CANBUS Protocol

Version History

Date	Version	Note	Author
2020-2-11	01	Add cell voltage, temperature, cycle cnt etc.	

CAN 总线配置 CAN Bus configuration：

标准帧/Standard frame

通讯速率：500kbps /Communication rate: 500kbps；

数据自动发送，发送周期 1s/ send out data automatically every 1 second；

字节序：小端 /Endian: little endian

储能逆变器响应/ Inverter response: Inverter CAN ID: 0x305: Data: 00 00 00 00 00 00 00 00

数据定义/Data definition:

CAN ID: 0x359

Byte	**definition**	**Note**
Byte 0	Protection 1	See table below
Byte 1	Protection 2	See table below
Byte 2	Alarm 1	See table below
Byte 3	Alarm 2	See table below
Byte 4	Module number	Parallel module number
Byte 5	Capacity	Ah
Byte 6		
Byte 7		

	Protection1	**Protection2**	**Alarm1**	**Alarm2**
Bit0	rsvd	Charge over current	rsvd	Charge high current
Bit1	Over voltage	rsvd	High voltage	rsvd
Bit2	Under voltage	rsvd	Low voltage	rsvd
Bit3	Over temperature	System error	High temperature	Internal communication fail
Bit4	Under temperature	rsvd	Low temperature	rsvd
Bit5	rsvd	rsvd	rsvd	rsvd
Bit6	rsvd	rsvd	rsvd	rsvd
Bit7	Discharge over current	rsvd	Discharge high current	rsvd

CAN ID: 0x351

Byte	**definition**	**Unit**	**Note**
Byte0	Charge voltage recommand	0.1V	Charge voltage recommand
Byte1			
Byte2	Charge current limitation	0.1A	Max charge current
Byte3			
Byte4	Discharge current limitation	0.1A	Max discharge current
Byte5			
Byte6	Discharge cut voltage	0.1V	
Byte7			

CAN ID: 0x355

Byte	**definition**	**Unit**	**Note**
Byte0	SOC	%	Single or average value for parallel modules
Byte1			
Byte2	SOH	%	Single or average value for parallel modules
Byte3			
Byte4	Max Cell voltage	1mV	

Byte5			
Byte6	Min cell voltage	1mV	
Byte7			

CAN ID: 0x356

Byte	**definition**	**Unit**	**Note**
Byte0	Pack volage	0.01V	Single or average value for parallel modules
Byte1			
Byte2	Pack current	0.1A	Single or total value for parallel modules
Byte3			
Byte4	Max Cell temperature	0.1℃	
Byte5			
Byte6	Min Cell temperature	0.1℃	
Byte7			

CAN ID: 0x35C

Byte	**definition**	**Unit**	**Note**
Byte0	Request flag		See table below
Byte1			
Byte2	Cycle cnt		
Byte3			
Byte4			
Byte5			
Byte6			
Byte7			

Request flag

	Definition	**Note**
Bit0	rsvd	
Bit1	rsvd	
Bit2	rsvd	
Bit3	Full charge request	Set when BMS need calibrate SOC
Bit4	Forced charge request1	Set when SOC get in the certain range defined by BMS
Bit5	Forced charge request2	Set when SOC get in the certain range defined by BMS
Bit6	Discharge enable	Set when discharge is allowed
Bit7	Charge enable	Set when charge is allowed