



HC900 Redundant Hybrid Controller Assemblies

Model Selection Guide with Price Data

Model Selection Guide
51-51-16-82 Issue 1

Honeywell Proprietary

Power Supplies	MODEL NUMBER
120/240VAC, 60W	900P01 -0001
120/240VAC, 28W Note 5	900P02 -0001

Redundant Controller Rack	
Redundant CPU Rack	900RR0 - 0001
Controller C70R CPU Config.SW & Docs	900C71R-0000-10
Controller C70R CPU Note 1	900C72R-0000-10
Redundant Switch Module	900RSM - 0001

Remote I/O Rack	
I/O Scanner - 2 Port (1 per I/O rack)	900C73R-0000-10
4 I/O Slot Rack	900R04-0001
8 I/O Slot Rack	900R08 - 0101
12 I/O Slot Rack	900R12 - 0101
8 Slot Rack -Red. Power	900R08R - 0101
12 Slot Rack - Red. Power	900R12R - 0101
Redundant Power Status Module	900PSM - 0001

I/O Module Selections	
Analog Input (8 channel)	900A01 - 0102
Analog Output, 0 to 20mA, (4 channel)	900B01 -0101
Digital Input, Contact type, (16 channel)	900G01 - 0102
Digital Input, 24VDC (16 channel)	900G02 - 0102
Digital Input, 120/240 VAC, (16 channel)	900G03 - 0102
Digital Output, Relays (8 channel)	900H01 - 0102
Digital Output, 24VDC (16 channel)	900H02 - 0102
Digital Output, 120/240 VAC (8 channel)	900H03 - 0102

Terminal Boards		MODEL NUMBER
Low Voltage Terminal Block (Euro style)	Note 3	900TEK - 0001
Low Voltage Terminal Block (Barrier Style)	Note 3	900TBK - 0001
High Voltage Terminal Block (Euro style)	Note 3	900TER - 0001
High Voltage Terminal Block (Barrier Style)	Note 3	900TBR - 0001
Analog Input Remote Terminal Panel (RTP)	Note 6	900RTA - L001
Relay Output Remote Terminal Panel (RTP)	Note 6	900RTR - H001
DI, DO, AO Remote Terminal Panel (RTP)	Note 6	900RTS - 0001
Low Voltage RTP Cable (1.0M, 3.28ft.)	Note 6	900RTC - L010
Low Voltage RTP Cable (2.5M, 8.2ft.)	Note 6	900RTC - L025
Low Voltage RTP Cable (5.0M, 16.4ft.)	Note 6	900RTC - L050
High Voltage RTP Cable (1.0M, 3.28ft.)	Note 6	900RTC - H010
High Voltage RTP Cable (2.5M, 8.2ft.)	Note 6	900RTC - H025
High Voltage RTP Cable (5.0M, 16.4ft.)	Note 6	900RTC - H050
Filler Block Terminal Cover		900TNF - 0001
Shield Terminal Strip (package of 2)		900TSS - 0001
Terminal board jumpers (10, two pos jumpers)	Note 4	900J02 - 0001
Terminal board jumpers (10, ten pos jumpers)	Note 4	900J10 - 0001

Manuals		
Full Document set on CD (<i>supplied with CPU 900C71R--</i>)	Note 2	900ME1-0021-10
Full document set, hard copy - English	Note 2	900ME2-0021-10

Software		
HC Designer Config. Software CD (<i>supplied with CPU 900C71R--</i>)		900W01-0021-10
HC Utilities Software/Documentation CD		900W02-0021-10

Note 1: Documentation and Hybrid Control Designer Configuration Software are not provided with this model. If required, specify CPU model number 900C71R-00NN-NN or order items separately.

Note 2: A full documentation set on CD is provided with CPU 900C71R-00NN-NN. If additional copies or if a hard copy manual set is desired, specify them as separate items. The manual set contains one each of all HC900 product manuals. Documentation (CD and hard copy) is available only in English language.

