

# WHEN RELIABILITY COUNTS

SENSORS FOR:

WATER AND WASTE WATER • PULP AND PAPER



CERLIC IS A MEMBER OF THE ELETTA GROUP

*Our objective at Cerlic is to contribute globally to minimize pollution to lakes, rivers and seas by developing, manufacturing and marketing measuring and control instruments to make industrial and municipal processes more efficient.*



**Central unit, BB2, for all X style sensors.  
All sensors are factory calibrated, push the enter button twice and off you go.**

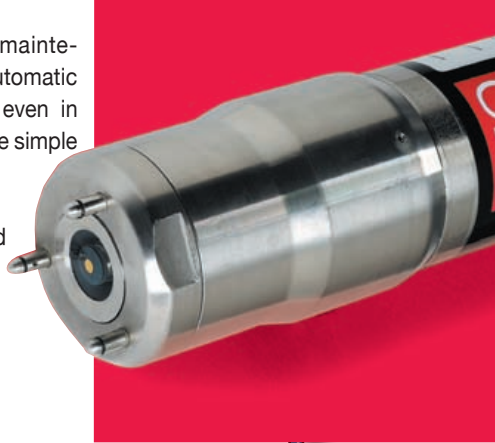
BB2 is easy to use with intuitive software. All settings are done by the three-button panel. The central unit, BB2, will support our rugged X style sensors for measuring fiber consistency and suspended solids in the Pulp & Paper Industry or MLSS, DO, pH, ORP or flow in Water and Waste Water Treatment Plants and Industrial Processes. Digital communication between sensors and BB2, central unit, ensures reliable and safe connection.

BB2 takes care of measuring values, monitoring, control, diagnostics and settings. A built-in heater guarantees function in ambient temperature range of  $-20...+50^{\circ}\text{C}$  ( $-4...122\text{ F}$ ). BB2 generates up to four 4-20 mA isolated output signals and can be up graded to enable bus communication with central control systems.

# SENSORS FOR WATER AND WASTE WATER

## THE O2X DISSOLVED OXYGEN SENSOR

combines precise measurement and low maintenance. Built-in flush nozzles allow for automatic cleaning and ensure accurate measuring even in aggressive liquids. Calibration procedures are simple and normally performed only twice a year. The O2X can be used to monitor dissolved oxygen in SBR systems, aeration basins and final effluent. As an option a protective plate is available suitable for applications using biofilm carriers.



## THE ITX SUSPENDED SOLIDS SENSOR

enables continuous measurement of suspended solids in aeration basins, return activated sludge lines and influent. Built-in flush nozzles allow for automatic cleaning to provide repeatable and accurate measurements. The ITX is essential for control of sludge retention time (SRT) and dosing of flocculation chemicals.



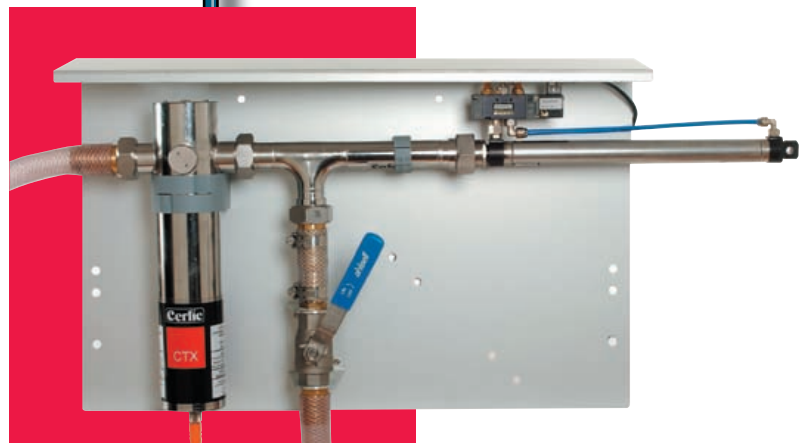
## IN-LINE SUSPENDED SOLIDS SENSOR ITXIL

used for continuous measurement of suspended solids in RAS, WAS, MLSS and Sand Filter Backwash monitoring in both industrial and municipal plants. An automatic cleaning system with built-in flushing nozzles ensures accurate measurements with little maintenance. Measurement range up to 5% TS. Pressure rating PN 6 with cleaning and PN 10 without cleaning.



