

# IP-S7-LINK version history

Version 1.78.00 04.10.2018

- IPS7GetDBLen - read length of the DB

Version 1.77.00 12.12.17

- Logo 8.1 no possibility to connect
- for multiple connections added function IPS7OpenExWithTSAP

Version 1.76.00 20.5.17

- Release for "S7200 and Logo" works now also for the Logo 8.1

Version 1.75.00 11.10.16

- Release only for S71200 and Logo created

Version 1.74.00 6.7.15

- Windows CE could not set timeout at socket level
  - Timeout monitoring implemented
- SocketError "host not reachable" is now reported for the Connect timeout
- Improved check whether socket connection still exists

Version 1.73 from 16.6.15

- Lint and ULInt data types implemented

Version 1.72.93 from 25.3.15

- LinkTo - correction

Version 1.71.92 from 8.12.14

- S7-Logo IPS7RdReal

Version 1.71.92 from 8.12.14

- S7-Logo IPS7RdReal

Version 1.70.91. from 2.7.14

- Periphery access implemented

Version 1.69.90 from 04.06.14

- internal memory management optimized for MultiRead
- for Bit/Byte absolutely byte aligned, otherwise 4-Byte aligned
- the first time MultiRead access with large packages it came to memory conflicts
- this effect are since V 1.67.88

Version 1.68.89 from 09.05.14

- IPS7ReadDiagBuffer implemented

Version 1.67.88 from 29.04.14

- MultiRead with Bit, read with the value 0

Version 1.66.87 from 04.04.14

- MultiRead error(2) with String, if the string entry was fragmented
- MultiRead memory optimised

Version 1.65.86 from 31.03.14

- MultiRead error with String, if the string entry was fragmented by 2 orders

Version 1.64 from 04.12.13

- MultiRead unfavorable combination of print jobs generated error

Version 1.63

- MultiRead the Result was not passed properly in the individual orders

Version 1.62.83 from 09.09.13

- adjust communication with Logo-PLC Logo/S7200

Version 1.62.82 from 08.07.2013

- IPS7RdStr error corrected at MultiRead

Version 1.61.80 from 19.06.2013

- IPS7RdStr, IPS7WrStr implemented
- String in IPS7RdMulti implemented

Version 1.60.78 from 02.04.2013

- PDU-Size optimised, access with maximum size
- inserted accessing Logo PLC → Access Mode 3 at IPS7OpenEx

Version 1.58 from 17.07.12

- only for the ARM-Version
- reading wrong real values because of the ALIGNMENT

Version 1.57

- IPS7RdW
- Offset at Start != 0 was calculated with the factor 4 and not 2

Version 1.56 from 21.05.12

- Lite Version for private use

Version 1.55 from 12.04.12

new functions:

- IPS7GetPLCName(long Ref, char \*Str);
- IPS7GetModuleName(long Ref, char \*Str);
- IPS7GetPlantIdName(long Ref, char \*Str);
- IPS7GetCopyrightEntry(long Ref, char \*Str);
- IPS7GetModuleSNr(long Ref, char \*Str);
- IPS7GetModuleTypeName(long Ref, char \*Str);
- IPS7GetMMCSNr(long Ref, char \*Str);

- IPS7GetOEMId(long Ref, char \*Str);
- IPS7GetLocationDesignation (long Ref, char \*Str); LPCSTR in LPCTSTR changed because of WINCE

#### Version 1.54 from 05.04.12

- LPCSTR changed in LPCTSTR because of WINCE
- S7-200 / Logo - access implemented, with Logo always use TSAP 02.00
- license only for S7-200 Logo generated, can be combined with S7-LAN-LINK
- with S7-LAN-LINK socket wasn't closed, when when S7-LAN or S5-LAN where not available
- Set / read the PLC-time implemented
- IPS7GetPLCTime (long Ref, long \*pYear, long \*pMonth, long \*pDay, long \*pHour, long \*pMin, long \*pSec, long \*pMs);
- IPS7SetPLCTime (long Ref, long Year, long Month, long Day, long Hour, long Min, long Sec, long Ms);

