SIEMENS

SIMATIC

Distributed I/O

Product Information for the ET 200S IM 151-1 STANDARD, IM 151-1 HIGH FEATURE Manuals

Product Information

LED display of the configuration and parameter assignment errors

Properties

The configuration and parameter assignment errors of the ET 200S distributed I/O system are output at the interface module by means of the LEDs group error **SF** (red) and bus error **BF** (red).

Requirements

- The function is available for the following interface modules from the specified firmware version on:
  - IM151-1 STANDARD (6ES7 151-1AA05-0AB0): FW Version V2.2.3
  - IM151-1 HIGH FEATURE (6ES7 151-1BA02-0AB0): FW Version V2.2.2
- The current firmware can be downloaded from Service&Support on the Internet at: http://www.siemens.com/automation/service&support

Mode of operation

The information about the cause of the problem is determined by means of the LED fault display. After an announcement by means of a flashing signal, the respective error type and after that the error location / error code are displayed.

The LED fault display of the configuration and parameter assignment errors

- Is activated both during POWER ON and during operation.
- Takes precedence over all other states that are displayed by the SF and BF LED.
- Remains activated until the cause of the problem has been eliminated.

After a change in the ET 200S configuration, a POWER-OFF / POWER ON may be required at the interface module.

Steps		Description
1	LEDs SF and BF flash 3x at 0.5 Hz	Announcement of error type
2	LED BF flashes at 1 Hz	Display of the error type (decimal)
3	LEDs SF and BF flash 3x at 2 Hz	Announcement of the error location / error code
4	LED SF flashes at 1 Hz	Display of the decade (decimal) of the error location / error code
5	LED BF flashes at 1 Hz	Display of the unit position (decimal) of the error location / error code
6	Repetition of 1 - 5 until the cause of the problem has been eliminated.	

Error display

Error type (BF)	Error location (SF/BF)	Cause of the problem	Measure
1	01 to 63 (slot)	**Communication interruption** Displays the first slot at which no I/O module is recognized. • Missing I/O module during POWER ON or several I/O modules are missing during operation. • Interruptions at the rear panel bus • Short-circuit at the rear panel bus ("01" is output as the slot) • Termination module missing If the termination module is missing, the number of inserted I/O modules + 1 is output (if there is no set configuration)	Check the configuration of the ET 200S.
2	01 to 63 (slot)	**Termination module not recognized** This error type is output if there is a set configuration and the slot at which an I/O module is no longer recognized is equal to (number of modules of the set configuration +1).	Install the termination module.
3	01 to 63 (slot)	**I/O module** The configured structure of the ET 200S does not match the actual structure of the ET 200S. The first slot that displays a configuration error (missing module, incorrect module module fault) is displayed. This error is only output if the parameter "Operation at preset <> actual configuration" is locked.	Check the structure or the configuration of the ET 200S, whether a module is missing or defective, or whether an unconfigured module has been inserted.

The following errors can only occur if you have configured the ET 200S at a master from a different supplier or by using the GSD file:

Error type (BF)	Error location, error code (SF/BF)	Cause of the problem	Measures
4	01	**Configuration error at the option handling** Option handling has been configured but no power module was configured for options handling.	Change the configuration.
	02 to 63 (slot)	Option handling has been configured but more than one power module was configured for options handling. The slot of the second power module that has option handling is displayed.	
5 [1]	01	**General parameter assignment error** The number of module parameter blocks in the parameter assignment telegram does not agree with the number of identifiers in the configuration telegram.	Correct the configuration.
	02	The maximum address area (inputs and outputs) of the interface module has been exceeded.	
	03	Incorrect structure of the parameter assignment telegram.	

[1] You prevent this error when configuration is carried out with STEP 7 and it is only possible if other configuration tools are used.