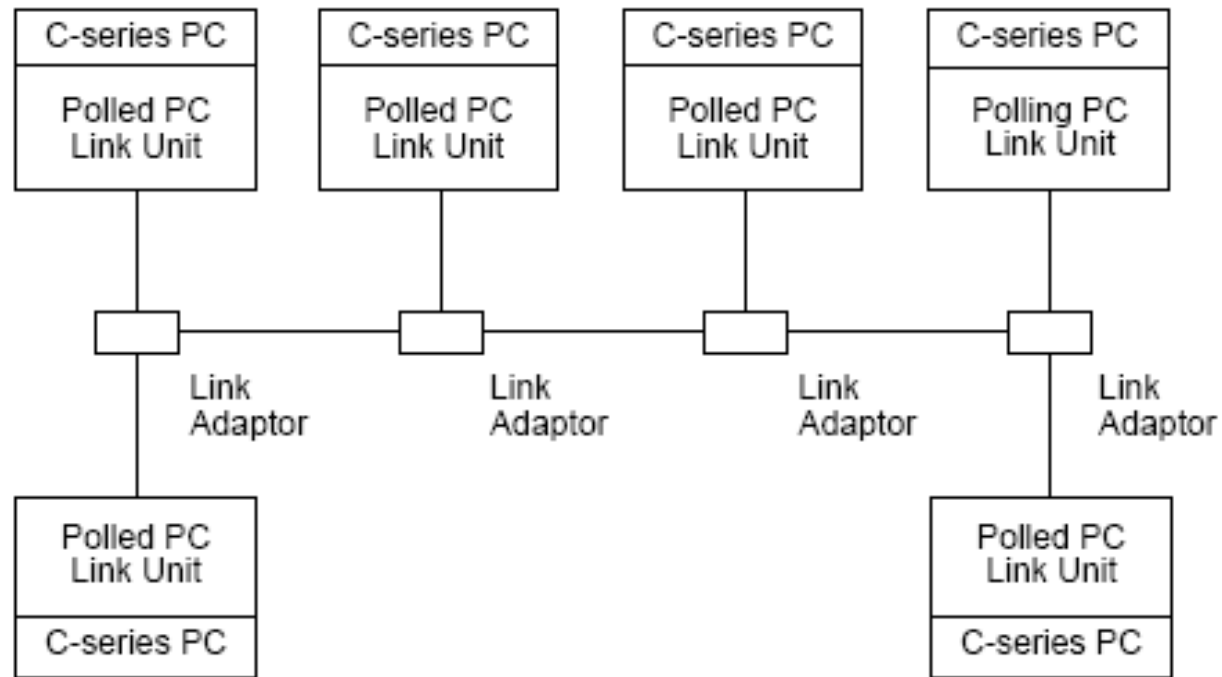

Connessione PLC OMRON C200H con scheda PC LINK C200-LK401

2-10-2019

Rev.1.0

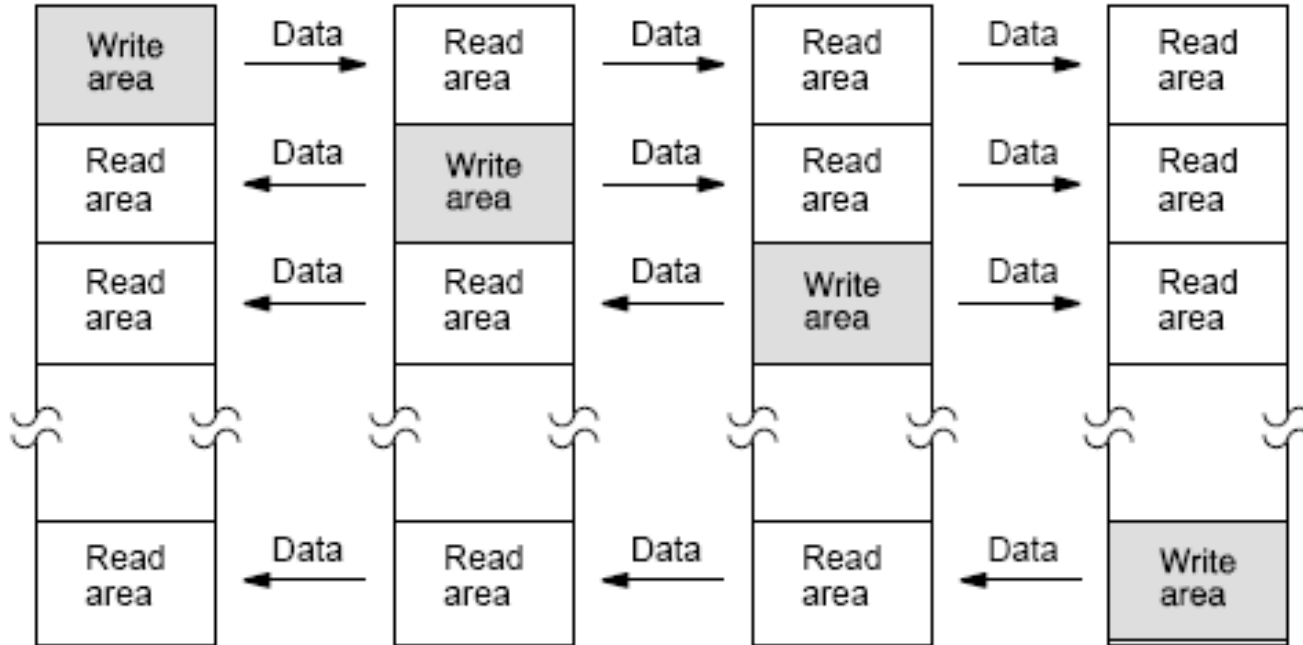


Schema Connessione



LR Area Data

PC Link Systems employ the LR area in the exchange of data.