#### Version 1.53 from 22.02.12

- RdMultiSimplex, if e.g. while debugging, the IP-connection was reset, was possibly an undefined positive error returned

#### Version 1.52 from 30.01.12

- IPS7RdBit, read Bit since version 1.51 always a Bit 0 was read
- inserted in the source changes for IAR Compiler

#### Version 1.51 from 30.11.11 with 1.50 MultiRead error (PDUSize)

#### Version 1.50 from 25.11.11

- MultiRead with Counter was incorrect
- adjustments for Embedded Systems
- read routines optimised

#### Version 1.49 from 11/11

- In Linux for Critical Sections now pthreads are used

#### Version 1.48 29.11.10

- for S7-LAN-LINK also S5-LAN integrated
- under Linux for generate shared Libs with Compileroption -"fPIC" compiled

#### Version 1.47 from 24.09.10

- Support for ARM-Processors implemented (Alignment-Trap fixed)

#### Version 1.46 from 08.09.10

- Bit-accesses with MultiRead function
- At read from Bit's with Start-Bit address > 0 at some PLC's a error occurred
- Data area not reachable (Bit address was passed with byte access)

#### Version 1.45 from 07.09.10

- PDU-Size for CPU 400 etc. optimised

#### Version 1.44 from 18.08.10

- Support / identification S5-LAN with S7-TCP/IP
- with MultiRead-access to S5-LAN the real conversion is not carried out in S5-LAN but the driver. The driver needs to know if a S5-LAN is connected.
- since S5-LAN ++ V 1.20 the driver can automatically detect it
- at modules < 1.20, at function IPS7OpenEx use AccessMode "20"

#### Version 1.43 from 22.07.10

- MultiReadzugriff: demo version implemented
- sizeof - corrected comparisons

#### Version 1.42 from 14.07.10

- MultiRead access: before execution of the first read-contract an error (e.g. timeout etc.) was commissioned as a result -88 / order not edited set now the actual error value is there.
- Linux: no connect are possible, so error -5 (general error) was set, now the socket error will be set, so the original problem can be checked with error number or strerror()

#### Version 1.41 from 13.07.10

- MultiRead access: read from outputs was not supported

#### Version 1.40 from 07.07.10

- MultiRead access: at blocks > 220 Byte it came to overrides
- .Net MultiRead access: because of the Garbage Collection the variables can be shifted accidentally, the access way had to be revised
- Programs in C# or VB.Net should use the function RdMultiBuffered. More you will find in the .chm file!

#### Version 1.39 from 17.06.10

- MultiRead access: new function " IPS7RdMultiCalcPacketCnt " returns the count of packets for read all of the given MultiRead-assignments

#### Version 1.38 from 24.05.10

- MultiRead access: Int16 and Int32 (signed) was on collection of PC\_INT32 and PC:DWORD was converted in unsigned now conversion will be done right to a signed-value

#### Version 1.37 from 18.05.10

- .Net-Interface: for MultiRead access, Int16 and Int32 (signed) access implemented.
- .Net-Interface: for MultiRead access, at use of arrays, size will be checked, is the array to small, error -20 will be generated
- MultiRead access: Conversion of bits in DWORD or Real resulted in the protection violation

#### Version 1.36 from 03.05.10

- IPS7RdMulti, copy error protection violation occurred
- Demo for Delphi updated, Outfit also like C++/C#/VB.net

#### Version 1.35 from 14.04.10

##### New functions:

- IPS7Connect - takes explicit IP connection from
- IPS7GetConnectStatus - checks the IP connection state

- IPS7SetKeepAlive – sets individual keepalive times
- IPS7RdMulti – reads various data areas in one piece from the PLC

Version 1.34 from 02/10

- between version

Version 1.33 from 02.02.10

- when reading the timer it could lead to erroneous results when the timer is running. The base was miscalculated.

Version 1.32 from 27.08.09

- Read / write the real / float values with S7 code as well as an operation to S5 Lan++ is possible with real values.

