

PLC / HMI Product Specification

PLC - Flexible IO Solution



FLEXYS GT35
99(H) x 95.6(W)mm



FLEXYS PANEL TX4
99(H) x 95.6(W)mm



FLEXYS RAIL
93.4(H) x 140(W)mm

FEATURES	<ul style="list-style-type: none"> 3.5" LCD with touch screen Flexible I/O card selection Real time clock Expandable 	<ul style="list-style-type: none"> PLC with built in HMI Flexible I/O card selection Real time clock Expandable 	<ul style="list-style-type: none"> PLC with flexible I/O card selection Real time clock Expandable
DISPLAY	TFT 3.5" diagonal touch screen, Resolution 320x240	LCD with backlight, 4x16 character display, Font size 5x7mm	7 segment display for slot number & card status. Multipurpose LED bank
NO. OF KEYS	5 function keys +1 system key	18 keys (14 user configurable)	One key to scroll through different slots
I/Os	3 I/O slots (Please refer I/O card for flexys series)	4 I/O slots (Please refer I/O card for flexys series)	
DIGITAL INPUTS	4 / 10 / 14 per card, PNP (6 - 30V DC)		
MAXIMUM COUNTING FREQUENCY	FC0 (I0 & I1) & FC1 (I2 & I3) - 5KHz (on power supply card only), Normal digital inputs - 30Hz		
ANALOG INPUTS	3 / 4 / 6 Channels per card (TC, RTD, 0-10V, 0 - 20mA, NTC)		
RESOLUTION	12 Bits		
RELAY OUTPUTS	4 / 8 per card, NO type 5A @ 230V AC / 30V DC (Resistive)		
TRANSISTOR OUTPUTS	8 per card, Source type 100mA @ 24V DC		
ANALOG OUTPUTS	2 / 4 Channels per card (0 - 10V, 0 - 20mA)		
RESOLUTION	14 Bits (0.0 to 100.0% = 0 to 10.000V, 0.0 to 100.0% = 0 to 20.000mA)		
PROGRAM MEMORY	221KB	351KB	
EXPANSION	Yes		
COMMUNICATION INTERFACE	RS485 MODBUS RTU protocol	RS485 MODBUS RTU, Proprietary protocol	
RTC	Yes		
SUPPLY VOLTAGE (AC : 50 / 60 Hz)	18 - 30V DC, 100 - 240V AC		

Compact Series - UNIX & TWIX



UNIX-1
72(H) x 72(W)mm



TWIX-1
48(H) x 96(W)mm

TWIX-2
48(H) x 96(W)mm

TWIX-3
48(H) x 96(W)mm



MM1015
48(H) x 96(W)mm

FEATURES	<ul style="list-style-type: none"> Compact PLC with built in HMI RS485 MODBUS RTU protocol 	<ul style="list-style-type: none"> Compact PLC with built in HMI Configurable LED display RS485 MODBUS RTU protocol 			<ul style="list-style-type: none"> Compact PLC with built in HMI RS485 MODBUS RTU protocol
DISPLAY	6 digits red & 4 green digits 7 segment LED	4 + 4 digits red & 6 green digits 7 segment LED			3 + 4 digits red & 4 green digits 7 segment LED
NO. OF KEYS	3 keys (2 - User configurable)	5 keys (4 - User configurable)			
DIGITAL INPUTS	3 + 1*	6	6 + 2*	8	10
INPUT TYPE	PNP (5 - 30V DC)	PNP (6 - 30V DC)			PNP (11 - 30V DC)
MAXIMUM COUNTING FREQUENCY	FC0 (I0 & I1) - 5KHz, Normal digital input: 30Hz				Normal digital input: 30Hz
ANALOG INPUTS	3 Channels, 1 (TC / RTD), 1 (0-10V), 1(0-20mA)	1 Channel (TC / RTD)	6 Channels 2 (TC / RTD), 2 (0-10V), 2(0-20mA)	1 Channel (TC / RTD)	---
ANALOG OUTPUTS	---	---	1 Channel (0-10V/0-20mA)	---	---
RESOLUTION	12 Bits				
DIGITAL OUTPUTS	2 Relay, 2 Transistor	4 Relay	5 Relay	6 Transistor	6 Relay
TYPE & RATING	For Relay O/P : 5A NO type @230V AC / 30V DC (Resistive), For Transistor O/P : Source type 100mA@24V DC				
PROGRAM MEMORY	240KB	112KB	240KB	112KB	224KB
COMMUNICATION INTERFACE	RS485 MODBUS RTU protocol				
SUPPLY VOLTAGE (AC : 50 / 60Hz)	90 - 270V AC	90- 270V AC, 18-28 V DC		18 - 30V DC	100 - 270V AC (without retention) 180 - 270V AC (with retention)

