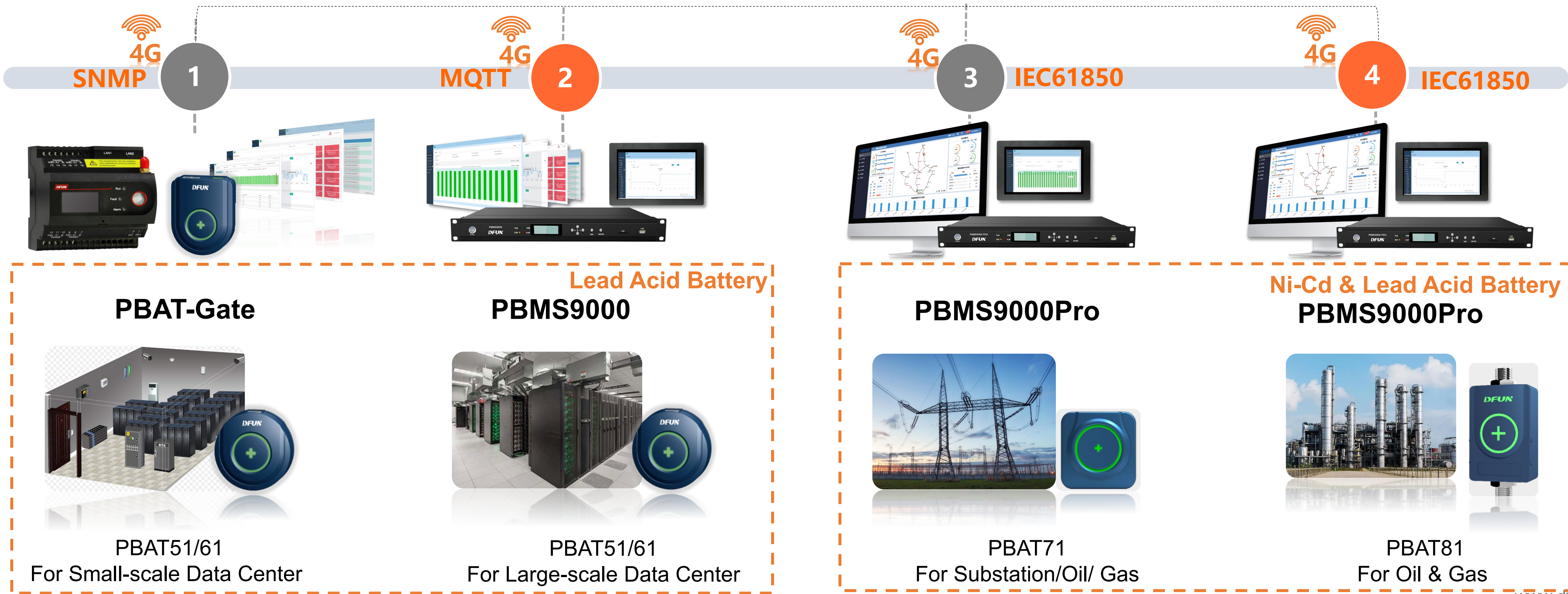


Battery Monitoring System



How to Select the Solution ?

