## ControlWave PAC Base Unit



**ControlWave** 

**Remote Automation Solutions** 

ControlWave PAC is a high performance RTU/PLC suitable for demanding in-plant measurement and control applications with a high concentration of local I/O. Hot-swap I/O maximizes system up time during maintenance operations and Hold Last maintains safe operating conditions in the event of a CPU failure. Single and Dual-Redundant internal power supply selection allows the proper level of reliability to meet the requirements of the application.

CW				(PC 850)	
MODEL &	SPEC				
SEG	SHEET	DESCRIPTION	APPROVAL	SELECT	
Α		Base Housing		A	
		None	UL	0	
10	CWPAC	4 I/O slot panel mount chassis	UL	1	
10		8 I/O slot 19" rack mount chassis	UL	2	
		8 I/O slot panel mount chassis	UL	3	
		Internal Power Supply Sequencer Module			
В		(PSSM) (Slot #1)		В	
		None	UL	0	
		24 V input power (CE Approved)			
		Standard PSSM	UL	1	
20	CWPAC	24 V input power (Not CE Approved)			
		PSSM with single power supply modules	UL	3	
		24 V input power (Not CE Approved)			
		PSSM with dual power supply modules	UL	4	
CC		CPU Module (Slot #2) (Note 1)		CC	
		None		00	
		CPU with 64 MB SDRAM, 32 MB of Flash			
	CWPAC	1-ENET & 2-RS 232	UL	01	
		CPU with 64 MB SDRAM, 32 MB of Flash			
		1-ENET & 3-RS 232 & 1-RS 485 (Note 2)	UL	02	
30		CPU with 64 MB of Flash			
30		3-ENET & 3-RS 232 & 1-RS 485 (Note 2)	UL	04	
		CPU with 64 MB of Flash			
		3-ENET & 2-RS 232 & 2-RS 485 (Note 2)	UL	05	
		I/O Expansion Rack CPU			
	CWPAC	Comm CPU, 1-ENET & 2-RS 232	UL	06	
		Comm CPU, 3-ENET & 3-RS 232 & 1-RS 485	UL	07	
DD		Embedded Application		DD	
39	CWPAC	None	UL	0	
Е		CE Approval		E	
40	CWPAC	Without CE approval	UL	0	
40		CE foil shield and labels	UL/CE	1	
Model Number: CW - <u>A</u> - <u>B</u> - <u>CC</u> - <u>DD</u> - <u>E</u> - <u>FF</u> <u>NN</u> - <u>OO</u> - <u>P</u>					
Note 1: RS485 Comm port 3 is RJ45. RS 485 ports have 500 V isolation.					
Note 2: The I/O Expansion Rack CPU interfaces to the main ControlWave Chassis CPU via Ethernet.					

CW		1		(PC85
MODEL & SEG	SPEC SHEET	DESCRIPTION		
FF-NN	SHEET	DESCRIPTION I/O Slot #3, through #10	APPROVAL	SELEC FF-NN
FF-ININ		Local Termination I/O Modules		FF-ININ
		None	UL	00
		16 Al, 4-20 mA Internally or Externally powered Al		00
		8 AI, 4-20 mA Internally or Externally powered AI	UL	01
				03
		6 TC, B, R, S, J, E, K, T, C, N, + 10 mV		
		4 RTD, 2, 3, or 4 wire platinum RTD	UL	06 07
		8 AO, Without read back 4-20 mA		
	CWPAC	32 DI, Selectable Int or Ext powered Dry Contact	UL	09
		16 DI, Selectable Int or Ext powered Dry Contact	UL	10
		32 DO, Open Drain - 500 mA current capability	UL	11
		16 DO Without read back,		
		Open Drain - 500 mA current capability	UL	12
		6 UDI (HighSpeed Counter),		
		With selectable debounce @ (0-10 KHz) for low or High		
		speed counters. Inputs 24 VDC only.	UL	14
		Remote Termination I/O Modules with		
50-120		Remote Terminal Blocks (No Fuses)		
		16 AI, 4-20 mA Internally or Externally powered AI	N/A	20
	CWPAC	8 AI, 4-20 mA Internally or Externally powered AI	N/A	22
		16 AI (Used with Redundant I/O system),		
		1-5 V & ext. powered 4-20 (with 250 ohm on input)	N/A	23
		6 TC, B, R, S, J, E, K, T, C, N, + 10 mV	N/A	24
		4 RTD, 2, 3, or 4 wire platinum RTD	N/A	25
		8 AO, without read back 4-20 mA	N/A	26
		8 AO, with read back for Redundant I/O 4-20 mA	N/A	34
		32 DI, Selectable Int or Ext powered Dry Contact+	N/A	28
		32 DO, Open Drain - 500 mA current capability	N/A	30
		16 DO without read back,		
		Open Drain - 500 mA current capability	N/A	31
		16 DO with read back for Redundant I/O,		
		Open Drain - 500 mA current capability	N/A	35
		6 UDI (HighSpeed Counter),		
		With selectable debounce @ (0-10 KHz) for low or High		
		speed counters. Inputs 24 VDC only.	N/A	33

