## **Yangtze FC-MEA Operation Instructions**

## **ACTIVATION PROTOCOL**

- 1. Set voltage: 0.2V; Cell Temp: 70°C Anode: H<sub>2</sub>, dew point 50~70°C, 1.2 stoic, non-pressurized Cathode: air, dew point 50~70°C, 3.0 stoic, non-pressurized
- 2. Set 0.2V for 30mins, then run 30 cycles: 0.2V,  $60secs \rightarrow OCV$ , 30secs as 1 cycle.
- 3. Finish the activation.

## **PRECAUTIONS**

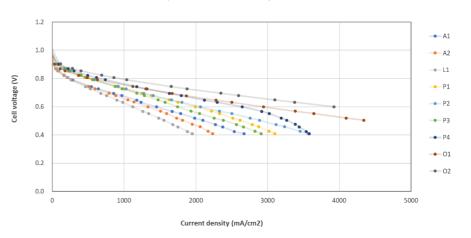
- 1. Degree of compression of GDLs is the key to the performance of MEAs. Please make sure that the GDL is compressed down to about 70%-75% of its original thickness when assembling your cells. The thickness of our standard GDL is 215um (JNTG 21-B1), thus we recommend employing gasket of 150  $\mu$  m thick. For customers who purchase our 3-layer MEA, please contact your GDL suppliers for the degree of compression of their GDLs.
- 2. Please confirm the assembling parameters and test conditions of your fuel cell. Please contact us if you cannot obtain the normal performance as shown in the plots below.

If you need any technical support please email to: sales@fc-mea.com.

## IN-HOUSE TECHNICAL DATA

\* You may also find the data on http://www.fc-mea.com/performance.html

Polarization curves of FC-MEA-T at various operation conditions (MEA Lot: 0000619011)



No.	Code	Cell Temp (°C)	Anode	Cathode
1	A1	70	H <sub>2</sub> , 100%RH, 1.2 stoic, ambient pressure	air, 100%RH, 2.4 stoic, ambient pressure
2	A2	80	H <sub>2</sub> , 100%RH, 1.3 stoic, ambient pressure	air, 100%RH, 2.0 stoic, ambient pressure
3	L1	55	H <sub>2</sub> , dry, 1.2 stoic, ambient pressure	air, dry, 2.0 stoic, ambient pressure
4	P1	80	H <sub>2</sub> , 33%RH(55°C), 1.3 stoic, 50kPa (7.25 psi)	air, 33%RH(55°C), 2.0 stoic, 50kPa (7.25 psi)
5	P2	75	H <sub>2</sub> , 60%RH(63°C), 1.5 stoic, 70-100kPa (10.2 psi~)	air, 60%RH(63°C), 2.5 stoic, 70-100kPa (10.2 psi~)
6	Р3	70	H <sub>2</sub> , 60%RH(58°C), 1.2 stoic, 80kPa (11.6 psi)	air, 60%RH(58°C), 2.0 stoic, 70kPa (10.2 psi)
7	P4	90	H <sub>2</sub> , 85%RH(84°C), 2.0 stoic, 150 kPa (=21.8 psi)	air, 85%RH(84°C), 2.5 stoic, 150 kPA (=21.8 psi)
8	01	70	H <sub>2</sub> , 100%RH, 1.2 stoic, ambient pressure	O <sub>2</sub> , 100%RH, 1.2 stoic, ambient pressure
9	02	70	H <sub>2</sub> , 100%RH, 1.2 stoic, 5 psi	O <sub>2</sub> , 100%RH, 1.2 stoic, 5 psi

