

- The SSD Drives gsd file forces all parameters to be transferred and received as 16-bits.
- Please visit <http://ssddrives.com> Resource Center for Profibus manuals and other gsd files.

Note: Remember that different configuration tools work differently. Some tools use an import command to install new gsd files. Some copy the gsd to a directory, then either restart the tool or use a scan gsd command. Other tools just copy the gsd to a directory.

Note: The euro3245.gsd requires the first 3 bytes of the User_Param_Data to be set to zeroes. Refer to pages 10 and 11 of HA467329U001 Issue 1.

USING A SIEMENS S7 PLC TO CONFIGURE A L5353

The following Organization Blocks, OB82, OB85, OB06, and OB122 are “highly” recommended to complete the setup for the PLC. These Organization Blocks keep the PLC from stopping communications and/or simulating a fatal error to the module.

Also, uncheck the “Turn on Cyclic Distribution of the Bus Parameters” in the DP monitoring setup. When the PLC has power applied, a Global reset command is initiated and can sometimes simulate a communications error.

USING A GE 90 30 PLC WITH VERSA PRO TO CONFIGURE A 6055/PROF/00

The GE Profibus configuration software (Versa Pro) does not support user parameter data larger than 25 bytes in length. The SSD Drives GSD file specifies 63 bytes of user parameter data for the 590+. Users must alter the SSD Drives GSD before importing to the GE hardware configuration software. The end result is that the amount of data that can be exchanged between the master and drive is limited to 11 words.

GE PLC's do not ground the face of the Profibus interface cards or remote I/O, Siemens does.

Note: An example connection is on the following page

If you have questions, please call the Product Support Group at (704) 588-3246.

Objective

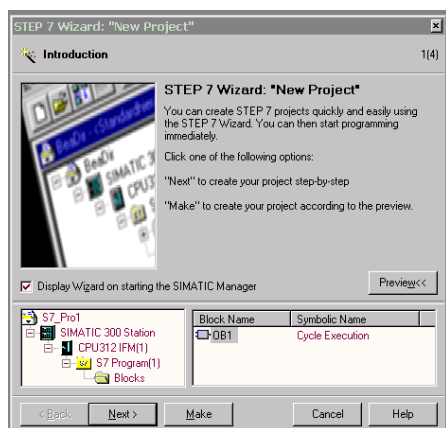
To setup communications between a Siemens PLC™ S7-315™ Master to SSD Drives Profibus communication module L5353.

Equipment

- S7 PLC, Simatic™ Manager Step 7 Software, L5300 or L5392, L5311, and L5353.

Procedure

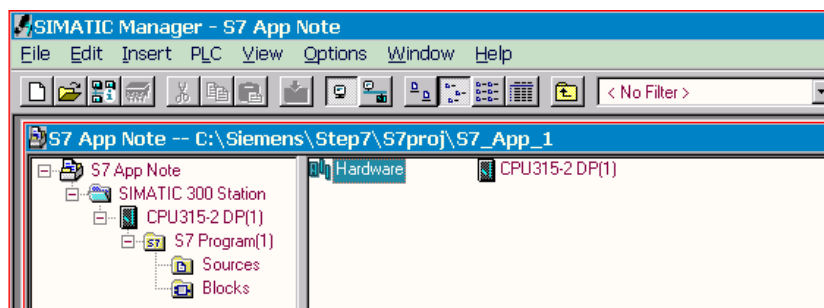
Note: The project wizard in Step 7 will guide you to set up the PLC.



1. Initialize Simatic™ Manager
2. Select the CPU type

Note: The following blocks are recommended to be added to the PLC configuration OB1, OB82, OB85, OB86, and OB 122.

3. Install the Eurotherm Drives GSD file euro5353.gsd.

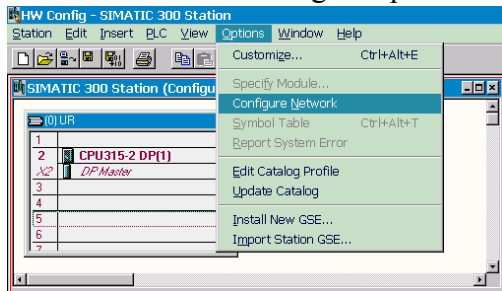


4. Double click on the hardware icon in “Simatic™ Manager”.
5. Select from the pull down menu: Option::Install new GSE.

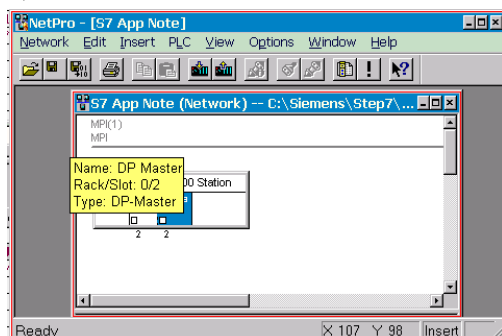
Note: After the “wizard” generates a new project, proceed to step 6 to configure the PLC hardware and Profibus Master.

