



a xylem brand



**Parameters:**

Dissolved Oxygen (Galvanic; electrochemical)

Temperature

Additional User-Configurable Inputs

**Applications:**

Recirculating Systems

Raceways

Ponds

Sea Cages

Live Haul

Aquariums

Research

Tanks

**YSI 5400**

**Continuous MultiDO Monitoring and Control**

Designed specifically for aquaculture systems, the YSI 5400 Continuous Monitor for dissolved oxygen along with AquaManager® Software can be used to integrate process control, feeding, alarming and data management into one product for a complete facility or can be used to simply monitor one tank. Powerful enough to manage a full-scale farming operation from anywhere in the world yet simple enough for anyone to use.

- MultiDO monitor
- Ethernet TCP/IP or wireless communications - optional
- Event logging records calibrations, high and low conditions, and more
- Conditional feed timer with Feed Smart™ software included
- Networking capability up to 32 instruments per communications port or can be integrated with 5200A multiparameter monitors or 5500 optical DO monitors
- Graphic interface function for quick, reliable system status checks
- Plug-and-play...easy to install, setup and maintain; no need to hire consultants
- Flexible monitoring and control software
- E-mail and SMS alarming

The standard conditional feed timer, **Feed Smart™**, manages food delivery based on user's preset criteria. Manage feed delivery based on user-selectable inputs for the number of daily feedings, daily feed weights, total biomass and feed conversion ratios (FCRs), along with parameter control based on water quality values. Interfaces with most auto feeders.

Optional **AquaManager®** desktop software allows you to view, configure, or setup instruments from the convenience of one central location. Instantly see an overview of your facility, manage parameter set points, and conveniently manage data to make informed operational decisions. Browser-based format makes navigation, setup and maintenance easy and the facility mapping feature provides an immediate overview of all ponds or tanks indicating their current state.



A 5400 deployed pond-side to control paddle wheels

## 5400 Controller Specifications

Dissolved Oxygen (Galvanic)	Range	0 to 500% air saturation; 0 to 60 mg/L
	Resolution	0.1% (0.0-99.9%); 0.01 mg/L (0-10 mg/L); 0.1 mg/L (10-60 mg/L)
	Accuracy	±2% or ±0.2 mg/L whichever is greater (0-200%)(0-20 mg/L), ±6% of reading (200-500%)(20-60 mg/L)
	Response time	95% of reading in 17 seconds for 2.0 mil PE membrane; 95% of reading in 36 seconds for 2.0 mil Teflon® membrane
Temperature	Range	0 to 45 °C (32 to 113 °F)
	Resolution	0.1 °C
	Accuracy	± 0.2 °C
Timers	4 timers - 10 events cascading events start/duration 4 feed timers (feeder not supplied); Feed Smart™ software manages feed delivery, user-selectable inputs for number of daily feedings, daily feed weights, total biomass, FCRs and parameter control	
Communication Ports	RS485 and RS232 standard; Ethernet and wireless optional	
Memory/Logging	Non-volatile; 1000 data, 1250 relay/alarm, 1000 entries/change and 500 GLP records	
Warranty	2-years instrument; 1-year probes and cable	
Inputs	4 DO probe inputs 4 user-configurable inputs for temp (0 to 1.0 VDC, 0 to 5.0 VDC or 4-20 mA) or DO, pH TGP, ORP, photo period, etc. 2 user-configurable inputs, digital (0 to 1.0 VDC, 0 to 5.0 VDC or 4-20 mA)	
Ratings	NEMA 4X, CE, ULC, CUL, ETL, RoHS, IP-65, Made in USA	
Instrument Operating Range	-15 to 70°C (5 to 158 °F) Direct exposure to outside conditions NEMA 4X Enclosure	
Output Relays	8 each 10 amp 115 VAC (5 amp 230 VAC) relays for parameter, control and/or alarm E-mail and/or SMS alarming up to 3 e-mails with Ethernet module or up to 10 e-mails with AquaManager	
Power Requirements	Option 1 12 VDC; mobile live haul or anytime AC power not available Option 2 100-240 VAC; automatically switches to 12 VDC back-up with alarm if primary voltage drops	
Display	Back-lit graphic LCD (320 x 240) with timer, extended temperature range LCD	
Operating System	AquaManager Software: Windows 2000/XP/Vista/Windows 7 operating systems	
Field Upgradable Software	Yes; flash based	
Size	Height: 16.5 cm (6.5 in) Length: 21.6 cm (8.5 in) Depth: 12.1 cm (4.75 in)	

## 5400 Ordering Information (controllers, cables, accessories separately)

5400-DC	MultiDO monitor, 12 VDC, includes wall mount, no power supply
5400-AC	MultiDO monitor, 100-240 VAC, includes wall mount and 115 VAC
605952-X	4- 10- 20- 30- 50- or 60-m cable with galvanic DO/temp (special order up to 100-m)
605953-X	4- 10- 20- 30- or 50-m cable with galvanic DO (special order up to 100-m)
5405-5	DO membrane kit, 2 mil Teflon, 5 membranes, electrolyte
5405-25	DO membrane kit, 2 mil Teflon, 25 membranes, electrolyte
5406	1 pint (473 mL), DO electrolyte
6505	Weather shield
6509	Rail mount kit
6510	Panel mount kit
5209A	AquaManager desktop software
5578	12 V power supply, 230 VAC for 5400-AC
5579	12 V power supply, 115 VAC for 5400-DC

### YSI

1725 Brannum Lane, Yellow Springs, OH 45387  
Tel +1 937.767.7241 800.897.4151 (US)  
environmental@ysi.com  
YSI.com

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Printed in the USA. W46-02 May, 2012



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