Simatic Modbus S7 error- and statuscodes

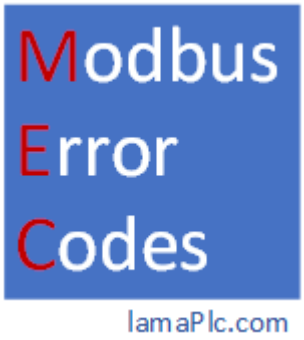
Online professional books

Simatic S7- TIA Portal programming: **Automation!**

lamaPLC Simatic know-how contents

Simatic S7-1500 / S7-1200: Simatic S7-1500 / S7-1200
Simatic TIA portal (and classic) type-definitions: TIA Data-types
Simatic TIA SCL commands: SCL commands
Simatic TIA Basic know-hows: TIA Portal know-how
Simatic (TIA and classic) Modbus error- and statuscodes: Simatic Modbus S7 error- and statuscodes
Simatic S7 PLC types: S7 PLC types
Simatic TIA lamaLibrary:Simatic LamaLibrary
Simatic TIA Diagnose generator: TIA Diagnose generator

2026/01/19 14:11



List of error codes related to Simatic communication, especially Modbus communication. I added a few entries based on my own experience (marked in red).

If you have more information about Modbus error signals, or if you found any errors in the table, let me know!

I continually expand and improve the table based on my own experience.

Simatic Modbus error codes:

Status codes	Text	notes and example call functions
0000	**ok** - No error / Instruction executed without errors	
0001	Connection established	
0003	Connection terminated	

Status codes	Text	notes and example call functions
7000	#no job active AND no connection established (REQ=0, DISCONNECT=1)	
7001	Start of job processing / Connection establishment triggered, BUSY = 1, DONE = 0.	
7002	Intermediate call. Connection is being established, BUSY has the value “1”.	
7003	Connection is being terminated	
7004	Connection established AND monitored. No job processing is active.	
7005	Data is being sent. In a properly functioning client system, signal 7005 will only “flash” briefly, indicating that the query telegram has been sent. Signal 7006 should then be received shortly thereafter, confirming receipt of the response. [vamsan]	
7006	data is being received. If a properly functioning client function causes this status to “freeze,” meaning the #busy signal is not followed by #done, the unit does not respond but remains technically available. For Modbus communication, it is advisable to verify the unit address and set it correctly. This is especially important if a TCP/RTU converter is used; in that case, *“MB_CLIENT_DB”.MB_Unit_ID := address;* might be significant. It is recommended to test the converter's operation in advance using a PC with a Modbus client test program. For a server, a persistent 7006 signal usually indicates the “stand by, everything is fine” status. [vamsan]	
00 .. 7Fxx	CPU Kein Fehler oder keine Warnung	
8x3A	Invalid pointer at parameter x.	
8070	All internal instance memories are in use.	
8080	The identifier entered for the communications port is invalid.	
8081	Timeout, module error, internal error. The system data type used must match the organization block in the user program.	
8082	Parameter assignment failed because parameter assignment is currently being performed in the background.	
8083	Buffer overflow: The CM or CB has returned a receipt message with a length that is greater than permitted by the length parameter.	
8085	Error specifying the length at the LENGHT parameter. The specified length is “0” or greater than the maximum permitted value. The connection ID (ID parameter) is already in use by a configured connection. LEN parameter is greater than the largest allowable value (For S7-1200: 8192; for S7-1500 (TCP): 65536; with S7-1500 (FDL): 240 / 236) - Parameter DATA and LEN both have the value “0”. - The value of the LEN or DATA parameter was changed after the first call.	
8086	The ID parameter is out of range (1 .. 0x0FFF).	
8087	Maximum number of connections reached, no further connection possible.	
8088	- LEN parameter is larger than the range specified in DATA. - Receive area is too small.	
8089	The CONNECT parameter does not point to a connection description or the connection description was created manually.	
8090	Message length invalid, module invalid, message invalid. Logical start address not valid.	