Note 3: Terminal blocks for I/O modules must be ordered separately. Two styles are available for each of the two types, Euro style and Barrier style. The type of terminal block (gold or tin contacts) must be matched to the appropriate I/O board type. See table below for proper selections. The CPU, Scanner and power supply cards do not require separate terminal blocks.

Card Type	Terminal Blocks	
Analog Input (8 channel)	900TEK-0001	900TBK-0001
Analog Output, 0 to 20mA, (4 channel)	900TEK-0001	900TBK-0001
Digital Input, Contact type, (16 channel)	900TEK-0001	900TBK-0001
Digital Input, 24VDC (16 channel)	900TEK-0001	900TBK-0001
Digital Input, 120/240 VAC, (16 channel)	900TER-0001	900TBR-0001
Digital Output, Relays (8 channel)	900TER-0001	900TBR-0001
Digital Output, 24VDC (16 Channel)	900TEK-0001	900TBK-0001
Digital Output, 120/240 VAC (8 channel)	900TER-0001	900TBR-0001

Note 4: Jumpers available for Barrier Style terminals only.

Note 5:

Specify one 900P02-0001 power supply for each C70R CPU used in the Controller Rack.

To determine if the 900P02 power supply will support the needs of the specific rack, use the table and limit tests below to calculate power requirements.						
Enter quantity of each card type, calculate 5V and 24V max current and sum for all card types.						
	"A"	"B"	"C"		"D"	"E"
		Max Current	Max Current		5V	24V
Card type	Quantity	@ 5 V in mA	@ 24 V in mA		mA Sub. Tot	mA Sub. Tot
					(D = A * B)	(E = A * C)
Controller (C30, C50)	()	600	0		()	()
Scanner 1 Port	()	000	0		()	()
Controller (C70R)	()	1500	0		()	()
Scanner 2 Port	()	770	0		()	()
Power Status Module (PSM)	()	22	0		()	()
Analog Input (8 pts)	()	40	25		()	()
Analog Output (4 pts)	()	40	200		()	()
AC Digital Input (16 pts)	()	130	0		()	()
DC Digital Input (16 pts)	()	130	0		()	()
Contact Input (16 pts)	()	130	40		()	()
AC Digital Output (8 pts)	()	220	0		()	()
DC Digital Output (16 pts)	()	340	0		()	()
Relay Output (8 pts)	()	110	100		()	()
Total mA				Total 5V=	()	Total 24V= ()
				1	Is total 5V less than 2000?	Yes No
				2	Is total 24V less than 900?	Yes No
				3	If the answer to 1 and 2 are YES, go to 4.	
					If the answer to 1 or 2 is NO, use power supply 900P01-0001	
				4	Multiply 5V total by 5.1	()
				5	Multiply 24V total by 24.5	()
				6	Sum results of 4 and 5	()
				7	Divide results of 6 by 1000	()
				8	Is the result of 7 less than "28"?	Yes No
				9	If the answer to 8 is Yes, Use power supply 900P02-0001	
					If the answer to 8 is No, use power supply 900P01-0001	

Note 6

Using the table below, select a Remote Terminal Panel and Cable Assembly to match the module type.

Module Types	Module Model	Remote Terminal Panel	Acceptable Cables
Analog Input Module	900A01 - 0103	900RTA - L001	900RTC - L010 900RTC - L025 900RTC - L050
Relay Output Module	900H01 - 0102	900RTR - H001	900 RTC - H010 900 RTC - H025 900 RTC - H050
Analog Output Module Contact Discrete Input Module DC Discrete Input Module DC Discrete Output Module	900B01 - 0102 900G01 - 0102 900G02 - 0102 900H02 - 0102	900RTS - 0001	900RTC - L010 900RTC - L025 900RTC - L050
AC Discrete Input Module AC Discrete Output Module	900G03 - 0102 900H03 - 0102	900RTS - 0001	900 RTC - H010 900 RTC - H025 900 RTC - H050