PLC / HMI Product Specification

PLC - Fixed IO Configuration



MM3030-2
96(H) x 96(W)mm

MM3030-4
96(H) x 96(W)mm



MM3032-2-0-0-230V V2
96(H) x 96(W)mm

MM3032-2-0-0-24V V2
96(H) x 96(W)mm

FEATURES	<ul style="list-style-type: none"> • Low cost • Panel / DIN rail mounting • Fast inputs / outputs • Windows based user friendly software for ladder programming and HMI configuration 	<ul style="list-style-type: none"> • Compact PLC with built-in HMI • Panel / DIN rail mounting • Windows based user friendly software for ladder programming and HMI configuration 	
DISPLAY	4x16 Character LCD	2x16 Character LCD	
NO. OF KEYS	15 keys (12 User configurable)	8 keys (6 User configurable)	
DIGITAL INPUTS	10 PNP (11 - 30V DC)	8 PNP (6 - 30V DC)	
COUNTING FREQUENCY	FC0 (I0 & I1) – 12KHz, FC1 (I2 & I3) & FC2 (I4 & I5) – 7.5KHz Normal input – 30Hz.	FC0 (I0 & I1) – 5KHz, Normal input – 30Hz.	
ANALOG INPUTS	2 Channel (0 - 10V or 0 to 20mA) selectable via jumpers	2 Channels (0 - 20mA) / (0-10V) 2 Channels (0 - 20mA / (0-10V) + 1 NTC Channel	
RESOLUTION	10 Bits	12 Bits	
DIGITAL OUTPUTS	8 Transistor	6 Relay	
TYPE AND RATING	O0-O1 Sink 50mA @ 24V DC (Fast Outputs 50KHz), O2-O7- Source 100mA @ 24V DC	5A NO type @ 230V AC / 30V DC (Resistive)	
ANALOG OUTPUTS	Through expansion	1 Channel, (0 - 10V)	
RESOLUTION	As per expansion modules	14 Bits (0.0% to 100.0% = 0 – 10.000V)	
RTC	YES	NO	
EXPANSION	YES	NO	
PROGRAM MEMORY	351KB	240KB	
COMMUNICATION INTERFACE SLAVE	RS485 MODBUS RTU protocol		
COMMUNICATION INTERFACE MASTER	Proprietary protocol & RS485 MODBUS RTU protocol	RS485 MODBUS RTU protocol	---
SUPPLY VOLTAGE (AC : 50 / 60 Hz)	18 - 30V DC	100-270V AC without retention 180-270V AC with retention	18 – 30V DC

Human Machine Interface



SP3-GT35
96(H) x 96(W)mm



SP112-GT70
149(H) x 203(W)mm



SP112-GT100
193(H) x 273(W)mm

FEATURES	<ul style="list-style-type: none"> • 10 Password levels • Serial printing • Data logging • Built in buzzer • Recipe management 	<ul style="list-style-type: none"> • 7" Touch screen • Ethernet / Serial communication • User management • Recipe management 	<ul style="list-style-type: none"> • Data logging functionality • Update program by USB flash • Multiple communication protocols • In-Built symbol library
DISPLAY	3.5" Diagonal resistive touch screen	7" Diagonal resistive touch screen	10" Diagonal resistive touch screen
RESOLUTION	320 x 240 pixels	800 x 480 pixels	1024 x 600 pixels
USER MEMORY	16 MB	128M Flash + 64M DRAM	
DATA LOGGING	2 GB (External SD card)	Yes	
COMM. PORT 1	Master port - RS485 MODBUS RTU protocol	RS485 MODBUS RTU protocol	
COMM. PORT 2	Slave port - RS232 MODBUS RTU protocol	RS232 MODBUS RTU protocol, Multiple communication protocols	
COMM. PORT 3	Serial printer ESC / PAUSE protocol	Ethernet - 10M / 100M Self adaptation	
USB SLAVE	---	USB 2.0	
KEYS	5 Function keys + 1 System key	---	
RTC	Yes	Yes	
BACKUP BATTERY	3V CR2032	---	
OPERATING TEMPERATURE	0° - 55° C	0° - 50° C	
SUPPLY VOLTAGE	18 - 30V DC	24V DC	