Status codes	Text	notes and example call functions
8091	Incorrect version in parameterization message. Path does not exist or is invalid. (FileWriteC)	
8092	Invalid record length in parameterization message. Illegal type for VARIANT pointer The source or target area is only available in the load memory. The “Name” parameter is not of the data type “STRING”, is too long or contains invalid characters. (FileWriteC)	
8093	The DP component addressed using ID or F_ID is not configured. The “Offset” parameter points past the end of the file to be written. (FileWriteC) The creation of the file is rejected because “Offset” is greater than zero. (FileWriteC)	
8094	“Length” is greater than the maximum permitted value. For an S7-1500 CPU, for example, the maximum value permitted is 16 MB, i.e. 16,777,216 bytes. (FileWriteC) “Length” + “Offset” is greater than the maximum permitted value. (FileWriteC)	
809A	The structure at the CONNECT parameter is not supported on an integrated interface or the length is invalid.	
809B	The InterfaceId element within the TCON_xxx structure does not reference a hardware ID of a CPU or CM/CP interface or has the value “0”.	
80A0	Negative acknowledgment when reading from the module	
80A1	The specified connection or port is already in use. Communication error: - The specified connection has not yet been established. - The specified connection is being terminated. Transmission via this connection is not possible. - The interface is reinitialized. - Negative acknowledgment when writing to the module - Write error; the data in the file on the memory card may be partly overwritten. (FileWriteC) This errors are often caused by conflicting IDs (CONN_OUC). Ensure each connection has a unique ID! After fixing the error, it's advisable to recompile the entire program (*compile → software (rebuild all)*) and then download it (*PLC restart!*). - Vamsan	
80A2	Local or remote port is used by the system. The following ports are reserved locally: 20, 21, 80, 102, 135, 161, 162, 443, 34962, 34963, 34964 and the range 49152 to 65535. DP protocol error at layer 2 (e.g. slave failure or bus faults)	
80A3	ID is used by a connection created by the user program that also uses the same connection description at the CONNECT parameter.	
80A3	An attempt is being made to terminate a non-existent connection or the connection has already been terminated. General communication error or IO device / DP slave cannot be reached	
80A4	IP address of the remote endpoint of the connection is invalid or it matches the IP address of the local partner.	
80A4	Temporary communication error: The interface is being reconfigured or the connection is being set up.	
80A7	Communication error: You executed “TDISCON” before “TCON” was completed. DP slave or module is busy (temporary error)	
80A8	DP slave or module reports inappropriate versions	
80A9	**Feature not supported** Function is not supported by the DP slave or the module	
80AA .. 80AF	DP slave or module reports a manufacturer-specific error in its application. Please refer to the documentation provided by the manufacturer of the DP slave or module.	

Status codes	Text	notes and example call functions
80B0	**Invalid index** Module does not recognize the data set Data set number ≥ 256 is not permitted	
80B1	**Write length error** Error in length specification. You changed the DATA parameter before the current job ended. The source area specified by the “Data” parameter is shorter than the length required at the “Length” parameter. (FileWriteC)	
80B2	**Invalid slot** The configured slot is not occupied.	
80B3	**Type conflict** Actual assembly type not equal to target assembly type The parameterized protocol variant (parameter ConnectionType in the connection description) is UDP. Please use the “TUSEND” / “TURCV” instruction for a UDP connection. There is not enough space on the memory card or in the internal load memory. (FileWriteC)	
80B4	**Invalid area** DP slave or module reports access to an illegal area Only with TCON_IP_RFC: The local T-Selector was not specified or the first byte does not contain the value 0x0E (only with a length of T-Selector = 2) or the local T-Selector begins with “SIMATIC-”. The memory card or file is write-protected. (FileWriteC)	
80B5	**State conflict** DP slave or module is not ready With connection type 13 = UDP, only passive connection establishment is permitted (ActiveEstablished parameter of the TCON_IP_v4 / TCON_PARAM structure has the value TRUE).	
80B6	**Invalid connection type / access denied** only TCP connections are supported. DP slave or module denies access Parameterization error in the ConnectionType parameter of the data block for the connection description. - Only valid for TCON_IP_v4: 0x11, 0x0B and 0x13. - Only valid for TCON_IP_RFC: 0x0C and 0x12	
80B7	**Invalid range** DP slave or module reports an invalid range of a parameter or a value For TCON_IP_v4: - TCP (active connection establishment): Remote port is “0”. - TCP (passive connection establishment): Local port is “0”. - UDP: Local port is “0”. - Partner endpoint IP address was set to 0.0.0.0. For TCON_IP_RFC: - Local (LocalTSelector) or remote (RemoteTSelector) T-selector specified with a length greater than 32 bytes. - A length greater than 32 was entered for TSelLength of the T-selector (local or remote). - Error in the length of the IP address of the respective connection partner. - Partner endpoint IP address was set to 0.0.0.0.	
80B8	**Invalid parameter** DP slave or module reports an invalid parameter The ID parameter in the local connection description (structure at the CONNECT parameter) and the ID parameter of the statement are different.	
80B9	DP slave or module reports an invalid type, eg buffer too small	
80BA	S7-1500-R/H-CPU: The primary CPU fails while reading or writing a data record.	

