







**YASKAWA**

## **OVERVIEW LIBRARIES**

Library	Version	Features	Application	Download
<b>Building Control SW90ES0MA</b>	01V10.002	<p><b><u>TIA-Portal und Simatic Manager:</u></b></p> <ul style="list-style-type: none"> <li>▪ LAMP</li> <li>▪ BLIND</li> <li>▪ DSTRIKE</li> <li>▪ ACONTROL</li> <li>▪ KEYPAD</li> <li>▪ KEYPAD2</li> </ul>	<ul style="list-style-type: none"> <li>▪ Building automation e.g. to control lamps or to evaluate keypads</li> </ul>	
<b>Device Specific SW90LS0MA</b>	01V10.002	<p><b><u>TIA-Portal:</u></b></p> <ul style="list-style-type: none"> <li>▪ Frequency measurement modules</li> <li>▪ Energy measurement terminals</li> <li>▪ Motion modules</li> </ul> <p><b><u>Simatic Manager:</u></b></p> <ul style="list-style-type: none"> <li>▪ Onboards I/Os – System 100V</li> </ul>	<ul style="list-style-type: none"> <li>▪ Control of VIPA motion modules</li> <li>▪ Control and read values of energy measurements from VIPA energy measurement terminals</li> <li>▪ Capture of frequencies and speeds with VIPA frequency measurement modules.</li> </ul>	
<b>EtherCAT Communication SW90HS0MA</b>	01V10.001	<p><b><u>TIA-Portal:</u></b></p> <ul style="list-style-type: none"> <li>• Not available</li> </ul> <p><b><u>Simatic Manager:</u></b></p> <ul style="list-style-type: none"> <li>▪ Read and write service data objects via EtherCAT</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reading and writing objects from EtherCAT Slaves.</li> </ul>	

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<b>Modbus Communication</b> <b>SW90AS0MA</b>	01V10.003	<u><b>TIA-Portal and Simatic Manager:</b></u> <ul style="list-style-type: none"> <li>▪ Modbus TCP Client and Server</li> <li>▪ Modbus RTU Master and Slave via CP040 or VIPA SPEED7 CPU</li> </ul>	<ul style="list-style-type: none"> <li>▪ The TCP components allow the use of an Ethernet Interface as Modbus TCP Client or TCP Server</li> <li>▪ The RTU components allow the use of an internal serial RS485 Interface, a VIPA CPU or a VIPA system SLIO CP 040 as Modbus RTU-Master or RTU-Slave</li> </ul>	
<b>Network Communication</b> <b>SW90FS0MA</b>	01V10.001	<u><b>TIA Portal and Simatic Manager:</b></u> <p><b>Open Communication:</b></p> <ul style="list-style-type: none"> <li>▪ FB63 – TSEND</li> <li>▪ FB64 – TRCV</li> <li>▪ FB65 – TCON</li> <li>▪ FB66 –TDISCON</li> </ul> <p><b>Ethernet Communication:</b></p> <ul style="list-style-type: none"> <li>▪ FB12 - BSEND</li> <li>▪ FB13 – BRCV</li> <li>▪ FB14 – GET</li> <li>▪ FB15 – PUT</li> <li>▪ FB55 - IP_CONF</li> <li>▪ FC5 - AG_SEND</li> <li>▪ FC6 - AG_RECV</li> <li>▪ FC10 - AG_CNTRL</li> <li>▪ FC62 - C_CNTR</li> </ul>	<ul style="list-style-type: none"> <li>▪ Open Communication or Ethernet Communication between CPU's.</li> </ul>	

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<b>Serial Communication</b> <b>SW90GS0MA</b>	01V10.003	<p><b><u>TIA Portal and Simatic Manager:</u></b></p> <p><b>Serial Communication:</b></p> <ul style="list-style-type: none"> <li>▪ FC207/SFC 207 - SER_CTRL</li> <li>▪ FC/SFC 216 - SER_CFG</li> <li>▪ FC/SCF 217 - SER_SND</li> <li>▪ FC/SFC 218 - SER_RCV</li> <li>▪ FB 1 - RECEIVE_ASCII</li> <li>▪ FB7 - P_RCV_RK</li> <li>▪ FB 8 - P_SND_RK</li> </ul> <p><b>CP040:</b></p> <ul style="list-style-type: none"> <li>▪ FB 60 – SEND</li> <li>▪ FB 61 – RECEIVE</li> <li>▪ FB 65 - CP040_COM</li> </ul> <p><b>CP240:</b></p> <ul style="list-style-type: none"> <li>▪ FC 0 – SEND</li> <li>▪ FC 1 – RECEIVE</li> <li>▪ FC 8 – STEUERBIT</li> <li>▪ FC 9 - SYNCHRON_RESET</li> <li>▪ FC 11 - ASCII_FRAGMENT</li> </ul>	<ul style="list-style-type: none"> <li>▪ Serial Communication via CP341, CP240, CP040, PtP</li> </ul>	

Library	Version	Features	Application	Download
<b>Simple Motion Control</b> <b>SW90MS0MA</b>	01.V10.008	<u><b>TIA-Portal and Simatic Manager:</b></u> <ul style="list-style-type: none"> <li>▪ AXIS Control</li> <li>▪ Sigma5 EtherCAT</li> <li>▪ Sigma7 EtherCAT</li> <li>▪ Sigma5+7 PulseTrain</li> <li>▪ V1000 PWM</li> <li>▪ V1000 Modbus RTU</li> </ul>	<ul style="list-style-type: none"> <li>▪ Switch on/off</li> <li>▪ Speed setting</li> <li>▪ Relative or absolute Positioning</li> <li>▪ Homing</li> <li>▪ Read and write parameters</li> <li>▪ Query of axis position and status</li> </ul>	
<b>Standard</b> <b>SW90JS0MA</b>	01V10.002	<u><b>TIA Portal and Simatic Manager:</b></u> <ul style="list-style-type: none"> <li>▪ Conversion</li> <li>▪ IEC</li> <li>▪ IO</li> <li>▪ S5 Conversion</li> <li>▪ PID Regulation</li> <li>▪ Time Functions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Conversion</li> <li>▪ Scaling of values</li> <li>▪ IEC conform functions</li> <li>▪ Regulation tasks</li> </ul>	
<b>System Blocks</b> <b>SW90KS0MA</b>	01V10.002	<u><b>TIA-Portal:</b></u> <ul style="list-style-type: none"> <li>▪ Not available</li> </ul> <u><b>Simatic Manager:</b></u> <ul style="list-style-type: none"> <li>▪ Fetch/Write Communication</li> <li>▪ MMC Functions standard CPU's</li> <li>▪ File Functions SPEED7 CPU's</li> <li>▪ General system functions</li> <li>▪ General system components</li> </ul>	<ul style="list-style-type: none"> <li>▪ File access</li> <li>▪ Time measurement</li> </ul>	

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