

CAN Bus 2.0A/2.0B General and SAE J1939

Supported series: CAN Bus 2.0A / CAN Bus 2.0B / SAE J1939.

HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	CAN Bus 2.0A/2.0B General and SAE J1939		
	General	General / SAE J1939	
Baud rate	250K	20K~1M	
Reset RDO when communication fails			

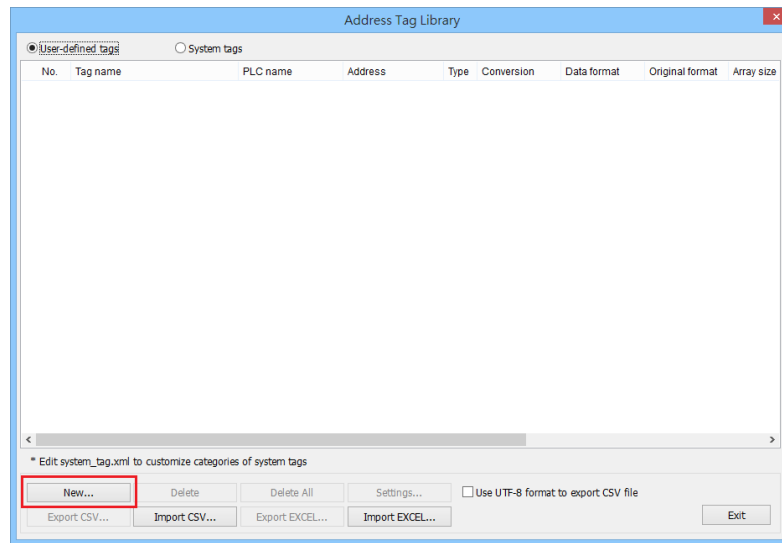
Online simulator	NO	Extend address mode	NO
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How to import SAE J1939 address tags:

1. In EasyBuilder Pro add **[CAN Bus 2.0A/2.0B General and SAE J1939]** driver.

The screenshot shows the 'CAN Device' configuration window. At the top, the 'Name' field is set to 'CAN Device'. Below it, there are radio buttons for 'HMI' and 'PLC', with 'PLC' selected. The 'Location' is set to 'Local' with a dropdown arrow and a 'Settings...' button. A note states: '* Select Local for a PLC connected to this HMI, or Remote for a PLC connected through another HMI.' The 'PLC type' is set to 'CAN Bus 2.0A/2.0B General and SAE J1939' with a dropdown arrow. Below it, the version 'V.1.40, CAN_BUS.e30' is displayed. The 'PLC I/F' is set to 'CAN (Controller Area Network) Bus' with a dropdown arrow and a link to 'Open PLC Connection Guide...'. There are radio buttons for 'General' and 'SAE J1939', with 'SAE J1939' selected. A note states: '* Support off-line simulation on HMI (use LB-12358)'. The 'CAN Bus' section shows 'bit rate : 250K' with a 'Settings...' button. At the bottom right, there are 'OK' and 'Cancel' buttons.

- Open Address Tag Library, select **[User-defined tags]** and then click **[New]**.



- Name: Enter the tag name.

PLC: Select the **SAE J1939**

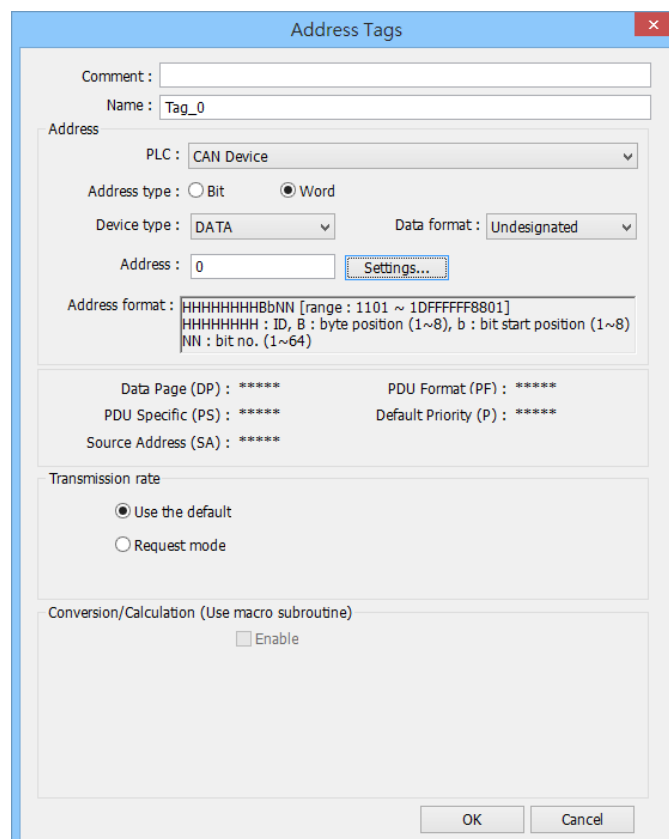
Address type: Select **Bit** or **Word**.

