

# LBWS-100 (Alkaline Electrolysis Stack Test Station)



<b>Stack Connections</b>	2-terminal (V+, V-)
<b>Stack Potentiostat:</b>	
Full Scale Current Ranges	40A
Current Resolution:	0.1% of range
Voltage Measurement Resolution	10 mV
Sense Lead Input Resistance	1.0 GΩ
Modes of Operation	Constant, Scan, Step-Stair; V and I
<b>Power Supply:</b>	
Maximum Current	40 A
Voltage Range	0 - 30 V
Power	Up to 1.2kW
<b>Water &amp; Electrolyte Handling:</b>	
Flow Path	All 316 SS
Feed Water Reservoir	1 L, 316 SS, auto-water fill,
Circulation Pump(electrolyte)	200 – 2500 mL/min, software controlled
Feed Water Temperature Range	Ambient to 95 °C
Ion exchanger / Deionizer	In-line water recycling loop
Stack Temperature Range	Ambient to 120 °C
Purge Gas (N2)	PC-controlled MFC on Negative; Manual on Positive
Liquid/Gas Separator/Dehumidifiers	2 (Negative, Positive), condensers & collection tanks
<b>Data Acquisition:</b>	
Product Mass Flow Meters	4 Temperature + 6 Analog (e.g., 0-5 V, 4-20 mA)
In-Line Gas Purity Sensors	2 (H <sub>2</sub> , O <sub>2</sub> ) H <sub>2</sub> Transmitter for monitoring of H <sub>2</sub> in Product O <sub>2</sub> O <sub>2</sub> Transmitter for monitoring of O <sub>2</sub> in Product H <sub>2</sub>
Pressure sensor	0~10barg 4~20mA
<b>Physical and Environment:</b>	
Operating Temperature	5-35 °C
Power Source	220-240 VAC, 50/60 Hz
Size (excluding tubing connections)	497 mm x 725 mm x 751 mm
Weight	60 kg