

Model Number

FCTS: Fuel Cell Station

S F A B - C D E						
SF	A	B	-	C	D	E
Scitech Fuel-cell	Test Range	Case Type		Fuel Cell Type	CVM	Option
	100 300 600 1k 7k 10k 100k 200k	U: University* L: Laboratory S: Standing		PE: PEMFC SO: SOFC PA: PAFC DM: DMFC	C + Channel Number	AC: AC Impedance H + HFR Channel Number HM: HFR Meter

*The University model (Bench Top) is only available in the SF100U-PE

Ex) SF7KS – PEC10HFR10

WETS: Water Electrolyzer Test Station

S E A B - C D E						
SE	A	B	-	C	D	E
Scitech Electrolyzer	Test Range	Case Type		Electrolyzer Type	CVM	Option
	100 500 1k 3k 5k	U: University* L: Laboratory S: Standing		PE: PEM AL: Alkaline AE: AEM SO: SOEC	C + Channel Number	AC: AC Impedance H + HFR Channel Number HM: HFR Meter

*The University model (Bench Top) is only available in the SE100U-PE

Ex) SE100U - PEC0AC

- General Specification -

Fuel Cell Test Station (FCTS) - PEMFC



SF[Range] - PE		100	300	600	1K	2K	3K	5K	7K
Test Range		~100W	~300W	~600W	~1kW	~2kW	~3kW	~5kW	~7kW
Gas Flow Control (slpm)	Anode Flow Range	1	3	6	20	40	60	100	130
	Cathode Flow Range	5	15	30	70	140	210	350	450

SF[Range] - PE		10K	20K	25K	30K	50K	100K	150K	200K
Test Range		~10K	~20K	~25K	~30K	~50K	~100K	~150K	~200K
Gas Flow Control (slpm)	Anode Flow Range	200	400	500	600	1000	2000	3000	4000
	Cathode Flow Range	700	1400	1800	2100	3500	7000	11000	15000

Common Specifications		
Gas Flow Control	N2 Purge	Auto N2 Purge (Anode, Cathode)
	MFC Control Range	Turndown 100:1
	Additional MFC & Gas	Gas Mixing, Multi Gas, Multi Range Control Available
Humidification	Humidifier	Gas Temperature Control: RT~95°C,
		Dewpoint Control: RT~95°C, ±1°C
		Wet & Dry (Bypass) Auto Control
	Line Heater	Flexible line heating, Direct gas temperature control
Exhausted gas cooling		Exhausted gas cooling and Trap (Condensation Water Trap & Gas Split)
Cell Heating & Cooling	Air Cooling	Cell Heating & Air Cooling
	Water Cooling	Water Circulation System (Heating & Cooling Control)
Back Pressure Control		Auto Back Pressure Control, max 3.5bar, ±2kpa control stability
Cell Voltage Monitoring		up to 1000channels, ±5V/Ch
AC-Impedance (Optional)		Single Cell AC-Impedance or Multi Channel HFR measurement, 10mHz~10KHz

- General Specification -

Water Electrolyzer Test Station (WETS) - PEMEC



SE[Range] - PE		300	500	1K	3K	5K	10K	30K	50K
Test Range		~300W	~500W	~1kW	~3W	~5kW	~10kW	~30Kw	50Kw
Gas Flow Measure (slpm)	Hydrogen Flow	1	2	5	15	25	50	150	250
	Oxygen Flow	0.5	1	2.5	7.5	12	25	75	125

SE[Range] - PE		100K							
Test Range		100kW							
Gas Flow Measure (slpm)	Hydrogen Flow	500							
	Oxygen Flow	250							

Common Specifications		
MFC Range	Turndown 100:1	
N2 Purge	Auto N2 Purge (Anode, Cathode)	
Electrolyte Circulation	Liquid Temperature Control: RT~95°C,	
	Liquid Level Control & Alarm	
	Liquid & Gas Separation	
	Liquid Flow Control (Pump & Flow Meter)	
Gas Colling	Gas cooling and Trap (Condensation liquid & gas separation)	
Dryer, Gas filter	Dryer (Moisture Absorb Filter) & Dewpoint Monitoring, or other type Gas Filter	
Concentration Detection	H2 in O2	0-5%, 10% Vol
	O2 in O2	0-5%, 10% Vol
Back Pressure Control	Auto Back Pressure Control, 10bar, 30bar ±2kpa control stability	
Cell Voltage Monitoring	Nominated Channel, ±5V/Ch	
AC-Impedance (Optional)	Single Cell AC-Impedance, HFR, Multi-Channel HFR measurement, 10mHz~10KHz	