## ControlWave PAC Base Unit (Cont.)

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CW				(PC850)
MODEL &	SPEC			
SEG	SHEET	DESCRIPTION	APPROVAL	SELECT
FF-NN		I/O Slot #3 through #10		FF-NN
		Remote Termination I/O Modules with		
		Remote Terminal Blocks (With Fuses)		
		16 AI, 20 mA Internally or Externally powered AI	N/A	40
		8 AI, 4-20 mA Internally or Externally powered AI	N/A	42
		16 AI (Used with Redundant I/O system),		
		1-5 V & ext. powered 4-20 (with 250 ohm on input)	N/A	43
		8 AO without read back, 4-20 mA	N/A	44
		8 AO with read back, 4-20 mA		
50-120		(Use with Redundant I/O only)	N/A	60
	CWPAC	32 DI, Selectable Int or Ext powered Dry Contact	N/A	46
		16 DI, Selectable Int or Ext powered Dry Contact	N/A	47
		32 DO, Open Drain - 500 mA current capability	N/A	48
		16 DO, Open Drain - 500 mA current capability	N/A	49
		16 DO with read back,		
		Open Drain - (Use with Redundant I/O only)	N/A	61
		32 DI With 120 Vac Remote Terminal Block (NO FUSES)	N/A	70
		32 DO With 120 Vac Block, 6Amp RELAY (NO FUSES)	N/A	71
		Remote Termination I/O Module spares without		
		Remote Terminal Blocks		
		16 AI, 20 mA Internally or Externally powered AI	N/A	72
	CWPAC	8 AI, 4-20 mA Internally or Externally powered AI	N/A	73
		16 AI (Used with Redundant I/O system),		
		1-5 V & ext. powered 4-20 (with 250 ohm on input)	N/A	74
		6 TC, B, R, S, J, E, K, T, C, N, + 10mV	N/A	75
		4 RTD, 2, 3, or 4, wire platinum RTD	N/A	76
		8 AO without read back, 4-20 mA	N/A	77
50-120		32 DI, Selectable Int or Ext powered Dry Contact	N/A	78
		16 DI, Selectable Int or Ext powered Dry Contact	N/A	79
		32 DO, Open Drain - 500 mA current capability	N/A	80
		16 DO, Open Drain - 500 mA current capability	N/A	81
		6 UDI (HighSpeed Counter),		
		With selectable debounce @ (0-10 KHz) for low or High		
		speed counters. Inputs 24 VDC only.	N/A	82
		8 AO with read back, 4-20 mA		
		(Use with Redundant I/O only)	N/A	83
		16 DO with read back for Redundant I/O,		
		Open Drain - 500 mA current capability	N/A	84

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CW				(PC850)
MODEL & SEG	SPEC SHEET	DESCRIPTION	APPROVAL	SELECT
00		Remote Terminal Cable Selection		00
		Number of ControlWave Micro Remote I/O Modules		
	CWPAC	None	N/A	00
		1 Remote I/O Module	N/A	01
		2 Remote I/O Module	N/A	02
130		3 Remote I/O Module	N/A	03
130		4 Remote I/O Module	N/A	04
		5 Remote I/O Module	N/A	05
		6 Remote I/O Module	N/A	06
		7 Remote I/O Module	N/A	07
		8 Remote I/O Module	N/A	08
Р		Remote Termination Length Selection		Р
	CWPAC	None	N/A	0
		18 inch Cable	N/A	1
190		39 inch Cable	N/A	2
		6.5 foot Cable	N/A	3
		13 foot Cable	N/A	4

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