

Orion BMS Custom Messages for use with HPEVS

		ADDRESS ID	
		0x300	0x301
Length in bytes			8
Byte0		Low Cell Voltage High Byte	Pack SOC
Byte1		Low Cell Voltage	High Temperature
Byte2		High Cell Voltage High Byte	Pack CCL
Byte3		High Cell Voltage	Pack DCL High Byte
Byte4		Pack Current High Byte	Pack DCL
Byte5		Pack Current	*Custom Flag
Byte6		Pack Amphours High Byte	Highest Cell Voltage ID
Byte7		Pack Amphours	Lowest Cell Voltage ID

	*Custom Flag for Orion BMS Jr	*Custom Flag for Orion BMS (NOT Jr)
Bit #1	Charge Interlock	Charge Interlock
Bit #2	DTC: Temperature Sensor Fault	DTC: Temperature Sensor Fault
Bit #3	DTC: Weak Cell Fault	DTC: Weak Cell Fault
Bit #4	DTC: Low Cell Voltage Fault	DTC: Low Cell Voltage Fault
Bit #5	DTC: Open Cell Fault	DTC: Open Cell Fault
Bit #6	DTC: BMS Current Sensor Fault	DTC: BMS Current Sensor Fault
Bit #7	DTC: Cell Over 5V	DTC: Cell Over 5V
Bit #8	n/a	DTC: High Voltage Isolation Fault (GFI)

Notes:

CAN Bus Baud rate	Message setting transmit speed for mailboxes 0x300 and 0x301	byte order
250 kbps	104 ms	Big Endian

Address 0x300	Field Length
Byte0: low cell voltage high byte set by multiply by 1 then divide by 10	2
Byte1: low cell voltage set by multiply by 1 then divide by 1	
Byte2: high cell voltage high byte set by multiply by 1 then divide by 10	2
Byte3: high cell voltage set by multiply by 1 then divide by 1	
Byte4: Pack current high byte set by multiplying by 1 then divide by 1	2
Byte5: Pack current set by multiply by 1 then divide by 1	
Byte6: Pack Amphours high byte set by multiplying by 1 then divide by 1	2
Byte7: Pack Amphours set by multiplying by 1 then divide by 1	

Address 0x301	Field Length
Byte0: Pack SOC value set by multiplying by 1 then divide by 2	1
Byte1: High Temperature set by multiplying by 1 then divide by 1	1
Byte2: Pack CCL set by multiplying by then then divide by 1	1
Byte3: Pack DCL High Byte set by multiplying by 1 then divide by 1	2
Byte4: Pack DCL set by multiplying by 1 then divide by 1	
Byte5: Custom Flag #3	1
Byte6: Highest Cell Voltage ID set by multiplying by 1 then divide by 1	1
Byte7: Lowest Cell Voltage ID set by multiplying by 1 then divide by 1	1