



Full-function PLC with built-in beautiful full-color touch-screen, & onboard I/O configuration. Great look, incredible price.

## Features:

### HMI

- Display: Color touch-screen  
3.5" - 320 x 240, 4.3" - 480x272, 7" - 800 x 480
- 24 user-designed screens and 40 images per application
- HMI graphs - color-code Trends
- Built-in alarm screens
- Text String Library - easy localization
- Memory and communication monitoring via HMI - No PC needed

### PLC

- I/O options: Digital, Analog, including High-speed
- Auto-tune PID, 2 independent loops
- Recipe programs and data logging via Data Tables
- Date & Time-based control

### Communication

- TCP/IP via Ethernet
- Send e-mail function
- SMS messaging
- GPRS/GSM
- Remote Access utilities
- MODBUS protocol supported
- CANbus: CANopen, UniCAN, SAE J1939, and more
- DF1 Slave
- Programming Port: RS232 for 3.5" model, USB for 4.3" & 7"
- 2 ports may be added: 1 Serial (RS232/RS485)/Ethernet & 1 CANbus



**SAMBA 3.5"**



**SAMBA 4.3"**



**SAMBA 7"**

“ It really enhanced our product’s look and flexibility. ”

Ralph Hannmann,  
President of Alyan Pump Company

<h1>SAMBA</h1>		
Article Number	<span style="color: red;">SM35-J-R20</span> <span style="color: red;">SM43-J-R20</span> <span style="color: red; border: 1px solid red; border-radius: 50%; padding: 2px;">New</span> <span style="color: red;">SM70-J-R20</span>	
	<span style="color: red;">SM35-J-T20</span> <span style="color: red;">SM43-J-T20</span> <span style="color: red; border: 1px solid red; border-radius: 50%; padding: 2px;">New</span> <span style="color: red;">SM70-J-T20</span>	
	<b>10</b> Digital Inputs <b>2</b> Digital /Analog <sup>1</sup> <b>8</b> Relay Outputs	<b>10</b> Digital Inputs <b>2</b> Digital /Analog <b>8</b> Transistor Outputs
<b>Inputs</b>		
Digital	<b>12</b>	<b>12</b>
HSC/Shaft-Encoder/Max. Freq. Measurer <sup>2,3</sup>	<b>1</b> 32-bit 30 kHz	<b>3</b> 32-bit 30 kHz
Analog	2: 10-bit, 0-10v 0-20mA, 4-20mA	2: 10-bit, 0-10v 0-20mA, 4-20mA
<b>Outputs</b>		
Digital	<b>8</b> relay	<b>8</b> pnp
High-Speed Outputs/PWM	None	Outputs 0 to 6 can be used as PWM outputs 0.5 kHz
Analog	None	
<b>I/O Expansion</b>	Remote I/Os via CANbus	
<b>Program</b>		
Application Memory	SM35 Application Logic: 112kb • Images: <b>1 MB</b> • Fonts: 512 k SM43 Application Logic: 112kb • Images: <b>2 MB</b> • Fonts: 512 k <span style="color: red; border: 1px solid red; border-radius: 50%; padding: 2px;">New</span> SM70 Application Logic: 112kb • Images: <b>5 MB</b> • Fonts: 512 k	
Scan Time	15µS per 1K of typical application	
Memory Operands	512 coils, 256 registers, 32 long integers (32-bit), 32 double words (32-bit unsigned), 24 floats, 32 timers (32-bit), 16 counters. Additional non-retainable operands: 64 X-bits, 32 X-integers, 16 X-long integers, 16 X-double words	
Data Tables	32K dynamic RAM data (recipe parameters, datalogs, etc.), up to 16K fixed data	
SD Card (Micro)	None	
Enhanced Features	Trends: graph any value and display on HMI • String Library: instantly switch HMI language	
<b>Operator Panel</b>		
Type & Colors	TFT LCD • 65,536 colors • 16 bit resolution • Brightness - Adjustable via touchscreen or software	
Display	SM35 Resolution: 320 x 240 pixels • Size: 3.5" (QVGA) SM43 Resolution: 480 x 272 pixels • Size: 4.3" <span style="color: red; border: 1px solid red; border-radius: 50%; padding: 2px;">New</span> SM70 Resolution: 800 x 480 pixels • Size: 7"	
Touchscreen	Resistive, Analog	
Keys	Displays virtual keyboard when the application requires data entry	
<b>General</b>		
Power Supply	24VDC	
Battery	7 years typical at 25°C, battery back-up for RTC and system data, including variable data	
Clock	Real-time clock functions (date and time)	
Environment	NEMA4X/IP66/IP65 (when panel mounted)	
Standard	CE, UL Many of our products are also UL Class 1 Div 2 and GOST certified - please contact Unitronics	

<sup>1</sup> When selecting NPN for the digital inputs, the 2 Analog inputs cannot be used.

<sup>2</sup> Certain inputs can function as high-speed counters, shaft-encoder inputs, or normal digital inputs.

<sup>3</sup> This specification depends on cable length