



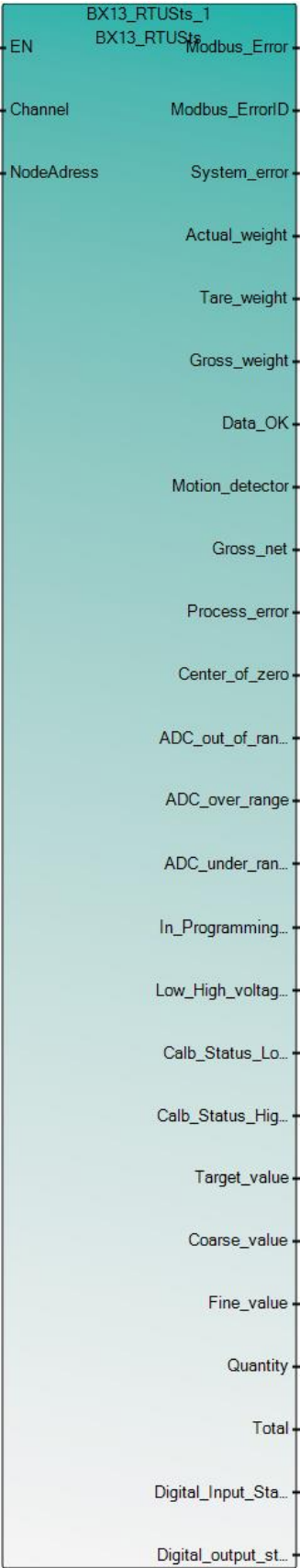
Micro800: Baykon BX13 Modbus RTU Status Block

User Defined Function Block Manual

2015 - Revision 1.00

BX13_RTUSts User Defined Function Block

This UDFB provides status from Baykon BX13 and similar modules using Modbus RTU over RS-485. Block uses big-endian format at Modbus communication registers therefore Baykon devices should be configured as required by this information. The BX13_RTUSts block was generated with Connected Components Workbench Version 8.00 and it is not compatible with lower revisions.



Block Variables	Data Type	Description
FBEN	Bool	When preceding rung conditions are true, function block is enabled.
Channel	UInt	Serial port plug-in channel number(1-5).
NodeAddress	USint	Modbus RTU slave address of Baykon module.
FBENO	Bool	When function block is enabled this output is enabled.
Actual_weight	Dint	Actual weight (Net if the indication is in Net)
Tare_weight	Dint	Tare weight
Gross_weight	Dint	Gross weight
Data_OK	Bool	If TRUE, Actual weight is true
Motion_detector	Bool	If TRUE, Actual weight is unstable
Gross_net	Bool	If TRUE, Actual weight is net weight, If FALSE it is gross weight
Process_error	Bool	If TRUE, the process has an error
Center_of_zero	Bool	If TRUE, weight is in zero range ($\pm 0.25e$)
ADC_out_of_range	Bool	If TRUE, ADC is out of range
ADC_over_range	Bool	If TRUE, ADC is over range
ADC_under_range	Bool	If TRUE, ADC is out of range
System_Error	Bool	If TRUE, system error occurred
In_Programming	Bool	If TRUE, module is in programming mode
Low_High_voltage_detected	Bool	If TRUE, low or high voltage is detected
Target_value	Dint	Target value
Coarse_value	Dint	Coarse value
Fine_value	Dint	Fine value
Calb_Status_LowByte	Dint	1 Ready for calibration
		3 Zero calibration is in process
		4 Span calibration is in process
		9 Calibration error occurred
Calb_Status_HighByte	Dint	1 Calibration timeout
		2 ADC error occurred
		3 Instrument can not be calibrating
		34 Loadcell signal is low or high
		35 Calibration error occurred
		36 Calibration load value entry error
		37 Scale unstable
		38 The Calibration DIP switch is not "On" position
Quantity	Int	Quantity
Total	Dint	Total
Digital_Input_Status	Int	Digital inputs status
Digital_Output_Status	Dint	Digital outputs status
Modbus_Error	Bool	Communication error occurred
Modbus_ErrorID	UInt	Communication error ID (see the table below)

Modbus Communication Error Table

3	The value of the TriggerType has been changed from 2 - 255.
20	The local communication driver is incompatible with the MSG instruction.
21	A local channel configuration parameter error exists.
22	The Target or Local Bridge address is higher than the maximum node address.
33	A bad MSG file parameter exists.
54	A lost modem.
55	The message timed out in the local processor. A link layer timeout.
217	The user cancelled the message.
129	An illegal function.
130	An illegal data address.
131	An illegal data value.
132	A slave device failure.
133	Acknowledge.
134	The slave device is busy.
135	Negative acknowledge.
136	A memory parity error.
137	A non-standard reply.
255	The channel has been shut down.