

AQ5 Sensor Output

Sensor Output

\$ANB,CRC,TIMESTAMP,PH,TEMP,SALINITY,CONDUCTIVITY,TRANSDUCER HEALTH,SENSOR DIAGNOSTICS,R,R,R,CR,LF

Parameter	Description
\$ANB	ANB Sensors messsage identifier
CRC	CRC-16/MODBUS 4 digit hex number
TIMESTAMP	Sample timestamp yyyy:mm:dd:hh:mm:ss
PH	Sample pH value (pH) (3 decimal place)
ТЕМР	Sample temperature (°C) (2 decimal place)
SALINITY	COMING SOON - currently 0.0 Sample salinity (ppm) (1 decimal place)
CONDUCTIVITY	COMING SOON - currently 0.0 Sample conductivity (ppm) (1 decimal place)
TRANSDUCER HEALTH	COMING SOON - currently 0 Transducer health status code (0, 1, 2 or 3) where: 0=transducer performing well 1=transducer will require abrasion soon 2=transducer needs abrasion 3=transducer needs replacing

Parameter	Description
SENSOR DIAGNOSTICS	COMING SOON - currently 0 Sensor health status code (0, 1, 2 or 3) where: 0=sensor performing well 1=clock battery error 2=SD card error 3=Unrecoverable error
RESERVED	COMING SOON - currently 0
RESERVED	COMING SOON - currently 0
RESERVED	COMING SOON - currently 0

All output as ASCII

Displayed pH value

The number displayed for a pH reading can contain 3 types of data:

Output	Cause	Action
nn.nnn	Sensor measuring pH	No action required
	COMING SOON	
тт.ттт	There is no transducer on the sensor	Install transducer
RR.RRR	The reference element has failed during deployment	Contact ANB Sensors
\$\$.\$\$\$	The system has not been able to determine a valid pH response yet	Abrade transducer and restart sensor

Transducer Health - COMING SOON

Health number	Explanation	Action
0	Healthy Transducer	None
1	Transducer will require abrasion soon	Depending on scanning profile and access. ie if daily access, wait for health number to go to 2 before abrading, if not accessing sensor for weeks/months, abrade now
2	Transducer needs abrasion	Abrade Transducer
3	Transducer needs replacing	Replace Transducer

Sensor Diagnostics - COMING SOON

Diagnostic number	Explanation	Action
0	Healthy Sensor	None
1	Clock Battery Error	If there is no external power to the sensor the real time clock will not hold the programmed time - If the sensor is powered, the time set and data streamed, this failure is not an issue - If the sensor is in automonous mode the clock will fail if disconnected from the power when it was programmed and placed on an external battery -Users can record when the sensor was first switched on (where the sensor's time will be set to 0) and calculate the times externally, or, if this is not viable, contact support@anbsensors.com
2	SD Card Error	A failing in the internal data save has occurred and no new data can be saved to the internal memory - If the sensor is connected to an external

Diagnostic number	Explanation	Action
		communications system the sensor will continue to stream data, however no data will be saved in autonomous mode - Please contact support@anbsensors.com
3	Unrecoverable Error	Contact support@anbsensors.com