

DGS-M™ DISSOLVED OXYGEN SYSTEM



DGS-M model shown. Oxygen cylinder not included.
Optional Oxygen Generation Package (O2 Gen) and DO Stat available as an accessory.



ACCESSORIES



▶ OXYGEN GENERATION

BioTherm offers an oxygen generation package so you don't need to worry about oxygen tanks. BioTherm's O2 Gen 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.



WHERE IT WORKS

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

The BioTherm DGS Dissolved Oxygen System™ (DGS) is a highly efficient gas to liquid infusion technology that increases measurable dissolved oxygen (DO) levels in irrigation water.

The DGS system can be accompanied by BioTherm's Oxygen Generation (O2 Gen) Package or an oxygen tank can be used for o2 supply. DO stat is available as an accessory.

The DGS 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.

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

DGS DISSOLVED GAS SYSTEM

MODEL	DGS-M
LIQUID FLOW CAPACITY (WATER)	
Flow Rate, GPM	20
Daily Performance Capacity, GPD*	4000
Max. System Water Pressure, PSIG	40
OPERATING PARAMETERS	
System Temperature Range, °F	40-140
Max. Solid Allowance, microns	< 100
OXYGEN FEED	
Recommended Gas Flow, LPM	3-4
Min. Gas Delivery Pressure, PSIG	15
Max. Gas Delivery Pressure, PSIG	40
ELECTRICAL REQUIREMENTS	
AC Voltage, VAC	110
Phase	1
Frequency, Hz	60
Pump Size, Hp	1
Full Load Amps	11.2 A
PUMP	
Pump Type	TEFC
Wetted Parts Materials	Buna-n / 316 SS / Ceramic and Carbon Mechanical Seal
CONTROL	
Power Switch IEC Connection	On/Off
Dissolved Oxygen (DO) Sensor**	Optical, 0-40 ppm (+/- 1.5 ppm)
CONNECTIONS	
Inlet (Union), in	1
Discharge (Union), in	1
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	14.5
Width, inches	12.1
Length, inches	18.3
Weight, lb	42

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

DGS 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 DGS 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.