Status codes	Text	notes and example call functions
80BB	**Invalid type** Invalid value at ActiveEstablished parameter. *This parameter must be “false” for “server” mode.*	
80C0	**Read constrain conflict** The data is only written when the CPU is in STOP mode. Note: This means that the user program cannot write. The data is only written online with PG/PC. The file cannot be accessed. (FileWriteC)	
80C1	**Write constrain conflict** The module has not yet processed the data from the previous write request for the same data set on the module.	
80C2	**Resource busy** The module is currently processing the maximum possible number of jobs for a CPU.	
80C3	**Resource unavailable** All connection resources are in use or ports may be in dynamic use by other applications or connections.	
80C3	- A block with this ID is already being processed in another priority group. - Internal lack of resources. The maximum number of simultaneously active FileWriteC instructions has already been reached.	
80C4	Temporary communication error: - The connection cannot be established at the moment. - The connection cannot be established because firewalls on the connection path are not enabled for the required ports. - The interface is receiving new parameters. - The configured connection is currently being removed by a “TDISCON” instruction. Most often, the solution to this error is to recompile the entire program (*compile → software (rebuild all)* and download it (*PLC newstart!*) - vamsan	
80C5	DP slave or module not available. The connection partner refuses to establish the connection, clears down the connection, or actively ends it. - Connection terminated by the communication partner. - LSAP of the remote connection partner not released - This error often points to an incorrect firewall setting. You should verify that, in addition to IP release, port release is also configured properly. When port release is involved, ports 502 and 503 need to be enabled. - In many cases, this error occurs when a Modbus RTU network is connected behind a Modbus-TCP media converter. In this scenario, the station ID must also be included with the call (0..255). Without it, the converter “loses” the telegram. [vamsan]	
80C6	**Network error** - The connection partner cannot be reached. Record transfer aborted due to priority class abort.	
80C7	Execution timed out. Job aborted due to restart (warm start) or cold start of the DP master.	
80C8..80CF	DP slave or module reports a manufacturer-specific error regarding its resources. Please refer to the documentation provided by the manufacturer of the DP slave or module for further information.	

Status codes	Text	notes and example call functions
80C8	No response from the server in the defined period. Value at the ID parameter is already being used by a connection that was created via the user program. The connection uses the same ID but different connection settings on the CONNECT parameter.	
80C8	The slave does not respond within the set time **Solution:** Check the data transmission rate, parity and wiring of the slave.	
80C9	Connection partner validation failed. The connection partner who wants to establish a connection does not correspond to the partner defined in the structure at the CONNECT parameter.	
80C9	The length of the receive area is smaller than the length of the sent data.	
80C9	The slave does not respond within the time set by Blocked_Proc_Timeout. **Solution:** Check the setting for Blocked_Proc_Timeout. Check if the module has been configured with the Modbus_Comm_Load instruction. The module may possibly need to be reconfigured using Modbus_Comm_Load after a pull/plug or after voltage recovery.	
80CE	The IP address of the local interface is 0.0.0.0	
80D0	Related to TCP and the active connection endpoint: The remote_qdn parameter is an empty string. In this case no connection can be established.	
80D1	The remote_qdn parameter is not a fully qualified domain name. Possibly the dot is missing at the end.	
80D1	The wait time for XON or CTS = ON has expired. **Solution:** The communication partner has a fault, is too slow or is offline. Check the communication partner or change the parameters, if necessary.	
80D2	There is no DNS server address configured.	
80D2	“Hardware RTS always ON”: Send job canceled due to change from DSR = ON to OFF **Solution:** Check the communication partner. Make sure that DSR is ON for the entire duration of transmission.	
80D3	The fully qualified domain name could not be resolved. Possible causes: - The DNS server cannot be reached, e.g. B. because it is down or the remote port is unreachable. - An error occurred while communicating with the DNS server. - The DNS server returned a valid DNS response, but the response did not contain an IPv4 address.	
80E0	Inappropriate or bad message was received.	
80E0	Frame aborted: Send buffer overflow / send frame too long **Solution:** Call the instruction more frequently in the user program or set up communication with data flow control.	
80E1	Error during handshake. Possible causes: - Canceled by user - Security not high enough - Renegotiation is not supported - SSL/TLS version is not supported - Hostname validation failed	
80E1	Frame aborted: Parity error **Solution:** Check the connection line of the communication partners, or verify that the same data transmission rate, parity and stop bit number are configured for both devices.	
80E2	Unsupported / Invalid Certificate - Possible cause: The time of the module concerned has not been set or the module is not synchronized.	

