
EMOS® SINGLE CELL TEMPERATURE EVALUATOR

Monitor and Control Individual Cell Temperatures

FEATURES:

- Alarms: if temperature is outside the defined range (either too hot or too cold)
- Information provided to minimize temperature difference between the coldest and hottest cells

BENEFITS:

- Extended membrane lifetime
 - Avoid invalidating membrane warranty
 - Increased current efficiency
 - Lower power consumption
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Overview

The EMOS® Single Cell Temperature Evaluator, as an extension of the EMOS® SIL2 Safety System, monitors the temperature of the individual electrolyzer cells. This data can be used to adjust the temperature or the flow rate of the brine passing through the electrolyser.

Using a cell's heat balance, EMOS® Single Cell Temperature Evaluator calculates the temperature at the membrane "hot spot" in the electrolytic cell and converts this value into the virtual catholyte outlet temperatures.

The EMOS® Single Cell Temperature Evaluator calculation results are displayed as a property on the main EMOS® Monitoring screen for added convenience.

With the use of the EMOS® Single Cell Temperature Evaluator alarms can be set for individual cells; if desired each membrane type can have its own defined alarm set-point which can aid in the utilization of membranes as directed by each manufacturer for extended lifetime and warranty validity.



EMOS® Single Cell Temperature Evaluator

System Requirements

System Requirements	
Operating System:	Windows 7 pro 32-bit/64-bit/ Windows Server 2008 Windows 8.1 pro 32-bit/64 bit/ Windows Server 2012
CPU:	Xeon processor (minimum)
RAM:	16 GB (minimum)
Hard Disk Space:	(2) 500GB Hard Drives mounted in RAID-1

Additional Requirements	
	<u>OPC Link with Plant DCS:</u> - Flow Catholyte Inlet - Flow Brine Inlet - Temperature Catholyte Inlet - Temperature Catholyte Outlet - Temperature Brine Inlet
Network:	

Required Products

Part Number	Description
SWSTD	EMOS® Safety Software Package

Ordering Information

Part Number	Description
SWTEM	EMOS® Single Cell Temperature Evaluator

Additional Information

EMOS® Single Cell Temperature Evaluator is part of R2's Electrolyser Maintenance, Optimization and Safety System. Contact us for more information.