

- Port 1~4 support Modbus RTU/ASCII (Slave) communication protocol
 - . Method 1 (All OS versions of FBs PLC can support this method)
 - R4047 : Upper Byte = 55H , configure the communication port of Modbus RTU protocol
 - = Other values , Port 1~4 don't support Modbus RTU protocol (FATEK as the default)

Lower Byte : Port assignment for Modbus RTU protocol

Format as below :

Upper Byte	Lower Byte							
55	b7	b6	b5	b4	b3	b2	b1	b0

b0, Reserved ;

b1=0, Port 1 acts as FATEK protocol
 =1, Port 1 acts as Modbus RTU protocol

b2=0, Port 2 acts as FATEK protocol
 =1, Port 2 acts as Modbus RTU protocol

b3=0, Port 3 acts as FATEK protocol
 =1, Port 3 acts as Modbus RTU protocol

b4=0, Port 4 acts as FATEK protocol
 =1, Port 4 acts as Modbus RTU protocol

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b7~b5, Reserved

- ※ It allows to assign multiple ports for Modbus RTU protocol , where the corresponding bit must be 1 ◦

For example:

R4047=5502H, Assign Port 1 as Modbus RTU protocol ;

R4047=5504H, Assign Port 2 as Modbus RTU protocol ;

R4047=5506H, Assign both Port 1 & Port 2 as Modbus RTU protocol ◦

. Method 2 (FBs PLC OS V4.24 or later can support this method)

R4047 : Upper Byte = 56H , configure the communication port of FATEK or Modbus RTU/ASCII communication protocol

= Other values , it doesn't work above function

Lower Byte : Port assignment for communication protocols

Format as below :

Upper Byte	Lower Byte							
56	b7	b6	b5	b4	b3	b2	b1	b0

Bits	Value	Description
b1b0	0 or 1	Port 1 works FATEK protocol
	2	Port 1 works Modbus RTU protocol
	3	Port 1 works Modbus ASCII protocol
b3b2	0 or 1	Port 2 works FATEK protocol
	2	Port 2 works Modbus RTU protocol
	3	Port 2 works Modbus ASCII protocol
b5b4	0 or 1	Port 3 works FATEK protocol
	2	Port 3 works Modbus RTU protocol
	3	Port 3 works Modbus ASCII protocol
b7b6	0 or 1	Port 4 works FATEK protocol
	2	Port 4 works Modbus RTU protocol
	3	Port 4 works Modbus ASCII protocol

- Port 1~4 work the master of Modbus RTU/ASCII communication protocol
 - . Enable the FUN150(M-BUS) instruction, let A/R input of instruction be 0, the assigned communication port performs the master of Modbus RTU communication protocol
 - . Enable the FUN150(M-BUS) instruction, let A/R input of instruction be 1, the assigned communication port performs the master of Modbus ASCII communication protocol
- Assign the "FORCE to RUN" input of the PLC main unit
 - . If the PLC main unit has been assigned with the on-board input to work the "Force to RUN" function, turning on this input more than 3 seconds while PLC stays at STOP mode, the PLC main unit will reset and restart the execution like the power off then power up; the main unit will enter into

the RUN mode if it doesn't find any error; the main unit will still stay at the STOP mode if it finds the error

- Enlarge the ladder program capacity up to 20223 Words (19967 W before)
- Remove the bug - while the system contains the maximum digital inputs (256 points in total), it causes the malfunction of Y0~Y7
- Debug the wrong transfer treatment while executing the simultaneous convergence in step ladder programming