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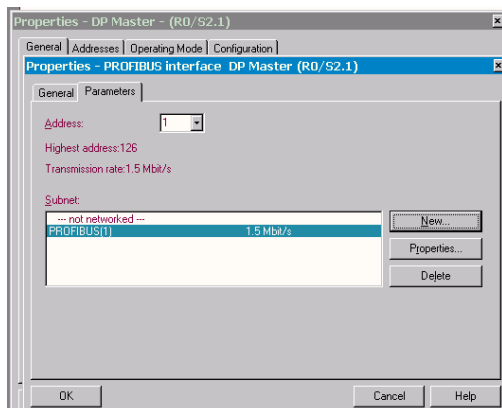
6. Select from the “HW Configure” pull-down menu: Option::Configure Network.



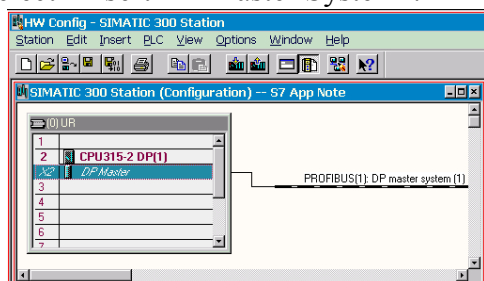
7. Next, double click on “DP Master”



8. Next, from “Properties – DP Master”, select “Properties”, then assign an address.



9. Next, right click on the “X2 DP-Master” of the Hardware Configure, Simatic 300” window, then select “Insert DP Master System”.



Note: A Profibus(1): DP Master Line appears:

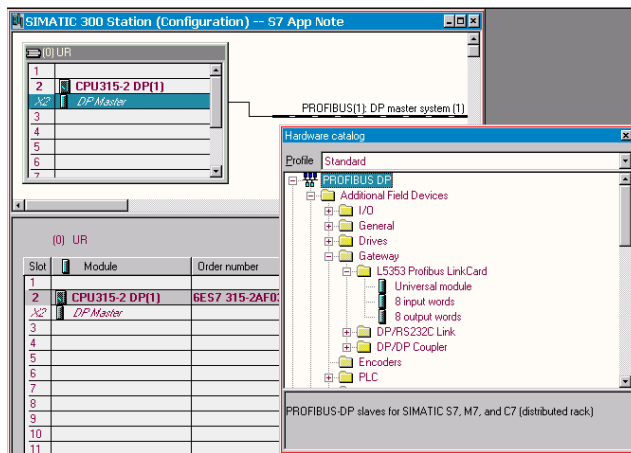
10. Select from the pull down menu, “Insert::hardware component”.

Note: A hardware window will appear. You can select the Link product as shown.

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11. Make sure to install a power supply and any other hardware I/O's being used.

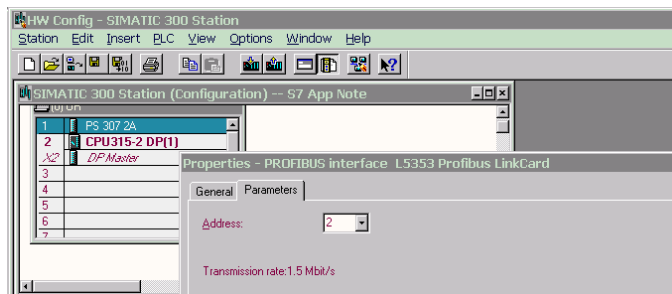
Note: Double click on the “Profibus(1): DP Master” line then select “Properties”, “Network setting”, “Parameters”, then uncheck the “Turn On Cycle Distribution of Bus Parameters”.



