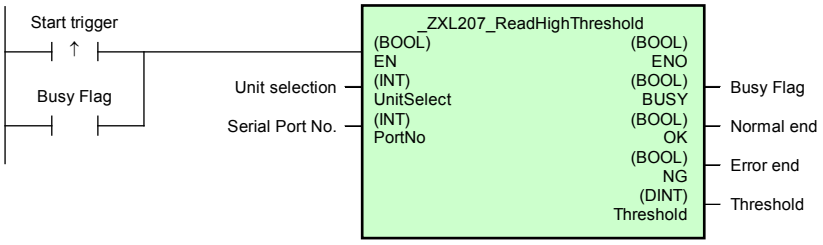
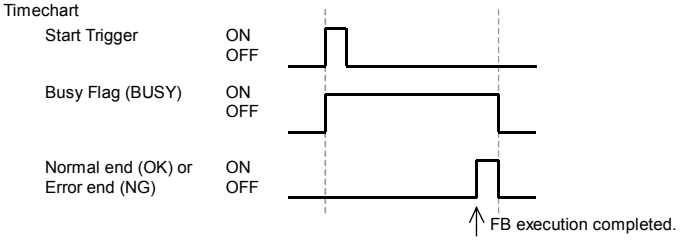
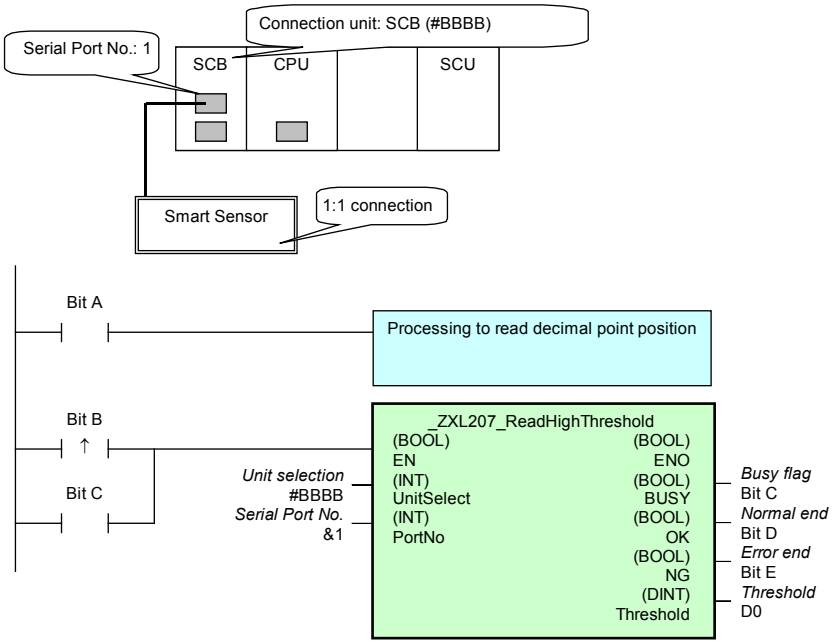
ZXL -207	Read High Threshold: _ZXL207_ReadHighThreshold