Transmission rate:

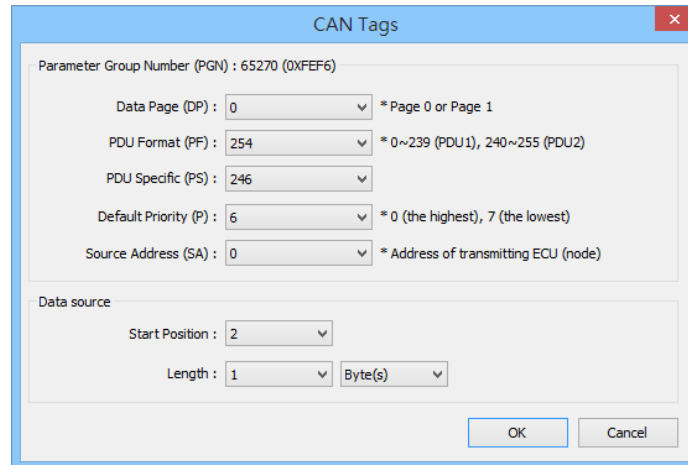
If **[Use the default]** is selected, then HMI will wait for the reply from CAN device.

If **[Request mode]** is selected, then HMI will send polling packet.

After entering the above information, click **[Settings]**.



4. Please set the following parameters according to the specification of the CAN device used.



CAN Tags

Parameter Group Number (PGN) : 65270 (0XFEF6)

Data Page (DP) : 0 * Page 0 or Page 1

PDU Format (PF) : 254 * 0~239 (PDU1), 240~255 (PDU2)

PDU Specific (PS) : 246

Default Priority (P) : 6 * 0 (the highest), 7 (the lowest)

Source Address (SA) : 0 * Address of transmitting ECU (node)

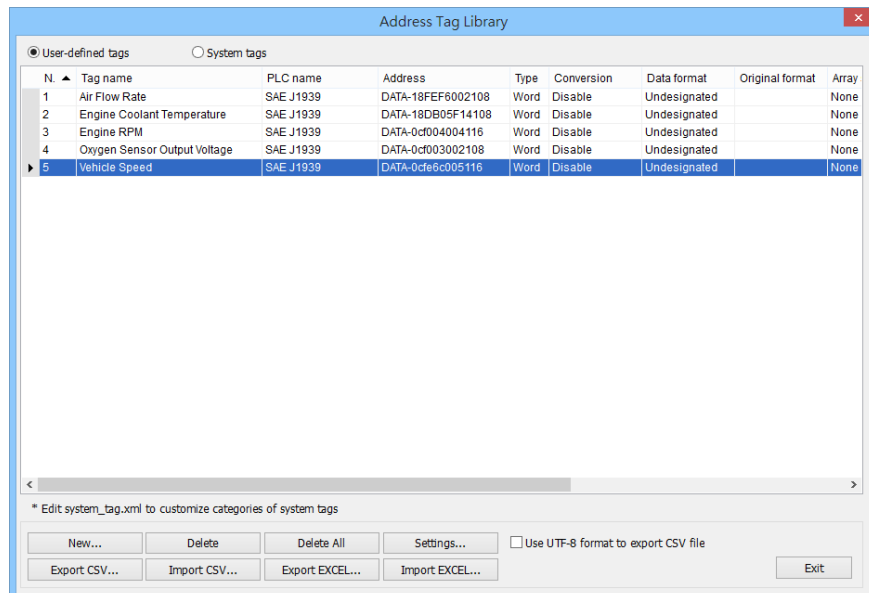
Data source

Start Position : 2

Length : 1 Byte(s)

OK Cancel

5. After building the tags click **[Exit]**.



Address Tag Library

☒ User-defined tags ☐ System tags

N.	Tag name	PLC name	Address	Type	Conversion	Data format	Original format	Array
1	Air Flow Rate	SAE J1939	DATA-18FEF6002108	Word	Disable	Undesignated		None
2	Engine Coolant Temperature	SAE J1939	DATA-18DB05F14108	Word	Disable	Undesignated		None
3	Engine RPM	SAE J1939	DATA-0cd004004116	Word	Disable	Undesignated		None
4	Oxygen Sensor Output Voltage	SAE J1939	DATA-0cd003002108	Word	Disable	Undesignated		None
5	Vehicle Speed	SAE J1939	DATA-0cf6c005116	Word	Disable	Undesignated		None

* Edit system_tag.xml to customize categories of system tags

New... Delete Delete All Settings... ☐ Use UTF-8 format to export CSV file

Export CSV... Import CSV... Export EXCEL... Import EXCEL... Exit

Device Address:

Bit/Wor	Device type	Format	Memo
B	DATA_Bit	HHHHHHHHBb	H: ID B: Byte position (1~8) b: Bit start position (1~8)
W	DATA	HHHHHHHHBbNN	H: ID B: Byte position (1~8) b: Bit start position (1~8) NN: Bit no. (1~64)

Wiring Diagram:

CANBus

The serial port pin assignments may vary between HMI models, please click the following link for more information.



To minimize signal reflection on the CAN bus network, termination resistors should be installed at both ends of the network, as shown in the following figure.