## THE CTX-IL SUSPENDED SOLIDS SENSOR

provides continuous measurement of low suspended solids. The by-pass transmitter is used in municipal and Industrial Waste Water Treatment Plants. An automatic brush cleaning device is optional. The entire CTX assembly can be mounted on a single aluminum plate. Measurement range from 0-10 up to 20,000 mg/l (ppm).



**CBX – AUTOMATIC SLUDGE BLANKET METER**

Cerlic CBX detects the blanket by means of a near infrared (NIR) suspended solids sensor, which travels through fluff layers until it finds the preset blanket solids concentration. Sensor is lowered on pulse from rake limit switch. Field adjustable concentration setting. Automatic water flushing system of cable and sensor after each cycle.

**APPLICATIONS:** CBX is a sludge blanket meter for measurement of blanket depth in clarifiers and thickeners in WWTP and WTP.



**THE FLX OPEN CHANNEL FLOW SENSOR**

Is used to measure flow as a function of liquid depth in open channels. FLX is intended for applications in Waste Water Treatment Plants, industrial processes, sewers, etc.



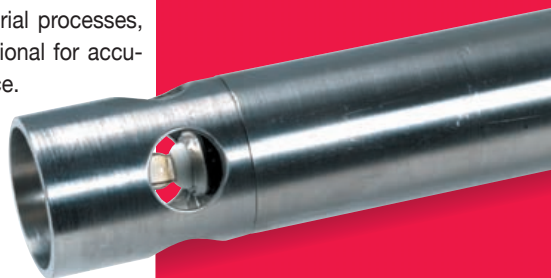
**THE ReX ORP SENSOR**

enables continuous measurement of Redox equilibrium in Water and Waste Water Treatment Plants, coating and other industrial processes. Automatic flushing is optional for accurate measurement and low maintenance.



**THE pHX pH SENSOR**

enables continuous measurements of pH in Water and Waste Water Treatment Plants, industrial processes, sewers, etc. Automatic flushing is optional for accurate measurement and low maintenance.



HIGH AVAILABILITY – MINIMAL MAINTENANCE



# OPTICAL CONSISTENCY MEASUREMENT

## **THE CTX20/25 AND CTX20/50 FLOW-THROUGH SENSORS**

enable continuous measurement of consistency in a host of applications, such as around pressurized screens and after pulpers, as well as for monitoring filters, suspended solids in waste water, and white and green liquor. They are easy to install and have a measurement range of 0 – 5%. The sensors can be connected via either a 25 or 50 mm welded end. Inspection and calibration are simple and generally required only once or twice a year.



## **THE CTXIL-HP IN-LINE SENSOR**

enables continuous measurement of consistency at high pressures – up to 16 bar. The CTXIL-HP is particularly suited to applications around MC pumps and other critical locations. The sensor is mounted directly in the process line via a ball valve, making it available for inspection and service during runtime. The sensor has a PN 16 pressure rating and a 0 –16% measurement range.



## **THE CTXIL20/70 IN-LINE SENSOR**

employs the same measurement technology as the CTXIL-HP but is designed to replace mechanical blade sensors where high accuracy and easy maintenance are a must. The CTXIL20/70 is mounted via a 70 mm clamp fitting. For use in applications with extreme vibration positions, a special designed sensor with separate electronics is recommended. The sensor has a PN 16 pressure rating.



## **THE CTPX03/25 TOTAL CONSISTENCY SENSOR**

uses polarized NIR light, enabling it to be positioned where there are variations in ash content, such as prior to a head box and in white water (retention). The sensor has a PN 25 pressure rating and measurement range of 0 – 2% or 0 – 20,000 mg/l (ppm).

## **THE CTXA03/25 RETENTION SENSOR**

is a further development of the CTPX technology. Polarized NIR light in combination with advanced mathematic calculations enables the CTXA to give both consistency of fiber as well as ash in the range of 0 - 1,5%.



*Slide rail assembly for easy installation and servicing. The rail has field adjustable stop. It's easy to install and to inspect sensors for cleaning and calibration*



*The flexible, spring-loaded mounting bracket is designed to withstand turbulent conditions. The fiberglass telescopic rod is extendable to 4 meters (13.5 feet) and can be removed easily for inspection.*



*The automatic flushing device has no moving parts and ensures minimal maintenance and enhanced reliability. The flush nozzles use water or compressed air.*