12. Install a L5353 in the Profibus listing.

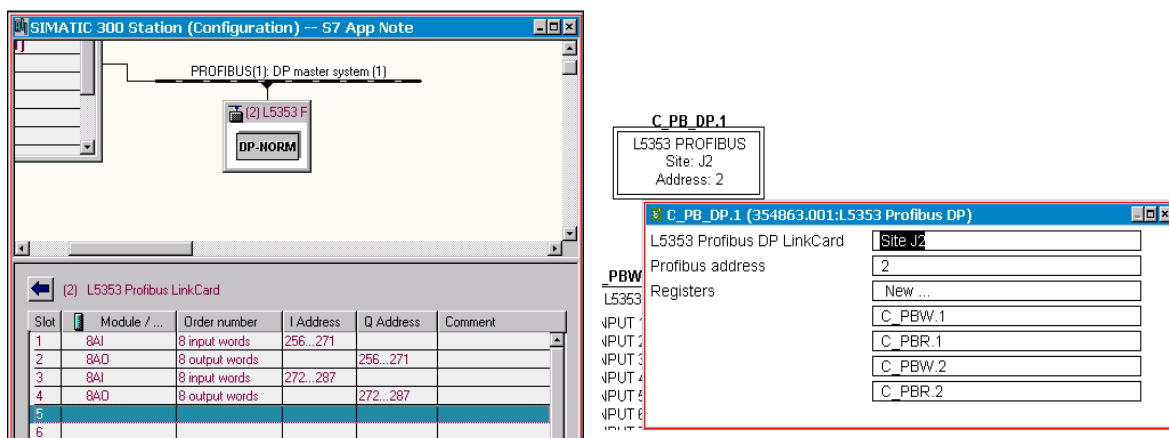
13. Add a “L5353 Profibus Link Card” folder from the “Hardware Catalog”.

Note: Scroll across and under the “Profibus(1): DP Master” line until the cursor changes into a “+ sign”.



14. Now you can assign a node address to L5353.

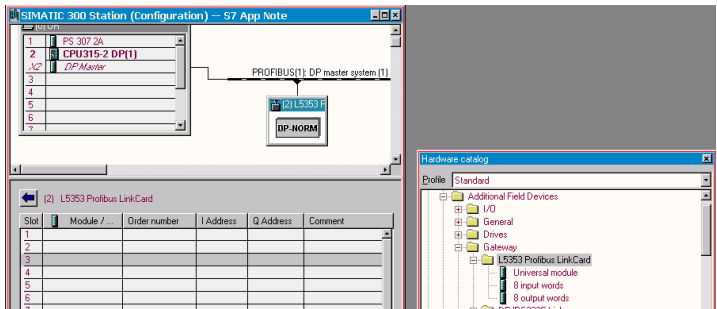
15. Now add the needed “8 Input word” or “8 Output word” as needed for program.



Note: Click on the “(2) L5353 DP-Norm” before you drag and drop.

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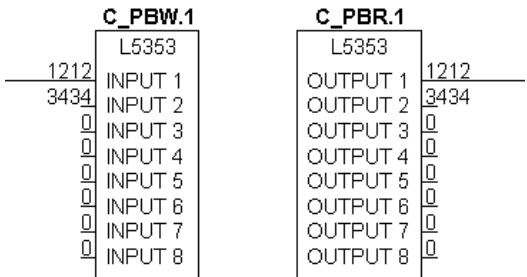
16. Verify the list of I/O words against the Link Configuration.



17. Next, from the pull down menu select “Station::Save and Compile”

18. Close this window and from the “Simatic™ Manager” highlight the Hardware icon and install.

Note: After installing the Link and plc program both LED’s on the L5353 should be green.



Note: The following is the data communication monitoring in *Link* and PLC:

Coping first two word IW1, IW2 (or double word ID1) to outpts of same designation.

Address	Symbol	Monitor Format	Monitor Value	Modify Value
IW 1	---	DEC	1212	
QW 1	---	DEC	1212	
IW 3	---	DEC	3434	
QW 3	---	DEC	3434	

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Objective

Provide tips for different PLC tools to be used with SSD Drives products

Equipment

Master PLC, Communication TechBox (6053/6055) or Communication LinkCard (L53xx)

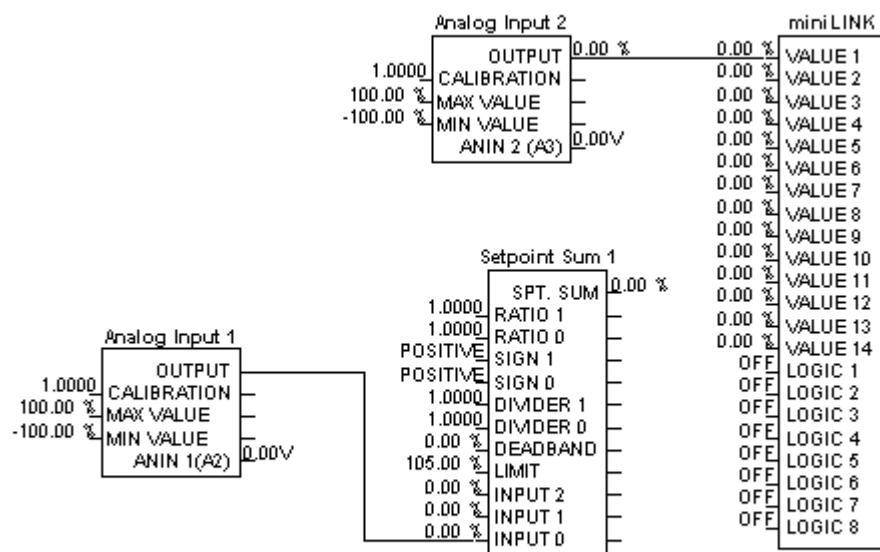
Procedure

FOR ALL DRIVE CONFIGURATIONS REGARDLESS OF PLC TYPE:

