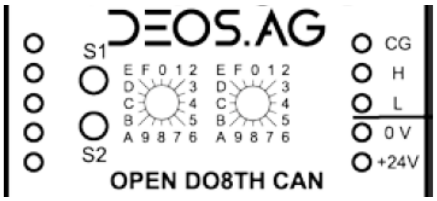
# TT180703 – Troubleshoot – IO Module Communication Problems

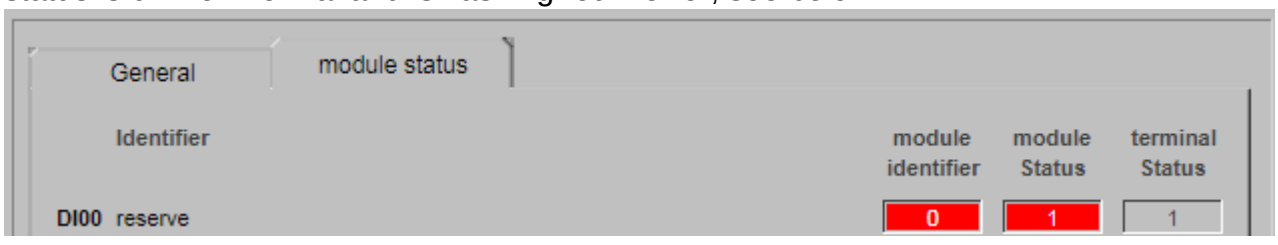
1. You can check the communication of the IO module with the S1 and S2 LEDs




2. Normally S1 should be flashing green, and S2 should be off
3. If S2 is yellow, then maybe the CAN cable is disconnected
4. If S2 is red, then maybe the CAN cable is disconnected or you've not yet configure any IO module in FUP
5. If S2 is flashing red, then maybe you've set a wrong address in the module, or the address you set in FUP in wrong, or no this IO module in FUP
6. If either S1 or S2 is flashing very quickly (around 5 times per second), then maybe the module is faulty
7. Please also check the CAN LED on the OPEN controller. If it is not flashing, then maybe the CAN cable is disconnected
8. Please refer to the table below for details

| S1 | S2 | Bedeutung |
|---|---|---|
| green flashing | | Normal operating state: The bus address is set on a valid range (01 ... 99). In this operating state the bus status is displayed via the status LED S2. |
| | off | The IO module is connected to the OPEN EMS. |
| | red flashing | The IO module recognizes valid CAN-telegrams at the bus. But the module is not directly addressed by a OPEN EMS. The set addresses should be checked. |
| | red | No valid CAN-telegram is recognized on the bus. |
| | yellow | By sending a CAN-telegram an error occured. No further CAN-devices were recognized at the bus. |
| yellow flashing | | An invalid address is set. |
| green/yellow flashing | | The IO module is in the service-mode. |
| yellow | yellow | If both LEDs shine yellow, an address switch was twisted directly before. After some seconds the module accepts the new bus address. |
| green fast flashing | | Internal hardware configuration fault |
| | red fast flashing | Internal hardware configuration fault |

9. You can also check the status of the IO module from the controller graphic page. The status is 0 when normal and is flashing red if error, see below




| ident. num. | Status |
|---|---|
| 0 | IO-module in operation |
| 1 | no IO-module with this Address, or IO-module does not respond |
| 2 | IO-module of other type |
| 3 | initializing IO-module |