

SELPRO

FEATURES

- User friendly ladder editor on lines of IEC61131-3
- Built-in HMI configuration facility
- On line & Off line simulation possible
- Exhaustive function and function block library
- Auto Read and Auto Save facility
- Auto declared variables to represent physical IO of selected configuration
- Project upload from target
- Editable passwords for download, upload and project
- Facility to set debounce time for physical inputs
- Hardware Compatibility- Facility to download applications into the previous versions of bootloader by selecting respective hardware version.
- Customized protocol support (MM3010, MM3030-2)

Programing languages supported Ladder Diagram

Data types supported BOOL, SINT,INT, DINT,UINT, USINT,UDINT, TIME,DWORD, REAL(FLOAT), LREAL (DOUBLE).DATE,TOD,WORD.

Platform Windows XP, Windows VISTA,Windows-7
RAM-512MB or above,
Processor-Min 166MHz
Operating System 32 bit

Maximum No. of Ladder 5000 rungs
(Dependent on product memory capacity)

Supported Products

PRODUCTS	MM3010	MM3030	MM1010
VARIANTS	MM3010	MM3030-1	MM1010-1
	MM3010-1	MM3030-2	MM1010-2
	MM3010-2	MM3030-3	MM1010-4
		MM3032	MM1012-1 MM1012-2
		MM3050	MM1013
			MM1015

IO Expansion Modules Supported IO630, IO610
(8DI, 4TO, 4RO, 2AI-TCR, 2AIVI, 2AO)

INSTRUCTION BLOCKS IN SELPRO

TYPE	INSTRUCTION	TYPE	INSTRUCTION
LOGIC	AND	ARITHMETIC	ADD
	OR		SUB
	NOT		MULTIPLY
	XOR		DVI
SELECTION	SELECT		INC
	MIN		DEC
	MAX		MOD
	LIMIT		SPL_ADD
DATA MANIPULATION	MOVE		SPL_SUB
	MOVE BLOCK		SCALE

INSTRUCTION BLOCKS IN SELPRO

TYPE	INSTRUCTION	TYPE	INSTRUCTION	
COMPARISON	GE	SHIFT AND ROTATE	SHL	
	GT		SHR	
	LE		ROL	
	LT		ROR	
		NE	CONTROL	FTC
		NQ		RAMP SOAK
		WINDOW		PID_T
NUMERIC	SQRT		DIGITAL OUTPUT	
	SIN	BASIC ELEMENTS	NO	
	ASIN		NC	
	COS		NT	
	ACOS		PT	
	TAN		ST	
	ATAN		SB	
	LN		RSB	
	LOG		JUMP	
	ABS		LABLE	
EXP	INTERRUPT		PULSE OUTPUT	
POWER		PWM		
		RATE TOTALIZER		
ANALOG	AIN		TOTALIZER	
	ANALOG OUTPUT			

TYPE	INSTRUCTION
COMMUNICATION	FORCE SINGLE COIL
	FORCE MULTIPLE COIL
	READ COIL STATUS
	READ INPUT STATUS
	READ INPUT REGISTER
	READ HOLDING REGISTER
	PRESET SINGLE REGISTER
	PRESET MULTIPLE REGISTER
FUNCTION BLOCK	SR
	RS
	READ_RTC
	SET_RTC
	TIMER ON DELAY
	TIMER OFF DELAY
	UP DOWN COUNTER
	TIME SWITCH
	SPECIAL TIMER
	SPECIAL UP DOWN COUNTER
	MVIR
	MVRI
	PULSE TIMER
	UP COUNTER
	UP COUNTER RPS
	DOWN COUNTER
	HYSTERISIS
	1ms TIMER

SMI

FEATURES

- User configurable keys.
- Multiple Global Tasks and Power On Tasks can be defined.
- Multiple page sequence can be defined.
- Password protection for Pages are available.

MAXIMUM NO. OF HMI PAGES 255

PROJECT COMPONENTS

- Page
- Text list
- Page Sequence
- Password Levels
- Alarms
- Global Key Definition
- Power On Tasks
- Global Tasks
- Global LED Definition

SCREEN OBJECTS

- Static text,
- Numeric text,
- Dynamic text

RESOLUTION

- Fixed Resolution(0.0001-1)
- User Resolution(0-4)

Tasks supported by SMI

TASK	DESCRIPTION
Add a constant value to tag	Adds a constant value to a tag
Subtract a constant value from tag	Subtracts a constant value from a tag
Add tag B to tag A	Adds contents of tag A and B
Turn Bit On	Turns bit/coil pointed by tag on
Turn Bit Off	Turns bit/coil pointed by tag off
Toggle Bit	Toggles bit/coil pointed by tag
Copy tag B to tag A	Copies contents of tag B into A
Swap tag A and tag B	Swaps contents of tag A and B
Copy tag to STR	Copies contents of tag into STR
Increase value by 1	Increments value of selected tag by 1
Decrease value by 1	Decrements value of selected tag by 1

Tasks supported by SMI

TASK	DESCRIPTION
Conditional Go to Screen	Conditionally takes control on to the screen mentioned while selecting the task
Conditional Go to Next Screen	Conditionally takes control on to the next screen
Conditional Go to Previous Screen	Conditionally takes control on to the previous screen
Conditional Go to Last Screen	Conditionally takes control on to the last screen
Conditional Enable STR	Conditionally Enables screen triggering using STR
Conditional Disable STR	Conditionally Disables screen triggering using STR
Accept Data Entry	Accepts Data at runtime
Conditional Execute Page Sequence	For explanation go to help topics of conditional execute page sequence.
Conditional Escape from Page Sequence	For explanation go to help topics of conditional escape from page sequence.
Escape from Page Sequence	For explanation go to help topics of page sequence.
Execute Page Sequence	For explanation go to help topics of page sequence.
Enable STR	Enables screen triggering using STR
Disable STR	Disables screen triggering using STR
Shift Value Left	Shift value left
Shift Value Right	Shift Value Right
Go to Screen	Takes control on to the screen mentioned while selecting the task
Go to Next Screen	Takes control on to the next screen
Go to Previous Screen	Takes control on to the previous screen
Go to Last Screen	Takes control on to the last screen
Write value to tag	Writes constant value to a tag