

- **Battery Test**
- **Fuel Cell Test**
- **Pulse charge/discharge; option**
- **USB control as option**
- **Universal Graphic function**
- **And more & more .....**

**Feature**

- ⌘ **Potentiostat/galvanostat circuit**
  - No switching time (charging to discharging, discharging to charging)
  - Analog feedback control to keep constant voltage & current
  - Capability of electrochemical experiments by controlling voltage versus reference electrode for positive voltage polarity only.(For +/- voltage range application, choose WMPG series multichannel potentiostat/Galvanostat
  
- ⌘ **High precision**
  - 16bit(0.0015% full scale) ADC, DAC
  - 3 current ranges (automatic/manual selection)
  - MOSFET type linear power supply circuit.
  - Shield cell cable to prevent EMI noise
  
- ⌘ **Safety**
  - Unique "Fail check" function: Automatic stop when measured value is different from control value by battery failure or wrong cell connection etc. => To protect system and cell.  
E.g. Control value: 1Amp Measured value: 500mA then automatic stop the channel
  - System safety parameter: If the measured value is over system specification, Automatic stop the running channel
  - User defined safety condition setting: User can input safety level following test cell's chemistry.
  - Automatic cell connection check: Before experiment, if the cell voltage value is near 0Volt, program gives the warning message for the operator to check the cell connection.
  - If operator did press stop function button by mistake, confirmation message box appears.
  - To prevent over current, poly-switch is located in each channel
  - Watchdog function: Stop "running channel(s)" on communication Failure.
  - While any channel is running, operator could not close the server program
  - If main program was down by unstable operating system, independent server program keeps the experiment (control & data acquisition) without dead time.

- ⌘ **Maintenance & System expansion**
  - Plug-In type channels or slave style
  - Power supply per 8channel(WBCS300S/M)
  - Easy expansion by adding plug in channel or by adding 8ch substation
  - Capability of configuring each channel by different voltage and/or current specifications
  - Each channel has Poly switch instead of fuse.

**Option**

- ⌘ **Auxiliary voltage & Temperature measurement**
  - User can assign any temperature input or auxiliary voltage input to single or multiple channel(s) data set by his/her demand.
  - Customized auxiliary voltage range and temperature range is available.
  
- ⌘ **Current pulse Capability (GSM/CDMA application):**
  - Bi-polar current pulse available
  - Max. 10 stages.
  
- ⌘ **Battery jigs**
  - Universal Jig
  - Lithium polymer battery Jig
  - Front Panel Jig (For type "B" only)



Front Panel type "B"

**System configuration**

Max. Channel number: 64ch/PC; 16ch/PC (pulse mode)

1) Standard type

- Max. Power: 50Watt
- Max. Current range: +/-5A f.s @ 5V
- Min. current range: +/-10uA f.s
- Max. Voltage range: +40V @500mA



Type B



Standard Type

2) Low current type

- Max. Current range: +/-5mA f.s
- Min. current range: +/-100nA f.s
- Max. Voltage range: +/-10V



3) Medium Power type

- Max. Power: 400Watt
- 8channel System:WBCS3000M2(Max200Watt)
- 4channel Slave
- 2channel Slave(Max 400Watt)



Dual channel Slave



16channel system

WBCS3000M2(Max200Watt per channel)

4) High Power type

- Slave Style
- Max Power: 4KWatt
- Max. Current range: +/-200A
- Max. Voltage range: +/-40V
- CCU or Substation is needed.



8 channel CCU controller



⌘ **System configuration example**

1) Standard type mixing

- 8channel system: 10V, 1Amp 3ch + 5V, 2A 1ch, 7V, 100mA 4ch
- Standard Substation + standard PIG 8set

2) Standard type & Low current type mixing

- 8channel system: 5V 1Amp 5ch, 10V, 1mA 3ch
- Standard Substation + standard PIG 5set + Low current PIG 3set

3) Standard type, Medium Power type and High power type mixing

- 8channel system: 5V 1Amp 4ch, 10V, 5A 2ch, 20V, 10A 2ch
- Standard Substation + standard PIG 4set + Extension card 4ea + High Slave 2set + dual Slave 1set



4) High Power type & Medium Power type mixing

- 8channel system:  
20V 10Amp 4ch, 10V, 20A 2ch, 5V, 10A 2ch
- CCU controller + High Slave 6set + dual Slave 1set