Sync Sys.

SS Large Scale PLC
Key Features

SS Large Scale PLC is designed for medium to large-scale control systems and high- performance control applications. It boasts single CPU and dual-rack redundant CPU design, ensuring fast operation and stable control. Drawing upon over 20 years of professional expertise, SS offers reliable, innovative factory automation, evolving for better reliability. With 10,000+ global installations,SS is rigorously validated for optimal performance.

High Reliability
Field-to-system and channel-to-channel isolation
- Fault diagnosis, limit alarm, and fail-safe output
- MRAM non-volatile memory for power-loss data retention

Harsh Environmental Adaptability
· Operating temperature from -20℃ to +70℃
· Storage temperature from -40℃ to +80℃
· PCB with conformal coating
· Compliant with EMC standards (IEC61000-4/IEC61131-2)

High Performance
Less than 100 ms of CPU switchover time
- Less than 100 μs of minimum task scheduling time
- Less than 200 ms of loop response time

Easy to Use
· Hot swap for all modules
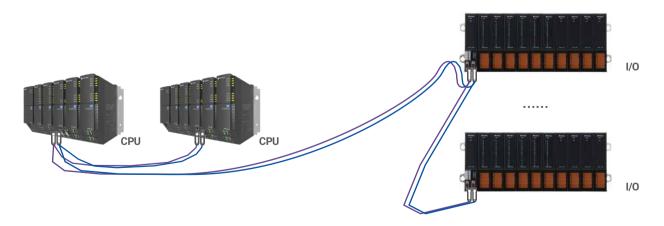- Foolproof design for module mounting

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Technical Data

Model		SS220	SS222	SS224
Controller clock speed		600 MHz	667 MHz	766 MHz
Instruction execution time	Bit operation	15 ns	10 ns	7 ns
	Fixed-point operation	15 ns	10 ns	7 ns
	Floating-point operation	25 ns	18 ns	12 ns
Memory	Integrated memory (program + data)	24 MB	32 MB	64 MB
	Power-loss retentive memory	512 KB MRAM (R area: 64 KB; M area: 4 KB)	512 KB MRAM (R area: 96 KB; M area: 6 KB)	512 KB MRAM (R area: 128 KB; M area: 8 KB)
Communication interface	Integrated Ethernet	2 × RJ45 Interface, 10/100M adaptive, dual-network-port redundancy; supporting Modbus TCP and Sys.TCP protocols		
Communication protocols	Modbus TCP (max. master/slave connections)	16	32	64
	Powerlink (max. PL slaves)	128	256	256
	Profibus-DP (max. PL slaves)	124	124	124
	Communication modules	SS240 × 1, SS249 × 1, SS246 × 2, SS241 × 1	SS240 × 1, SS249 × 1, SS246 × 2, SS241 × 2	SS240 × 1, SS249 × 1, SS246 × 2, SS241 × 2
Configuration capacity	Input variable area (I)	32 KB max.	64 KB max.	128 KB max.
	Output variable area (Q)	32 KB max.	64 KB max.	128 KB max.
	Global variable area (N)	1 MB	4 MB	6 MB
	Free variable area (M)	1 MB	2 MB	4 MB
	Power-loss retentive area (R)	64 KB max.	96 KB max.	128 KB max.

*Dual-rack redundancy in CPU power supply, and network