Status codes	Text	notes and example call functions
80E2	Frame aborted: Character frame error **Solution:** Check the settings for start bit, data bits, parity bit, data transmission rate, and stop bit(s).	
80E3	Certificate has been discarded.	
80E3	Frame aborted: Character overflow error **Solution:** Check the number of data in the frame of the communication partner.	
80E4	No valid certificate authority was found.	
80E4	Frame aborted: Maximum frame length reached **Solution:** Select a shorter frame length at the communication partner. The following are valid (depending on the module): 1-1024/2048/4096 (bytes)	
80E5	Certificate expired.	
80E6	Integrity error in transport layer security protocol.	
80E7	Unsupported extension in X.509 V3 certificate.	
80E9	TLS server without server certificate is not supported.	
80EA	DTLS (UDP) protocol is not supported.	
80EB	A client cannot request a client certificate.	
80EC	The server cannot validate against the subjectAlternateName (Only clients can do that.)	
80ED	TLSServerCertRef_m ID not valid	
80EE	Handshake not finished yet	
8100	**Invalid operating mode**	
8100..81FF	**Error in the 1st call parameter**	
8152	The WSTRING, WCHAR, BOOL, ARRAY of STRING, ARRAY of WSTRING and ARRAY of WCHAR data types are not supported at the SRCBLK parameter. (*Error in the 1st call parameter*)	
8180	Invalid value for MB_DB parameter **Solution:** The value configured for MB_DB (instance data DB) at the Modbus_Comm_Load instruction is not valid. Check the interconnection of the Modbus_Comm_Load instruction and its error messages.	
8181	The module does not support this data transmission rate. **Solution:** Select a valid data transmission rate for the module at the BAUD parameter.	
8182	The module does not support this parity setting. **Solution:** Select a suitable value for “Parity” at the PARITY parameter. The following are valid: • None (1) • Even (2) • Odd (3) • Mark (4) • Space (5) • Any (6)	
8183	The module does not support this type of data flow control. **Solution:** Select a valid data flow control for the module at the FLOW_CTRL parameter.	
8184	Invalid value for “Response timeout” **Solution:** Select a suitable value for “Response timeout” at the RESP_TO parameter. Valid range of values: 1 to 65535 (ms)	
8185	Diagnostics code NOT supported. (*Error in the 1st call parameter*)	

