

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 possiblility to connect
- for multible 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

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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

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- 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 strerrno()

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 occured
- 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 referneced to s7lanlnk.dll, so a link error at VC++ Compiler, or a message, that S7lanknk.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 IPS70pen 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





- 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

Bytewise 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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