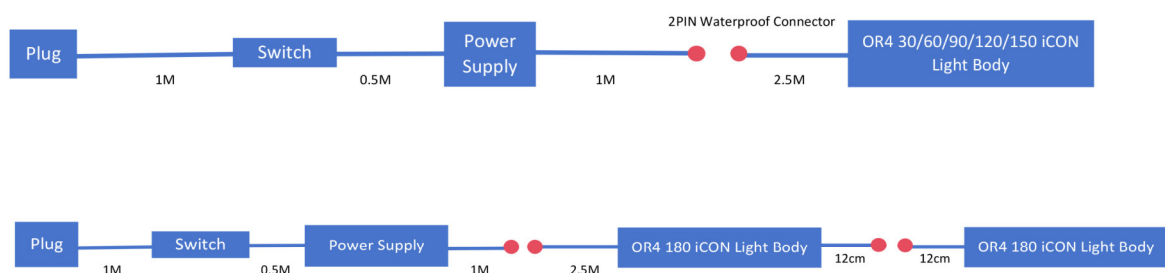
- Power Extension Cord with waterproof connector from light unit to Power Box: total 98.43" (2.5m)
- Power Cord: 59" (1.5m)

OR4 iCON Dimensions Draw



* Note: The Length is included waterproof connector.

OR4 iCON Wires Map



Ratio Maps

OR4 - Reef Day Plus



○ 18000K x12 ● 420/430nm x12
● 450nm x9 ● 470/480nm x9



○ 18000K x10 ● 420/430nm x10
● 450nm x8 ● 470/480nm x8



○ 18000K x7 ● 420/430nm x7
● 450nm x5 ● 470/480nm x5



○ 18000K x5 ● 420/430nm x5
● 450nm x4 ● 470/480nm x4

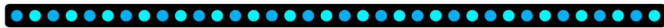


○ 18000K x3 ● 420/430nm x3
● 450nm x2 ● 470/480nm x2

OR4 - Blue Sky



● 460/470nm x21
● 470/480nm x21



● 460/470nm x18
● 470/480nm x18



● 460/470nm x12
● 470/480nm x12



● 460/470nm x9
● 470/480nm x9



● 460/470nm x5
● 470/480nm x4

Note: OR4 180 iCON and OR4 90 iCON share the same ratio map.

Ratio Maps

OR4 - Blue Plus



● 390/400nm x5 ● 400/415nm x5 ● 420/430nm x10
● 450nm x12 ● 460/470nm x4 ● 470/480nm x6



● 390/400nm x4 ● 400/415nm x4 ● 420/430nm x8
● 450nm x11 ● 460/470nm x4 ● 470/480nm x5



● 390/400nm x3 ● 400/415nm x3 ● 420/430nm x6
● 450nm x7 ● 460/470nm x2 ● 470/480nm x3



● 390/400nm x2 ● 400/415nm x2 ● 420/430nm x4
● 450nm x5 ● 460/470nm x2 ● 470/480nm x3



● 390/400nm x1 ● 400/415nm x1 ● 420/430nm x2
● 450nm x3 ● 460/470nm x1 ● 470/480nm x1

OR4 - UV Violet



● 390/400nm x14 ● 400/415nm x14
● 420/430nm x14



● 390/400nm x12 ● 400/415nm x12
● 420/430nm x12



● 390/400nm x8 ● 400/415nm x8
● 420/430nm x8



● 390/400nm x6 ● 400/415nm x6
● 420/430nm x6



● 390/400nm x3 ● 400/415nm x3
● 420/430nm x3

Note: OR4 180 iCON and OR4 90 iCON share the same ratio map.

Ratio Maps

OR4 - Freshwater Planted



10000K x11 740/670nm x5 420/430nm x5
 5000K x11 590nm x5 470/480nm x5



10000K x10 740/670nm x4 420/430nm x4
 5000K x10 590nm x4 470/480nm x4



10000K x6 740/670nm x3 420/430nm x3
 5000K x6 590nm x3 470/480nm x3



10000K x5 740/670nm x2 420/430nm x2
 5000K x5 590nm x2 470/480nm x2



10000K x2 740/670nm x1 420/430nm x1
 5000K x3 590nm x1 470/480nm x1

OR4 - Red Plus



550nm x9 740/670nm x14
 5000K x9 650/620nm x10



550nm x8 740/670nm x12
 5000K x8 650/620nm x8



550nm x5 740/670nm x8
 5000K x5 650/620nm x6



550nm x4 740/670nm x6
 5000K x4 650/620nm x4

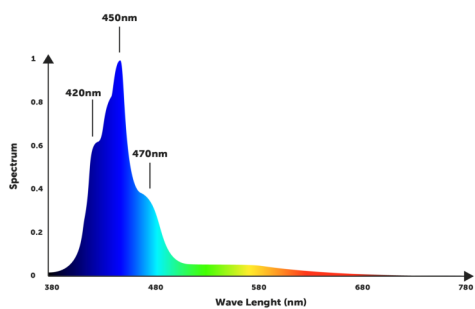


550nm x2 740/670nm x3
 5000K x2 650/620nm x2

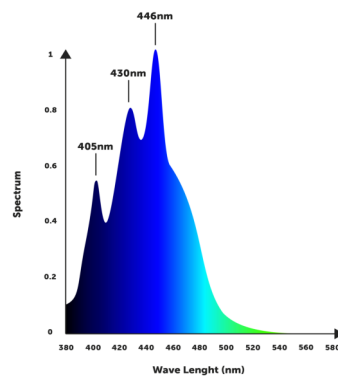
Note: OR4 180 iCON and OR4 90 iCON share the same ratio map.