Status codes	Text	notes and example call functions
8186	Invalid slave address **Solution:** Select a suitable slave address at the MB_ADDR parameter. The following are valid: 1-247 at standard address area; 1-65535 at extended address area (0 is reserved for Broadcast)	
8187	Invalid value at MB_HOLD_REG parameter **Solution:** Select a suitable value for the hold register at the MB_HOLD_REG parameter.	
8188	Invalid operating mode or broadcast (MB_ADDR = 0) and MODE parameter ≠ 1 **Solution:** Select the value 1 for MODE in Broadcast mode or select a different operating mode.	
8189	Invalid data address **Solution:** Select a suitable value for the data address at the DATA_ADDR parameter.	
818A	Invalid length **Solution:** Select a suitable data length at the DATA_LEN parameter.	
818B	Invalid value for DATA_PTR **Solution:** Select a suitable value for the data pointer at the DATA_PTR parameter (M or DB address).	
818C	The pointer to a MB_HOLD_REG area must be a data block or a bit memory address area. **Solution:** Select a suitable value for the pointer to the MB_HOLD_REG area.	
818C	Interconnection error of the DATA_PTR parameter **Solution:** Check the interconnection of the instruction.	
818D	The area addressed by DATA_PTR is longer than the DB, or the area addressed is too small for the number of data bytes to be read or written. **Solution:** Check the DATA_PTR pointer	
8189	Invalid addressing OF data at the MB_DATA_ADDR parameter. (*Error in the 1st call parameter*)	
8200..82FF	**Error in the 2nd call parameter**	
8200	The interface is busy with an ongoing request. **Solution:** Repeat the command later. Make sure that there are no commands still running before you start a new one.	
8280	Negative acknowledgment when reading module **Solution:** Check the input at the PORT parameter. You can find more detailed information on error causes in the Send_Config.RDREC.STATUS or Receive_Config.RDREC.STATUS static parameters or RDREC.STATUS and in the description of the SFB RDREC.	
8281	Negative acknowledgment when writing module **Solution:** Check the input at the PORT parameter. You can find more detailed information on error causes in the Send_Config.WRREC.STATUS or Receive_Config.WRREC.STATUS static parameters or WRREC.STATUS and in the description of the SFB WRREC.	
8282	Module not available **Solution:** Check the input at the PORT parameter and ensure that the module can be reached.	
8283	#error reading OR writing data OR access outside the address area. (*Error in the 2nd call parameter*)	
8284	Invalid exception code received. (*Error in the 2nd call parameter*)	
8285	Diagnostics code NOT supported. (*Error in the 2nd call parameter*)	
8286	received function code does NOT match the one sent originally. (*Error in the 2nd call parameter*)	
8300..83FF	**Error in the 3st call parameter**	

Status codes	Text	notes and example call functions
8352	The WSTRING, WCHAR, BOOL, ARRAY of STRING, ARRAY of WSTRING and ARRAY of WCHAR data types are not supported at the DSTBLK parameter. (*Error in the 3st call parameter*)	
8380	received Modbus frame has incorrect format OR too few bytes were received.(*Error in the 3st call parameter*)	
8380	CRC error Solution: Checksum error of the Modbus frame. Check the communication partner.	
8381	The function code is not supported or is not supported for broadcast. **Solution:** Check the communication partner and make sure that a valid function code is sent.	
8382	Invalid length information in the request frame **Solution:** Select a suitable data length at the DATA_LEN parameter.	
8383	Invalid data address in the request frame **Solution:** Select a suitable value for the data address at the DATA_ADDR parameter.	
8384	Invalid data value error in the request frame **Solution:** Check the data value in the request frame of the Modbus master	
8385	The diagnostic value is not supported by the Modbus slave (function code 08) **Solution:** The Modbus slave only supports the diagnostic values 16#0000 and 16#000A.	
8386	The returned function code does not match the requested function code. **Solution:** Check the response frame and the addressing of the slave.	
8387	A slave that was not requested answers **Solution:** Check the response frame of the device. Check the address settings of the slave.	
8388	Error in the response of the slave to a write request. **Solution:** Check the response frame of the slave.	
8389	Invalid data area definition: • Illegal value of data_type • DB number not permitted or not available:– Invalid value of db– DB number does not exist–DB number is already being used by another data area– DB with optimized access– DB is not in work memory • Illegal valid for length • Overlapping of MODBUS address areas that belong to the same MODBUS data type **Solution:** Check the definition of the data areas.	
8400..84FF	**Error in the 4st call parameter**	
8452	MB_HOLD_REG is not a pointer to a DB or a bit memory area **Solution:** Check the MB_HOLD_REG pointer	
8453	MB_HOLD_REG is not a pointer of type BOOL or WORD **Solution:** Check the MB_HOLD_REG pointer	
8454	The area addressed by MB_HOLD_REG is longer than the DB, or the area addressed is too small for the number of data bytes to be read or written. **Solution:** Check the MB_HOLD_REG pointer	
8455	MB_HOLD_REG points to a write-protected DB **Solution:** Check the MB_HOLD_REG pointer	
8456	Error during instruction execution. The cause of the error is shown in the STATUS parameter **Solution:** Determine the value of the SFCSTATUS parameter. Check what this means in the description for SFC51, STATUS parameter.	
8852	**Error in the 5st call parameter**	
8600..86FF	**Error in the 6st call parameter**	