Version 1.31 from 20.08.09

- in .Net-Assemblies Strong-Names implemented

Version 1.30 from 17.07.09

- V 1.29 ported to Linux, S7-LAN-Link have now the same interface as IP-S7-LINK, but runs only with S7-LAN, so the transition to IP-S7-LINK for the user is a simple

Version 1.29 from 20.04.09

- Assembly Interface for .Net Rd method with 32 Bit Integer was reading Bit, now 32 Bit

Version 1.28 from 09.02.09

- ips7lnk.lib refernced to s7lanlnk.dll, so a link error at VC++ Compiler, or a message, that S7lanlnk.dll couldn't be found, occurred

Version 1.27 from 26.08.08

- Additional tests for valid memory inserted. improved treatment of Critical Sections

Version 1.26 from 12.08.08

- IPS7WrBit was not exported

Version 1.25 from 16.07.08

When calling IPS7Open with multiple threads, there were occasional traps. Fixed problem with Critical Section

Version 1.24 from 10.07.08

- .Net and PHP implemented

Version 1.23 from 02.06.06

- access for Routing over SubnetID implemented

Version 1.22 from 14.10.05

- Operation with slot PLC and soft PLC did not worked (FAST ACK was not properly processed)
- Problems at receiving fragmented data

#### Version 1.21 from 04.08.05

- operation with CP 243 (S7 200) implemented

#### Version 1.20 from 08.07.05

- special version for university limited to DB1 and DB2 generated

#### Version 1.19 from 20.05.05

- The change of 1.18 was intended only for IPS7RdPlcW and IPS7WrPlcW in blocks > 111 words. With 1.18 the function IPS7RdW and IPS7WrW in these areas no longer worked

#### Version 1.18 from 17.05.05

- wrong calculation of start address with IPS7RdW and IPS7WrW at blocks > 111 words
- The start address of the sequence blocks were incorrectly determined

#### Version 1.17 from 04.03.05

- New function added IPOpenPG so it is possible to connect through the PG-PLC channel
- Useful if no OP channels are free
- For word-reading and writing with unsigned start addresses function IPS7RdPlcW and S7WrPlcW

#### Version 1.16 from 01.12.04

- We basically used the PG channel, from now the HMI / OP channel is used

#### Version 1.15 from 11.11.04

- Timeout monitoring inserted for reception of the entire block. Maybe, it caused problems with Berthel PLC

#### Version 1.14 from 01.08.04

- Maximum number of open channels increased to 256

#### Version 1.13 from 26.07.04

- Maximum number of open channels increased to 128

#### Version 1.12 from 07.07.04

- In order to achieve higher performance of the Nagle algorithm has been turned off. That TCP\_NODELAY was set to 1

#### Version 1.11 from 13.05.04

- At 'close' Windows socket has the required port partly unblocked only after 20 minutes
- there by the effect was that only after restarting the PLC or the PC, a new connection to the PLC could be established

#### Version 1.10 from 13.05.04

- Maximum count opened channels raised up to 64

#### Version 1.09 from 19.03.04

- allowed writing inputs

#### Version 1.08 from 23.01.02

- When trying to connect with users who were not in the network, handles were occupied in the system and no longer released
- Problem fixed!

#### Version 1.07 from 12.12.01

- fixed DLL-call from multiple applications

#### Version 1.06 from 19.09.01

- Timer / Counter function implemented
- double word function implemented
- real access (Floating point arithmetic) implemented

#### Version 1.05 from 12.07.01

- Bit- read and write function implemented

#### Version 1.04 from 19.06.01

- Bitwise read and write in DB implemented

#### Version 1.03 from 17.05.01

- When reading blocks, which are divisible by 222
- e.g. 444 Byte or 222 words
- e.g. 666 Byte or 333 words ..
- the last 222 bytes has not been read, no error message was created
- When writing blocks by 212 divisible
- e.g. 424 Byte or 212 words
- e.g. 636 Byte or 318 words ..
- the last 212 bytes has not been written, there was no error message

#### Version 1.02 from 29.01.01

- added error number -6
- Function IPS7GetSockErr implemented (see documentation)

#### Version 1.01 from 21.12.00

- read of block areas that have not been exist were confirmed as OK, although the specified range does not exist
- this happened with DB > 111 words

#### Version 1.00 from 14.12.00





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