

LCom Flexible Communication

Standard Library for SIMOTION

Release notes and limitations of functionality

These notes have a higher priority than information in the documentation.
Please read these notes carefully.

1 General notes (SIMOTION and SIMATIC library)

Number	Description
001	<p>Communication service TCP/IP</p> <p>You can use only TCP communication, UDP is not supported at this moment.</p>
002	<p>Multiple use of sockets (address + port)</p> <p>It is not possible to use the same socket (IP-address + port number) in more than one server instance of the FB (passive connection). Every server has to use a different port number.</p>
003	<p>Input <i>readingLength</i> (as from V1.1.1)</p> <p>Without LCom protocol the input <i>readingLength</i> is used for activating and deactivating the receiver. With LCom protocol this parameter is not used.</p> <p>'readingLength' > 0 (default value = 16#FFFF) means that the receiver is enabled. 'readingLength' = 0 means that the receiver is disabled. The received data will be buffered in the controller. In this case with TCP communication the data will not be lost.</p> <p>If any CP device is used (without LCom protocol), the length reading from the TCP stack must be defined explicitly (for CPs max. 240 bytes).</p>
004	<p>Connection monitoring with sign of life</p> <p>Contrary to the described behavior in the manual the connection is dropped after 4x configured life sign value (<i>b16LifeSignCycle</i>).</p>

2 SIMOTION

Number	Description
101	<p>Large number of connections</p> <p>If you use more than 30 connections at the same time, there may be a sporadic connection loss. Reconnection is only possible after changing operating state from STOP to RUN.</p>
102	<p>Download in run</p> <p>There may be a connection loss when downloading in Run with initialization of the FB instance – reconnection is only possible after changing operating state from Stop to Run.</p> <p>Comment: The returned connection id (from the system) is stored in the FB instance. This id is lost with initialization. A reconnection is not possible because this id remains active in the system.</p>
103	<p>remotePort</p> <p>Since LCom V1.1.1 the port number of the communication partner can be 1..65535.</p>

3 SIMATIC

Number	Description
201	Firmware version You need at least firmware version 2.4 for the use of this library, because the system functions „TCON“ were not available before.
202	Send and receive data length With communication mode = “ on change ” the maximum send and receive data length is limited to 4kByte and not 64kByte as documented.
203	Time synchronization Only cyclic distribution of time synchronization telegrams is supported. The possibility to send a time synchronization telegram at a parameterized time (e.g. 03:00:00) is not supported (parameter <i>u8SendModeTimeSync</i> = 2).
204	UDT User defined data types (UDT110, UDT111) can not be renamed, because of the use of these UDTs inside the know-how protected FB105.
205	Input parameter <i>enable</i> It is a must to have a rising edge at the <i>enable</i> input of the FB after power on of the PLC. It is not possible to parameterize a static true. See example using VAR_TEMP in OB1.
206	Creating DBs The UDTs UDT110 und UDT111 have to be created manually in a DB. It is not possible to create a DB of type UDT.
207	Automatic detection of the CPU type The automatic detection of the CPU type (<i>b8CPUType</i> = W#16#FF) works only for CPUs. If you use a WinAC RTX or CP, please configure the CPU type (<i>b8CPUType</i>) manually (see documentation).
208	Sliding window Only sliding window 1 is supported (<i>b8SlidingWindow</i> = 1).
209	localPort The local port number can be outside of 2000..5000 with S7 300 since firmware V3.2 (with S7 400 since firmware V6.0, see SIMATIC documentation).
210	remotePort Since LCom V1.1.1 the port number of the communication partner can be 1..65535.

Contact

Application center

Siemens AG
Digital Factory
Factory Automation
Production Machines
DF FA PMA APC
Frauenauracher Str. 80
91056 Erlangen, Germany
Fax: +49 9131-98-1297
mailto: profinet.team.motioncontrol.i-dt@siemens.com

Internet links:

www.siemens.com/simotion
www.siemens.com/sinamics
www.siemens.com/motioncontrol/apc