Status codes	Text	notes and example call functions
8700..87FF	**Error in the 7st call parameter**	
8800..88FF	**Error in the 8st call parameter**	
8828	DATA_PTR points to a bit address that is not equal to n * 8 **Solution:** Check the DATA_PTR pointer	
8852	DATA_PTR is not a pointer to a DB or a bit memory area **Solution:** Check the DATA_PTR pointer	
8853	DATA_PTR is not a pointer of type BOOL or WORD **Solution:** Check the DATA_PTR pointer	
8855	DATA_PTR points to a write-protected DB **Solution:** Check the DATA_PTR pointer	
8856	Error during call of SFC51 **Solution:** Call the Modbus_Master instruction again	
8900..89FF	**Error in the 9st call parameter**	
8A24	The “Data” points to an impermissible area, for example to the load memory or the local data. (FileWriteC)	
8A51	Invalid data type of the “Data” parameter. (FileWriteC)	
8A52	The tag at the Data parameter is insufficient. A part of the source area data may have been written. (FileWriteC)	
8FFF	The module is not ready temporarily due to a reset. **Solution:** Repeat the request.	

This error log is my own “collection”. It may contain errors and inaccuracies, Sandor Vamos, 12.05.2023.

Modbus and Simatic topics on lamaPLC

Page	Date	Tags
• Automation! v0.0	2026/01/19 12:31	simatic, programming, automation, plc, tia portal, s7, s7 1500, s7 1200
• Eastron Modbus maps	2023/05/26 15:15	modbus, modbus rtu, eastron, modbus map, mid
• lamaLib: #temp	2024/11/18 21:46	tia, scl, lamalibsimatic, source code, energy meter, modbus, register, word
• lamaLib: energyMeterToModbusRegs	2024/11/18 21:55	tia, scl, lamalibsimatic, source code, energy meter, modbus, register, word
• lamaPLC Communication: Modbus	2025/11/19 21:42	modbus, communication, bus, modicon, standard, rtu, tcp, multimaster, coil, register
• lamaPLC Communication: OPC	2024/11/15 20:33	communication, opc, scada, ole, net, xml, tcp, hmi, server, opc ua, opc ua client, mqtt, json, dcom, simatic, erp
• lamaPLC Communication: Sinec H1	2024/11/16 20:44	communication, bus, fieldbus, sinec-h1, s5, s7, simatic, siemens, industrial ethernet, ie, iec 8073
• lamaPLC: DM56A04 / DM36B06 digital tube display with Modbus Communication	2026/02/14 17:25	dm56a04, dm36b06, eletechsup, 7-segment, display, modbus, rtu, modbus rtu, arduino
• LamaPLC: Eastron SDM 230 Communication	2025/03/07 09:20	modbus, modbus rtu, eastron, modbus map, mid