Spectrum Graph

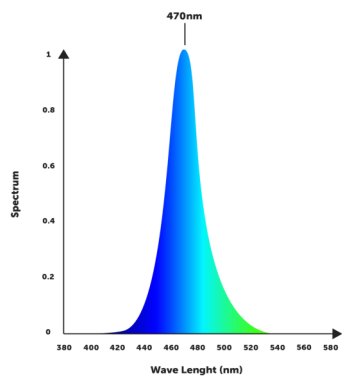
OR4 - Reef Day Plus



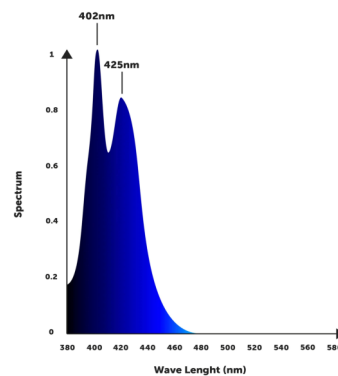
OR4 - Blue Plus



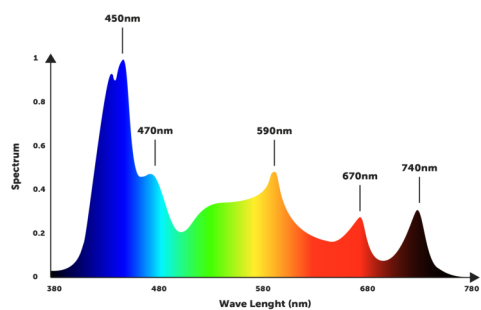
OR4 - Blue Sky



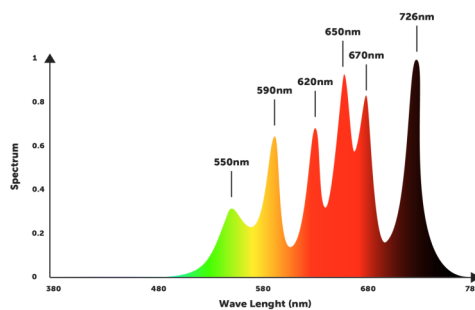
OR4 - UV Violet



OR4 - Freshwater Planted

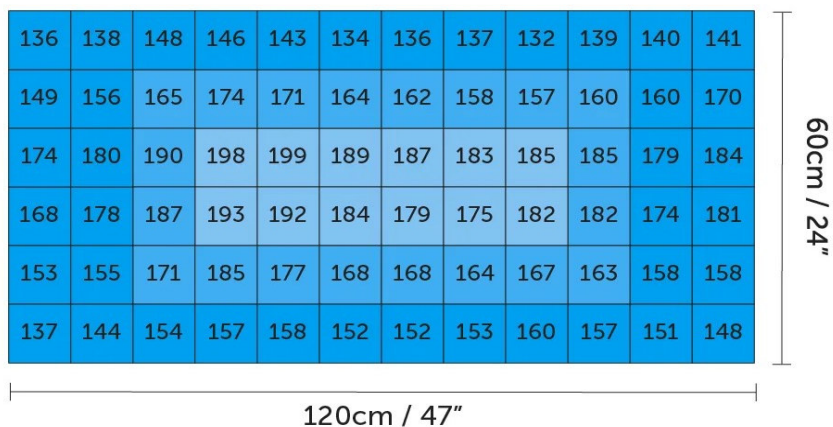


OR4 - Red Plus

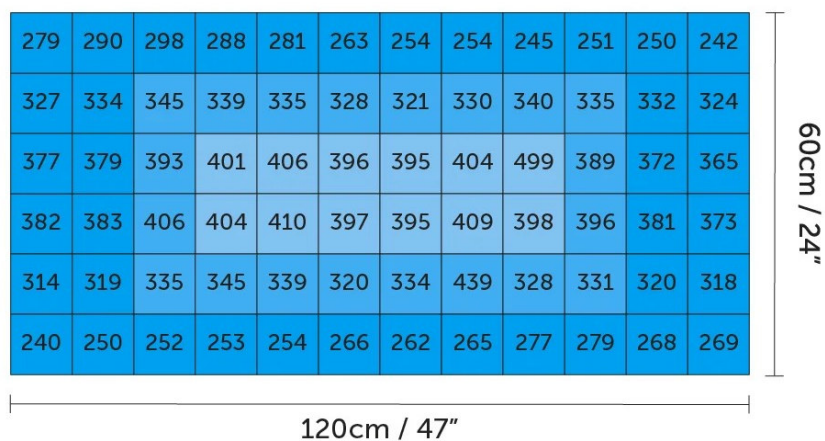


PAR Map

3x OR4 120 Blue Plus - 22cm / 6.6" from the water surface



6x OR4 120 Blue Plus - 22cm / 6.6" from the water surface



FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Information

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.
