

DOS-X™ DISSOLVED OXYGEN SYSTEM



*DOS-II model shown. Oxygen cylinder not included.
Optional oxygen convenience package available as an accessory.*

WHERE IT WORKS

- Water Tank Recirculation / Reservoir Oxygenation
- NFT
- Deep Water Culture

The BioTherm Dissolved Oxygen System™ (DOS) is a highly efficient gas to liquid infusion technology that increases measurable dissolved oxygen (DO) levels in irrigation water. DOS packages are available for flow rates up to 60 gpm- automated* or non-automated.

The DOS is built on a stainless steel frame, making it corrosion-resistant and able to withstand the elements of the growing environment. Easily integrated to existing DO control systems.

**Automation package includes DO Stat Controller and pump relay for accurate monitoring and hands-off/automated dosing.*

ACCESSORIES



◀ OXYGEN CONVENIENCE

BioTherm offers an oxygen convenience package so you don't need to worry about oxygen tanks. BioTherm's OCP pulls ambient air and purifies it into pure oxygen for your DO system.

DO METER ▶

Dissolved oxygen level measuring in the palm of your hand.



FEATURES & BENEFITS

- Plug & play system application
- Enhanced oxygen levels in irrigation water
- Enhanced root growth
- Improved photosynthesis
- Increased plant metabolism
- Prevention of root rot and other pathogens
- Improved nutrient uptake

DOS DISSOLVED OXYGEN SYSTEM

MODELS	DOS-I	DOS-II	DOS-III	DOS-IV
LIQUID FLOW CAPACITY (WATER)				
Flow Rate, GPM	15	30	45	60
Daily Performance Capacity, GPD*	4000	8000	10000	15000
Max. System Water Pressure, PSIG	40			
OPERATING PARAMETERS				
System Temperature Range, °F	40-140			
Max. Solid Allowance, microns	< 100			
OXYGEN FEED				
Recommended O2 Flow, LPM	1-2	3-4	5-6	7-8
Min. O2 Delivery Pressure, PSIG	15			
Max. O2 Delivery Pressure, PSIG	40			
ELECTRICAL REQUIREMENTS				
AC Voltage, VAC	110			
Phase	1			
Frequency, Hz	60			
Pump Size, Hp	0.75		2.0	
Full Load Amps	13.8A		27.5A	
PUMP				
Pump Type	TEFC			
Wetted Parts Materials	Buna-n / 316 SS / Ceramic and Carbon Mechanical Seal			
CONTROL				
Power Switch, Illuminated	On/Off			
Motor Starter	2 pole, 32 FLA 2HP rated, 24VAC Coil			
Dissolved Oxygen (DO) Sensor**	Optical, 0-40 ppm (+/- 1.5 ppm)			
CONNECTIONS				
Inlet (Union), in	1.25	1.25	2	2
Discharge (Union), in	1	1	1.5	1.5
System Gas Fitting for External O ₂	Push-to-Connect Fitting for 3/8in OD Tube			
Regulator Connection Type	CGA 540			
DIMENSIONS AND WEIGHT				
Height, inches	61.5	61.5	61.5	61.5
Width, inches	24	24	35	35
Length, inches	15.6	15.6	15.6	15.6
Weight, lb	126	136	157	167

* Tested at 77F. Performance rates will vary depending on source water, temperature, and elevation.

DOS system ratings are based on Gallons Per Day (GPD) and an average flow rate of the $GPD/24/60 = GPM$. There may be applications where an irrigation event may "draw-down" your tank very quickly and your DOS system could fall behind, even though your daily usage of gallons is within the stated range. To verify the proper selection for your particular application, please contact BioTherm and one of our application engineers will calculate your particular needs and recommend if a higher capacity model is required for those time periods.