

## S7-PLC coupling to S5-PLC without changes in the S5-PLC

### ==> PUT / GET from S7-PLC via S5-LAN++ to S5-PLC

An easy way to read/write data to/from the S5-PLC from an S7-PLC with Ethernet-port or Ethernet-CP. No changes to the S5-PLC-program necessary!

Simply plug the S5-LAN ++ onto the 15-pin PG interface, assign the module an IP address with the S5-LAN manager.

And parameterize your PUT/GET-connection as usual, use an S7-315-PN/DP-PLC as a placeholder for the S5-LAN++-module. The IP-address of this S7-PLC corresponds to the IP-address of the S5-LAN++-module.

That's it, nothing more is to be considered. Now you can write to the S5-PLC or read from the S5-PLC.

#### **Please note when addressing:**

The conversion from S5-float (KG-format) to S7-float (IEEE 754) is automatic in both directions. It is important to use a variable type of IEEE 754.

The addressing of memory bits, inputs, outputs, timers and counters is the same for S5 and S7. However, there are differences in the data blocks. Addressing at the data blocks has been adapted to the S7.

For example:

DB10 DW 10 (S5) is addressed with DB10.DBW20 (S7). The background is that the S7 principle addresses in byte. If you want to read a single byte, for e.g. DB10.DL4 (S5), so you have to address DB10.DBB8. It is therefore necessary: even byte address = DL, odd address = DR in DB of the S5.

Here are some address examples :

Simatic S5	Simatic S7	Format
MB 11	MB 11	Byte
MW 20	MW 20	Word
DB10 DW 9	DB10 DBW 18	Word
DB10 DW 60	DB10 DBW120	Word
DB10 DL 3	DB10 DBB 6	Byte
DB10 DR 3	DB10 DBB 7	Byte
DB10 DD 25	DB10 DD 50	DWord
DB10 DD 35	DB10 DD 70	Real

How can we address a DX (for e.g. extended DB135)

Must be for e.g. a DX addressed in a CPU 135, then the following rule applies:

DB-number 1-255 = DB, DB-number > 255 = DX.