RTC-C/N/P Software Module

Product #:   **LXZ514**

OBSOLETE ITEM
This item is no longer available.

How do you maintain ideal nutrient levels in ever-changing conditions?

Biological treatment is sensitive to imbalances in nitrogen and phosphorus, a condition that can limit the effectiveness of COD/BOD removal and result in permit violations for a number of related parameters. Imbalances also waste money by overdosing urea and phosphoric acid, by incurring effluent discharge costs, and by overusing aeration.

When nutrients are precisely dosed according to TOC load, COD/BOD removal can be efficient and cost-effective. You can ensure compliance on COD/BOD, ammonia and phosphate while saving money. Hach's RTC-C/N/P Software (formerly RTC-DOS) combines feed forward control and online TOC measurement with feedback control and ammonium and orthophosphate measurements to manage ideal biological efficiency in your wastewater treatment process. Although RTC-C/N/P is a standardized solution, it has built-in flexibility. Define your own nutrient ratios for specific process waste streams, or add an option that supplements the feed forward algorithm with N and/or P measurements that automatically account for variations in background nutrient and TOC values. Add an RTC-SRT module to prevent the growth of nitrifiers, further enhancing COD removal. And in the event that input signals for TOC, NH_4-N, PO_4-P, NO_3-N or flow rate become unavailable, the system will automatically switch to a fallback strategy to protect compliance.

Claros Process Management **solutions for BOD/COD removal** like RTC-C/N/P are designed to make the most of your plant's real-world conditions by transforming every uncertainty into an opportunity for measurement, responsive action, and savings.

Improved compliance on COD/BOD, NH_4-N, total N and PO_4-P
Responsive, load-based dosing ensures that C/N/P is at an optimal ratio to ensure compliance with your effluent limits.

Better sludge
Settlement characteristics improve by avoiding high aeration rates in the absence of NH_4-N/COD.

Predictive diagnostics
Prognosys keeps your system healthy by alerting staff to upcoming maintenance and system faults.

Cost savings
Dosing based on influent TOC eliminates overspending on P- and N-sources, while also reducing effluent discharge costs and eliminating the use of excess aeration energy.

Increased visibility
Understand your system's current performance with a glance at the dashboard, or delve into the factors that affect your nutrient dosing process by generating a historical report.

Specifications

Application:	Nutrient dosing
Industry:	Wastewater

Input Parameter:	TOC_{In}, NH_4-N, PO_4-P, NO_3-N
Model:	RTC-C/N/P
Number of channels:	1 or 2
Output:	$Q_{N\text{-component}}$, $Q_{P\text{-component}}$
Parameter:	TOC, COD
Process:	Nutrient dosing control
Prognosys:	Yes
Solution Type:	Software