



DESCRIPTION

WS1616 is a high speed modular controller ideal for controlling major mechanical and electrical equipment. This SAC can be used as a fully functional single-panel system, or integrated into a large system as a supervisory controller with complete programming and diagnostic capabilities.

WS1616 is expandable to a maximum of 72 input/output points; enough for most high point density areas or complete single panel systems.

Remote monitoring and control is facilitated by automatic alarm dial-out, manual operator dial-in, and other configuration options (see bottom of next page).

APPLICATIONS

- High point density areas (up to 72 input or output points in various combinations)
- Mechanical/electrical equipment control
- Fully functional single-panel systems remote monitoring & control applications

POWERFUL FEATURES

HARDWARE

- 16 Universal inputs
- 16 Universal outputs
- Expandable to 72 I/O points
- Isolated switching power supply
- Standard onboard real time clock
- LED output status indicators
- Hand/off/auto output switches
- Rx/Tx/diagnostic/power supply LEDs
- SuperCAP battery backup
- Watchdog timer

SOFTWARE

- TCP/IP communication option
 - BACnet option
 - Menu-driven operator interface
 - Multilevel password security
 - English language programming
 - Global system access
 - System-wide programming
 - System-wide diagnostics
 - Fixed-function (canned) programs
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SPECIFICATIONS

INPUTS

QTY	TYPE	USAGE	RANGES	DEVICES	DISPLAY
16	Universal	voltage	0~1 VDC / 0~5 VDC / 0~10 VDC	standard devices	0 ~ 100%
		current	1~5 VDC / 2~10 VDC	standard devices	0 ~ 100%
			0~20 mA / 4~20 mA / 0~50 mA	current transducers	0 ~ 100%
		digital	1 mA ~ GND / 10 mA ~ GND	contact closure	user defined
		temperature	-10°C ~ 140°C (14°F ~ 284°F)	3k thermistor	temperature
		temperature	-40°C ~ 40°C (-40°F ~ 104°F)	1k thermistor	temperature
	existing sensors	inputs can be adapted to operate with existing sensors			temperature, etc

OUTPUTS

QTY	TYPE	USAGE	RANGES	CAPACITY	DISPLAY
16	Universal	voltage	0~5 VDC / 0~10 VDC / 2~10 VDC	80 mA*	0 ~ 100%
		current	4~20 mA	500 Ω	0 ~ 100%
			4~20 mA	250 Ω	0 ~ 100%
	digital	0~10 VDC	80 mA	user defined	

* Fully modulating linear output

CPU & MEMORY

PROCESSOR			MEMORY		OTHER		
CPU	MHz	BITS	RAM	ROM	CLOCK	A/D Resolution	BACKUP
Z280	20	16	512k*	512k	Real time IC	12 bit	SuperCAP

* Expandable to 512k for additional trending and label

COMMUNICATION PORTS

TYPE	1.2 kbps	2.4 kbps	4.8 kbps	9.6 kbps	19.2 kbps	38.4 kbps	10.0 Mbps
RS-232*	✓	✓	✓	✓			
RS-232**	✓			✓	✓	✓	
RS-485***				✓			
10 BASE-T (with _NBC and _BR options)							✓

* modem/printer port ** terminal port *** SmartLAN network port

ELECTRICAL / MECHANICAL

TRANSFORMER	VA RATING *	BOARD SIZE	RS-232 CONNECTORS
16 ~ 24 VAC	48	230mm x 200m	RJ12

* Loaded VA rating

EXPANSION OPTIONS

COMPONENT	POINT TYPE	QUANTITY	LIMITS
WSOP8	Universal output	8	a maximum of 40 additional points may be added in any combination of expansion components.
WSOP16	Universal output	16	
WSIP8	Universal input	8	
WSIP16	Universal input	16	
WSD08	triac digital output	8	

ENVIRONMENTAL

OPERATING TEMPERATURE	STORAGE TEMPERATURE	RELATIVE HUMIDITY
0°C ~ 50°C (32°F ~ 122°F)	-35°C ~ 66°C (-31°F ~ 151°F)	0 ~ 95% RH, non-condensing

ORDERING OPTIONS

WS1616_NBC	WS1616_MP	WS1616_BR
BACnet controller	BACnet enable 240 external points via SMARTLAN. Note: Order as WS1616_NBC_MP	Bridge 2000-E functionality

