

3.10.2 Error codes

The hexadecimal error codes which are listed in the following table resemble the flashing sequence of the OK-LED of the USM. If the error code is transmitted through the protocol interface, it might – dependent from the superior system – be interpreted as decimal number.

Example:

| | |
|---|--|
| <i>Error 68</i> | - Connection to NTP Server disturbed |
| <i>Flashing sequence of OK-LED</i> | - long, long, long, long, long, long short, short, short, short, short, short, short, short, short, pause |
| <i>Interpretation on the protocol-interface</i> | |
| <i>hexadecimal</i> | - 0x68 |
| <i>binary</i> | - 0110.1000 |
| <i>decimal</i> | - 104 |

In the following table the error codes of the USM are enlisted.

| Error code | | Error | Remark |
|------------|---------|--|---|
| hex | decimal | | |
| 11 | 17 | Internal error | If the error still is at issue after restart of the device, the device needs to be returned to EES for inspection. |
| 12 | 18 | Internal error | |
| 13 | 19 | Overflow alarm buffer | After a surge of alarms, interstages of alarms can be lost. The final stages of the alarms are valid. |
| 14 | 20 | Relay cards | If the error still is at issue after restart of the device, the device needs to be returned to EES for inspection. |
| 15 | 21 | Communication within cascaded annunciator system disturbed | This error can occur in cascaded systems. It will be issued when the connection between the USM and at least one of the slaves (BSM) is disrupted. Please verify the configuration of the slave addresses and the connection cables. |
| 17 | 23 | Operating voltage 1 | This error can occur in annunciators with dual power supply. |
| 18 | 24 | Operating voltage 2 | |
| 19 | 25 | Configuration inconsistent | The downloaded configuration does not match the hardware of the device (e.g. USM08 and USM16). |
| 31 | 49 | License error | The IEC 61850 license does not match the device. Has the right license file been downloaded to the device? Please contact customer service. |
| 32 | 50 | CID-file missing | Please download CID-file to the device. |
| 33 | 51 | Parameter file missing | Download manufacturer file. Please contact customer service. |
| 34 | 52 | Imported configuration is faulty | Download correct file to the device or restore default setting by means of the web-server. |
| 35 | 53 | Faulty CID-file | The downloaded CID-file is incorrect. Please download the correct CID-file to the device. |
| 63 | 99 | IEC 104 Client connection | The connection to a IEC 104 Server is disturbed or no valid status can be received for defined information objects. If this error is still at issue after restart of the device, please check parameterisation of the IEC 104 Client links. |
| 68 | 104 | NTP-connection | Connection to NTP-Server disturbed. |

Table 3.1: Error codes of the USM

3.10.3 Operation modes

By means of a push button or function input, the annunciator can be set to different operation modes. A currently activated operation mode is indicated by green flashing of the OK-LED with dedicated flashing sequences as follows:

| Flashing sequence | Operation mode | Comment |
|----------------------|----------------|--|
| long – short | Horn muted | The horn will be triggered according to parameterisation in „Horn mute“, as long as this operation mode is activated. |
| long – short – short | Unmanned mode | As long as this operation mode is activated, no optical or acoustical output of alarms at issue is triggered. The internal alarm processing as well as triggering of relays and IEC communication stays active though. |

Table 3.2: Operation modes of the USM