

CAN ID	Description	Freq [ms]	Length	Byte #1	Byte #2	Byte #3	Byte #4	Byte #5	Byte #6	Byte #7	Byte #8	
18EEFF80	J1939 Address Claim Broadcast	200	8	Unique identifier for J1939 compatible address claim (Default value is: 0xF3 00 80)			BMS Target Address (0xF3 default)	Thermistor Module Number << 3 (Default = 0x00)	0x40 (Constant)	0x1E (Constant)	0x90 (Constant)	
1839F380	Thermistor Module -> BMS Broadcast	100	8	Thermistor Module Number	Lowest thermistor value (8 bit signed, units are 1°C)	Highest thermistor value (8 bit signed, units are 1°C)	Average thermistor value (8 bit signed, units are 1°C)	Number of thermistors enabled (NOTE #3)	Highest thermistor ID on the module (zero based)	Lowest thermistor ID on the module (zero based)	Checksum 8-bit (sum of all bytes + 0x39 + length)	
1838F380	Thermistor General Broadcast	100	8	Thermistor ID relative to all configured Thermistor Modules (NOTE #5)			Thermistor value (8 bit signed, units are 1°C) (NOTE #7)	Thermistor ID relative to this thermistor module (NOTE #6)	Lowest thermistor value (8 bit signed, units are 1°C)	Highest thermistor value (8 bit signed, units are 1°C)	Highest thermistor ID on the module (zero based)	Lowest thermistor ID on the module (zero based)
80	Legacy Broadcast Message - RESERVED	100	4	RESERVED FOR LEGACY EQUIPMENT								
Notes												
Note #1	All messages are transmitted continuously with the provided frequency. No polling or requesting is required.											
Note #2	All CANBUS message IDs listed above are relative to the "Module #" parameter configured on the Thermistor Module with the included utility. The module number indicates the Source Address (the last byte of the ID). Thus the message transmitted from Module #1 would be 0x1839F380 whereas the message from Module #2 would be 0x1839F381.											
Note #3	Bit 8 (0x80) indicates whether a fault is present for this byte.											
Note #4	This value will loop through all the thermistors loaded on the Thermistor Module. Thermistors that are not loaded (enabled) via the Thermistor Utility will be skipped by this message. The value is zero based so if thermistor 1 on the module is loaded / enabled then the first ID transmitted will be 0. Once all loaded thermistors values are transmitted the message will loop back and start with the first thermistor. This will continue indefinitely.											
Note #5	This value will loop through all the thermistors loaded on the Thermistor Module just like as described above in NOTE #4. The difference is that this value will be relative to the configured "Expansion Module #" setting configured on the Thermistor Module with the included utility. If the thermistor module is configured as Expansion Module #1 then the lowest thermistor will start with ID of 0. If the module is configured as Module #2 then the lowest thermistor will start with an ID of 80, and so on.											
Note #6	Bit 8 (0x80) indicates whether a fault is present for this particular thermistor being transmitted.											
Note #7	The thermistor value published in this byte will update cyclically based on what thermistor ID is currently being reported.											
Note #8	If attempting to simulate the thermistor expansion module for Orion BMS products, frames 0x1839F380 and 0x18EEFF80 both must be sent by your device.											