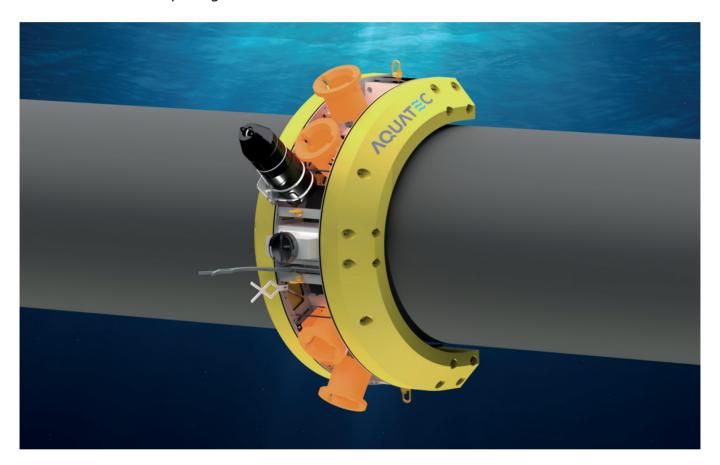


## Retrofit Subsea Strain Monitoring System

## KINEKtron®

Aquatec's KINEK*tron*<sup>®</sup> is a fully featured retrofit subsea strain monitoring system capable of measuring brace longitudinal strain on a variety of tubular structural members. The system combines precise 3-quadrant micro-strain measurements with storage and subsea communication capabilities in a robust ROV-installable package.



## **Key Features**

- Magnetic attachment
- Three sets of two strain gauges covering 3 quadrants of the brace
- Half-circle shape for enhanced installation
- Subsea ROV switch for hydraulic deployment
- For pipe sizes of Ø 1.2 m, Ø 1.4 m, Ø 1.6 m, Ø 1.8 m and scalable to others
- 3.3 Hz continuous data logging
- 3-year battery life
- Brace pipe engagement indicators

- Magnetic force test sacrificial fishtail handle
- Buoyancy modules
- Instrument pod rated to 150m and protective shroud at installation
- Data acquisition, storage and comms electronics
- Wetmate connector for surface interaction
- ROV handle
- Pressure sensor, accelerometer, acoustic modem and optical modem

## **Specifications**

Clamp					
Pipe diameter	1,200 mm (Scalable to other sizes)				
Weight in air (Kg)	320 kg				
Weight in water (Kg)	20 Kg				
Width	875 mm				
Height	1,675 mm				
Туре	Half circle				
Mounting technique	Magnetic mount				
Magnetic force	1,320 kg				
Instrument Pod					
Depth rating	150 m				
Logging rate	3.3 Hz				
Battery life	3 years continuous operation				
Battery type	Lithium pack certified for transport				
Memory capacity	4.6 GB				
Sensors					
Number of strain gauges	6				
Position of strain gauges	3 quadrants				
Strain gauge range	± 2000 με				
Resolution	Better than 10 με				
Accelerometer	Range (g)		Resolution (mg/count)		
	± 2		0.244		
	16 bit data				
Pressure sensor	Range	Range		Accuracy	
	10 bar		0.02% FS		
Communications					
USB	Flat USB connection				
Acoustic communication	Status acoustic modem	Upc	date	Range	
	Clamp ID, battery, health status, data, strain status data	15 r	min	Approx. 200 m	
Optical communication	AQUA <i>modem</i> ® Op2c			Speed	
	Capability to download a full data s	nload a full data set with ROV		1,000 kbps	