• LamaPLC: Eastron SDM 230 with Modbus Communication	2026/02/14 23:34	modbus, modbus rtu, eastron, modbus map, mid, sdm 230, sdm, arduino, code
• LamaPLC: Eastron SDM 630 Communication	2024/08/18 14:48	modbus, modbus rtu, eastron, modbus map, mid
• LamaPLC: Eastron SDM 630 Energy Meter with Modbus communication	2026/02/14 23:22	modbus, modbus rtu, eastron, modbus map, mid, sdm, sdm 630, arduino, code
• lamaPLC: PTA8C04 4-channel PT100 Modbus Modul	2026/02/14 17:42	pta8c04, sensor, modbus, rtu, rs-485, communication, platine, um72
• LamaPLC: S7-1500 and Metrawatt EM2389 Modbus TCP communication	2024/11/18 17:55	simatic, s7, modbus, communication, metrawatt, em2389, source code, scl, mid
• LamaPLC: S7-1500 and Sicam Q200 Modbus TCP communication	2023/06/24 22:42	simatic, s7, modbus, tia portal, communication, sicam, q200, sicam q200, source code, scl, class a
• lamaPLC: S7-1500 and UICPAL Temp.humi.sensor Modbus TCP communication	2023/06/19 21:24	bus, communication, s7, simatic, s7 1500, s7 1200, scl, uicpal, temperature, humidity, modbus, example, download, tia portal
• LamaPLC: Simatic datatypes	2025/01/16 10:00	simatic, s7, scl, datatype, ieee 754, string, wstring, s5time, indirect addressing, slice access, plc, tia
• LamaPLC: Simatic S7 PLC types	2025/03/11 14:41	cpu, plc, s7-1500, simatic, types, 1511-1, 1511c-1, 1511f-1, 1512c-1, 1513-1, 1513f-1, 1513r-1, 1515-2, 1515f-2, 1515r-2, 1516-3, 1516f-3, 1517-3, 1517f-3, 1517h-3, 1518-4, 1518f-4, 1518hf-4, pn dp, profinet, profibus, compact, fail-safe, redundand
• LamaPLC: Simatic S7 SCL commands with examples	2026/03/09 11:31	simatic, s7, scl, tia, commands, reference, main menu
• LamaPLC: Simatic S7 SCL commands: Bit logic operations	2024/11/17 22:29	simatic, scl, f trig, r trig, bit operation, flanke, trigger, tia
• LamaPLC: Simatic S7 SCL commands: Conversions	2023/06/09 19:47	simatic, scl, tia, round, ceil, floor, trunc, scale x, norm x, scale, conversion
• LamaPLC: Simatic S7 SCL commands: Move/memory operations	2025/09/23 21:12	simatic, scl, tia, blkmov, move blk, memory, move
• LamaPLC: Simatic S7 SCL commands: Timer / counter functions	2023/06/09 19:38	simatic, scl, tia, math, ctu, ctd, ctud, iec timers, tp, ton, tof, counter, timer
• LamaPLC: Simatic S7 SCL commands: Trigonometric / math functions	2023/06/09 19:25	simatic, scl, tia, math, abs, cos acos, acos, exp, frac, limit, ln, max, min, sin, asin, sqr, sqrt, tan, atan
• LamaPLC: Simatic S7 SCL commands: Variant operations	2023/06/09 20:29	simatic, scl, tia, variant
• LamaPLC: Simatic TIA Portal know-how	2024/03/21 13:20	simatic, s7, tia portal, fc, function, fb, function block, switch off db optimization, troubleshooting
• lamaPLC: TM1650 7-Segment Display with I²C like or Modbus Communication	2026/02/14 17:26	tm1650, stc8g, tp8485e, hyuduo5x1b64edtk1244, 7-segment, display, modbus, rtu, modbus rtu, arduino
• lamaPLC: TTL to RS485 Module	2026/02/14 22:49	modbus, rtu, modbus rtu, hw-097, rs-485, max485
• LamaPLC: UICPAL Temp.humi.sensor	2023/06/24 22:43	simatic, s7, modbus, communication, temperature, humidity, sensor

• LamaPLC: XTM35SC Modbus communication	2024/08/18 14:52	xtm35sc, modbus, modbus rtu, measuring, power, communication, current meter, voltmeter
• lamaPLC: YR-3180 - Weight sensor module with UART or Modbus communication	2026/02/14 23:00	communication, modbus, rtu, sensor, weight, yr-3180, hx710b, arduino, ttl, rs-485
• Modbus for Grundfos pumps	2023/06/01 11:49	modbus, modbus tcp, modbus rtu, grundfos
• NT18B07: 7 Kanal RS485 Temperatur Sensor with Modbus RTU	2026/02/14 17:49	nt18b07, sensor, modbus, rtu, rs-485, communication, platine
• Simatic Modbus S7 error- and statuscodes	2025/11/13 22:59	communication, bus, modbus, error, modbus error code, 7000, 7001, 7002, 7003, 7004, 7005, 7006, 80a1, simatic, s7, siemens, tia
• Waveshare	2023/06/17 19:43	waveshare, converter, modbus, modbus rtu, modbus tcp, communication
• XTM35SC current / voltage meter	2023/06/01 11:45	xtm35sc, modbus, modbus rtu, measuring, power, communication, current meter, voltmeter

communication, bus, Modbus, error, modbus error code, 7000, 7001, 7002, 7003, 7004, 7005, 7006, 80A1, Simatic, s7, Siemens, TIA