Basic function	Reads the high threshold value from the Smart Sensor.	
Symbol		
File name	Lib\FBL\omronlib\LaserSensor\ZXL_ZXL207_ReadHighThreshold10.cxf	
Applicable models	Laser Sensor	ZX-LDA-N
	CPU Unit	Unit version 3.0 or higher
	Serial Communications Units/Boards	• Unit Version 1.2 or higher of CS1W-SCU21-V1, CJ1W-SCU21-V1, and CJ1W-SCU41-V1 Serial Communications Units • Unit Version 1.2 or higher of CS1W-SCB21-V1 and CS1W-SCB41-V1 Serial Communications Boards
	CX-Programmer	Version 5.0 or higher
Conditions for usage	External Connections • Can be used only for 1:1 connections. • Communications must be within one network and cannot cross to another network. Communications Settings The communications settings of the serial port must be the same as those of the Laser Sensor. • The communications settings of the specified serial port can be set to the default Laser Sensor settings using the Set Communications Port (_ZXL600_SetComm) function block, and the other Laser Sensor settings using the Set Serial Gateway Mode (_SCx604_SetPortGATEWAY) function block. CPU Unit Settings PLC Setup: Shared Settings for Communications Instructions in FBs • Communications Instruction Response Timeout Time (default: 2 s) 5 s recommended • Number of retries (default: 0) Shared Resources • Communications ports (internal logical ports)	
Function description	When the Start Trigger turns ON, the high threshold value is read from the Smart Sensor connected to the Serial Port specified by the *Connection unit* and *Serial port No.* The threshold data read with this FB does not include the decimal point position. Use the Read Decimal Point Position FB (_ZXL202_ReadDecimalPoint) to read the decimal point.	
FB precautions	• The FB is processed over multiple cycles. The BUSY output variable can be used to check whether the FB is being processed. • OK or NB will be turned ON for one cycle only after processing is completed. Use these flags to detect the end of FB processing. Timechart 	
EN input condition	Connect EN to an OR between an upwardly differentiated condition for the start trigger and the BUSY output from the FB.	
Restrictions **Input variables**	• Always use an upwardly differentiated condition for EN. • If the input variables are out of range, the ENO Flag will turn OFF and the FB will not be processed.	
Output variables	• This FB requires multiple cycles to process. Always connect an OR including the BUSY output variable to the EN input variable to ensure that the FB is processed to completion (see *Symbol*). • Do not turn the BUSY output variable ON or OFF outside the FB.	
Other	• Up to 3 seconds may be required for this FB to be completed (i.e., from EN turning ON until the OK or NG Flag turns ON).	

Application example	A Smart Sensor is connected 1:1 to serial port 1 on a Serial Communications Board (SCB). When bit A turns ON, the value of the high threshold of the Smart Sensor is stored in D0 and D1. If the stored value is &30000 and the decimal point position is &1, the actual value is 3.0000. 
Related manuals	ZX-L-N Series Smart Sensors Laser Type User's Manual (Z197) ZX Series Smart Sensors Operation Manual (Z157)
Related FBs	Read Decimal Point FB (_ZXL202_ReadDecimalPoint) Read Low Threshold Data (_ZXL208_ReadLowThreshold)

■ **Variable Tables**

Input Variables

Name	Variable name	Data type	Default	Range	Description
EN	EN	BOOL			1 (ON): FB started. 0 (OFF): FB not started.
Unit selection	UnitSelect	INT	&0	At right.	Specify the connection Unit and the serial port. ■ Connected to CPU Unit Unit selection #FFFF Serial port No. Not accessed. (&1 recommended) ■ Connected to Serial Communication Board(SCB) Unit selection #BBBB Serial port No. &1: Port 1 &2: Port 2 ■ Connected to Serial Communication Unit(SCU) Unit selection SCU Unit No. (&0 to &15) Serial port No. &1: Port 1 &2: Port 2
Serial Port No.	PortNo	INT	&1	&1 to &2	

Output Variables

Name	Variable name	Data type	Range	Description
ENO (May be omitted.)	ENO	BOOL		1 (ON): FB processed normally. 0 (OFF): FB not processed or ended in an error.
Busy Flag	BUSY	BOOL		Automatically turns OFF when processing is completed.
Normal end	OK	BOOL		Turns ON for one cycle when processing ends normally.
Error end	NG	BOOL		Turns ON for one cycle when processing ends in an error.
Threshold	Threshold	DINT	19999 to 59999	Outputs the value of the high threshold.

Internal Variables

Internal variables are not output from the FB.

If the NG Flag from the FB turns ON, the following internal variables can be monitored to obtain information on the error.

Name	Variable name	Data type	Range	Description
Error code	ErrorCode	WORD		The results information from the Smart Sensor is output to the Error Code. See below.

Error Code Details

Code	Contents	Meaning
#0000	Normal end	
#2203	Operation error	• A setting is incorrect. Refer to the *Smart Sensor Operation Manual* for setting error conditions for thresholds, hystereses, and other parameters.
#2204	Operation error	• The Sensor is not in RUN mode.

■ **Version History**

Version	Date	Contents
1.00	2004.6.	Original production