

FAQ: How can I tell if my SSI sensor is not communicating with my AMCI SSI interface module?

AMCI manufactures a number of modules whose function is to connect to sensors that output SSI data and report that SSI data to a PLC. However, the very nature of the SSI data makes it difficult to determine when that sensor is no longer communicating the module.

The easiest way to determine if you have lost contact with the sensor is to look at the Actual SSI Data reported to the input registers. The following table shows the location of the Actual SSI data for all of the SSI modules manufactured by AMCI

Module	Location of Actual SSI Data
7262	Channel 1 = Input Word 5 Channel 2 = Input Word 11
7264	Channel 1 = Input Word 5 Channel 2 = Input Word 11 Channel 3 = Input Word 17 Channel 4 = Input Word 23
7361	Input Words 6 and 7 (This is the fifth and sixth words of the %AI data and may be used in Double Precision Format)
7561	Input Word 5 and 6
7662	Channel 1 = Input Words 2 and 3 Channel 2 = Input Words 6 and 7 (These word locations assume that the 7662 module has been configured to report SSI data.)
7761H	Words 5 and 6 of the BTR Data
7961	Words 6 and 7 of the VME_rd data (may be used in Double Precision Format)
NX2E4X	Channel 1 = Input Words 5 and 6 Channel 2 = Input Words 12 and 13 Channel 3 = Input Words 19 and 20 Channel 4 = Input Words 26 and 27

Use the following steps to determine a test for the loss of a SSI sensor.

1. Set up the SSI module for your application. This must be done because the value shown in the Actual SSI Value register(s) will vary based on the setup of the module.
2. Once your system is working correctly, remove the SSI sensor from the module and look at the value being reported in the Actual SSI value register(s).
3. Write your ladder logic to check if this value occurs. If it does, you will know that the module is no longer receiving data from the sensor.