- Delete internal software connections to the drive parameter that will be written to by the PLC. Otherwise, the internal drive connection will overwrite the data to the specific tag number.
- The SSD Drives datasheet file formats all parameters to be transmitted and received as 16-bit words.
- Any drive parameter with a tag number can be read or write via the PLC. I/O points that attach to customer connections must be properly triggered in the 590+ drive. Any function block output under the SYSTEM::CONFIGURE I/O::BLOCK DIAGRAM that is being read by the PLC must be triggered. The examples below show how to trigger correctly. The 690+ drive does not require the function block output to be connected to a system block to be triggered.

Note: The value for Analog Input 1 is read directly at Setpoint Sum 1::Input 0. The Setpoint Sum 1 block is the trigger for Analog Input 1.

Note: The value for Analog Input 2 is read directly at the miniLink. The miniLink block is the trigger for Analog Input 2.



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Communication Option	Protocol	Master	Maximum Nodes	Maximum Words per Card	Communication Speed
L5351	Device Net (CAN Bus)	Allen-Bradley PLCs	64	127 per node	125, 250, 500 Kbaud
L5352	Modbus TCP/IP Ethernet IP	Modbus TCP/IP PCs and PLCs Ethernet IP Allen Bradley ControlLogix	256	256	10 or 100 Mbaud
L5353	Profibus	Siemens/TI PLCs	32	112	9.6, 19.2, 93.75, 187.5, 500 Kbaud, 1.5, 12 Mbaud
L5354	ControlNet	Allen-Bradley PLCs	99	240	5 Mbaud
L5355	Modbus TCP, Modbus Plus	Modicon PLCs	256	256	1 Mbaud
6055/DNET/00 6053/DNET/00	Device Net (CAN Bus)	Allen-Bradley PLCs	64	Limited by Polled Assy. Number	125, 250, 500 Kbaud
6055/MBP/00 6053/MBP/00	Modbus TCP, Modbus Plus	Modicon PLCs	256	Limited by I/O Point to Point selection	1 Mbaud
6055/CNET/00 6053/CNET/00	ControlNet	Allen-Bradley PLCs	99	Limited by I/O Point to Point selection	5 Mbaud
6055/ENET/00 6053/ENET/00	Modbus TCP/IP Ethernet IP	Modbus TCP/IP PCs and PLCs Ethernet IP Allen Bradley ControlLogix	256	590+ 20 Read, 20 Write words 690+ 36 Read, 36 Write words	10 or 100 Mbaud
6055/PROF/00 6053/PROF/00	Profibus	Siemens/TI PLCs	32	16 Read, 16 Write words	9.6, 19.2, 93.75, 187.5, 500 Kbaud, 1.5, 12 Mbaud
6055/EI00/00 6053/EI00/00 6513/00	EI Bisynch ASCII/Binary, Modbus RTU	Any PC or PLC with EI Bisynch or Modbus RTU comms.	256	32 Read, 32 Write words	1200 to 57600 Kbaud

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Objective

To facilitate the use of CELite, CELite+, DSD and ConfigEd, on computers not fitted with serial ports.

Introduction

These software packages were originally intended to be used with a serial port but several new computers only have USB ports. This document is a recommendation for using the existing cable with a computer that has only a USB port.

Note: This does not apply to operating systems older than Windows XP, due to the lack of drivers supported by these adaptors.

Equipment

The Product Support Group has performed test on several different USB to Serial adaptors. See the picture below. The recommended brands have connected reliably between the PC and unit to be programmed, without errors in the SSD Drives software.



Recommended Brands

ATEN (model UC232A) <http://aten-usa.com/?product&cat=595&Item=UC232A>

IOGEAR (model GUC232A) <http://www.iogear.com/main.php?loc=product&Item=GUC232A>

SEWELL (model SW-1301) <http://sewelldirect.com/usbtoserial.asp>

Note: The **Belkin** brand of USB to Serial adaptor is not recommended. It performed poorly in our tests with our equipment.

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