Item	PBAT-Gate + PBAT61	PBMS9000 + PBAT61	PBMS9000Pro + PBAT71	PBMS9000Pro + PBAT81
Photos				
Build-in Web	√	√	√	√
Measure Battery Type	Lead Acid Battery & Lead Carbon Battery	Lead Acid Battery & Lead Carbon Battery Multi-pole battery	Lead Acid & Ni-Cad Battery Multi-pole battery	Lead Acid & Ni-Cad Battery Multi-pole battery
Measure Battery Voltage	For PBAT51: 02V / 12V For PBAT61: 02V / 04V / 06V / 12V	For PBAT51: 02V / 12V For PBAT61: 02V / 04V / 06V / 12V	02V / 12V Lead Acid Battery 1.2V Ni-Cad Battery	02V / 12V Lead Acid Battery 1.2V Ni-Cad Battery
Measure Battery String No.	Max. 4 Strings	Max. 6 Strings	Max. 6 Strings	Max. 6 Strings
Max. Battery Quntity	480pcs	420pcs	420pcs	420pcs
Sensor Power Supply	Powered by Battery	Powered by Battery	Powered by Communication Bus	Powered by Communication Bus
IP index	IP20	IP20	IP20	IP65
Anti-Fire				UL94-HB-V0 fire rating
Measuring Parameter	● Cell Voltage ● Cell Negative Temperature ● Cell Impedence ● Cell SOC/ SOH ● String Voltage ● String Charge & Discharge current ● String SOC ● Ambient Temperature and Humidity (if select PBAT-Gate-2ZL)	● Cell Voltage ● Cell Negative Temperature ● Cell Impedence ● Cell SOC/ SOH ● String Voltage ● String Charge & Discharge current ● String SOC ● Ambient Temperature and Humidity ● Ripple Current ● Ripple Voltage ● insulation resistance ● Hydrogen (H2)	● Cell Voltage ● Cell Negative Temperature ● Cell Impedence ● Cell SOC/ SOH ● String Voltage ● String Charge & Discharge current ● String SOC ● Ambient Temperature and Humidity ● Ripple Current ● Ripple Voltage ● insulation resistance ● String Leakage Current ● Battery Leakage ● Battery liquid level ● Hydrogen (H2)	● Cell Voltage ● Cell Negative Temperature ● Cell Impedence ● Cell SOC/ SOH ● String Voltage ● String Charge & Discharge current ● String SOC ● Ambient Temperature and Humidity ● Ripple Current ● Ripple Voltage ● insulation resistance ● String Leakage Current ● Hydrogen (H2)

How to Select the Solution ?



Item	PBAT-Gate + PBAT61	PBMS9000 + PBAT61	PBMS9000Pro + PBAT71	PBMS9000Pro + PBAT81
Photos				
Uplink Protocols	● SNMP ● Modbus TCP ● HTTP (RESTful API, JSON, XML format)	● SNMP ● Modbus TCP ● Modbus RTU ● IEC61850 (Can only onnect Max.100pcs) ● MQTT (JSON format)	● SNMP ● Modbus TCP ● Modbus RTU ● IEC61850(Can only onnect Max.100pcs) ● MQTT (JSON format)	● SNMP ● Modbus TCP ● Modbus RTU ● IEC61850 (Can only onnect Max.100pcs) ● MQTT (JSON format)
Uplink Port	● 2 Ethernet Port ● 1 4G Port	● 2 Ethernet Port ● 1 4G Port ● 1 RS485 Port	● 2 Ethernet Port ● 1 4G Port ● 1 RS485 Port	● 2 Ethernet Port ● 1 4G Port ● 1 RS485 Port
Downlink Protocol	MODBUS RTU	MODBUS RTU	MODBUS RTU	MODBUS RTU
Memory	512MB flash, 8G TF memory card	512MB flash 4G EMMC + 8G TF memory card	512MB flash, 4G EMMC + 8G TF memory card	512MB flash, 4G EMMC + 8G TF memory card
DI/DO Ports	4 DI, 2 AI, 1 DO (only for PBAT-GATE-2ZL)	6 DI, 6 DO	6 DI, 6 DO	6 DI, 6 DO
Auto-Sensing	√	√	√	√
Auto-Balancing	√	√	√	√
Power Supply	18 ~ 36VDC	85 ~ 264VAC, 120 ~ 370VDC	V1 : 18-72VDC V2 : 85 ~ 264VAC, 120 ~ 370VDC	85 ~ 264VAC, 100 ~ 370VDC
Measuring Wire Terminal				
HMI for Local Display	7" inch	10" inch	10" inch	10" inch
Pre-wired Cabinet	PBAT-BOX-400 PBAT-BOX-600	PBMS-BOX-260	PBMS-BOX-260	PBMS-BOX-260