What determines what part of the LR area is allocated to which PC is the unit number assigned to each PC Link Unit. These numbers in turn determine which PC Link Units are polling units and which are polled units.

LR Area Division Tables

The PC Link Unit has the ability to transfer from 2 to 32 words (32 to 512 bits) of data between PCs. The LR area is divided according to the number of PC Link Units and the number of Subsystems in the System.

Single-level Systems

C200H, C200HS, C200HX/HG/HE(-Z), C1000H, or C2000H PCs

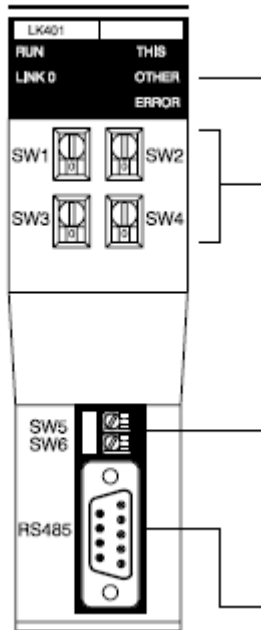
No. of PC Link Units		17 to 32	9 to 16	5 to 8	3 or 4	2
LR Wd	LR bits/Unit	32	64	128	256	512
0 and 1		Unit #0	Unit #0	Unit #0	Unit #0	Unit #0
2 and 3		Unit #1				
4 and 5		Unit #2	Unit #1	Unit #1	Unit #1	Unit #1
6 and 7		Unit #3				
8 and 9		Unit #4	Unit #2	Unit #1	Unit #1	Unit #1
10 and 11		Unit #5				
12 and 13		Unit #6	Unit #3	Unit #2	Unit #1	Unit #1
14 and 15		Unit #7				
16 and 17		Unit #8	Unit #4	Unit #2	Unit #1	Unit #1
18 and 19		Unit #9				
20 and 21		Unit #10	Unit #5	Unit #2	Unit #1	Unit #1
22 and 23		Unit #11				
24 and 25		Unit #12	Unit #6	Unit #3	Unit #1	Unit #1
26 and 27		Unit #13				
28 and 29		Unit #14	Unit #7			

PC Data Areas

PC Link Units utilize data areas in the PCs for both communication and operation monitoring. These data areas are enumerated in the table below.

	C2000H, C1000H, C200H, C200HS, or C200HX/HG/HE(-Z)
LR Area	LR 0000 to LR 6315 (1,024 bits)
Error flags	24708 to 24715 24808 to 24815 24908 to 24915 25008 to 25015
PC RUN flags	24700 to 24707 24800 to 24807 24900 to 24907 25000 to 25007

Piedinatura scheda C200H-LK401



Display Indicates operational status

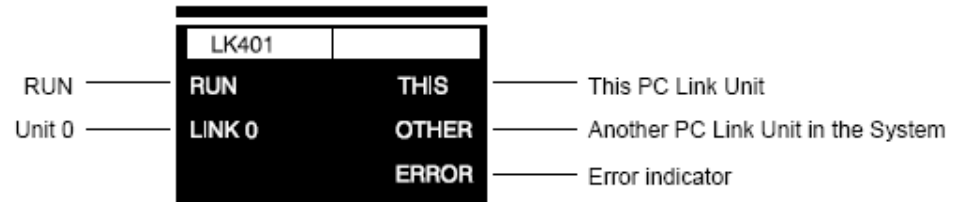
Switches 1 through 4

Used to set the PC Link Unit unit number, the Special I/O Unit unit number, and the number of LR bits in the Subsystem.

Switches 5 and 6

Used to connect the PC Link Unit to another PC Link Unit or to a Link Adapter.

RS-485 connector



LED	Function/Meaning
RUN	Lit when PC Link Units are operating.
LINK 0	Lit when PC Link Unit #0 (polling unit) is operating properly. Not lit when an error has occurred.
THIS	Lit when this PC Link Unit is operating properly. Not lit when an error has occurred.
OTHER	Lit when other PC Link Units are operating properly. Not lit when an error has occurred.
ERROR	Light when a unit number is set incorrectly; flashes when an error has occurred on the links between #0 or others and this PC Link Unit. Not lit during normal operation.
All LEDs not lit.	All LEDs will go out when an error occurs in the PC.

Switch Setting

SW1 and SW2

These switches are used to set the Unit number.

The same unit number must not be specified for more than one Unit.

SW3: Baud Rate

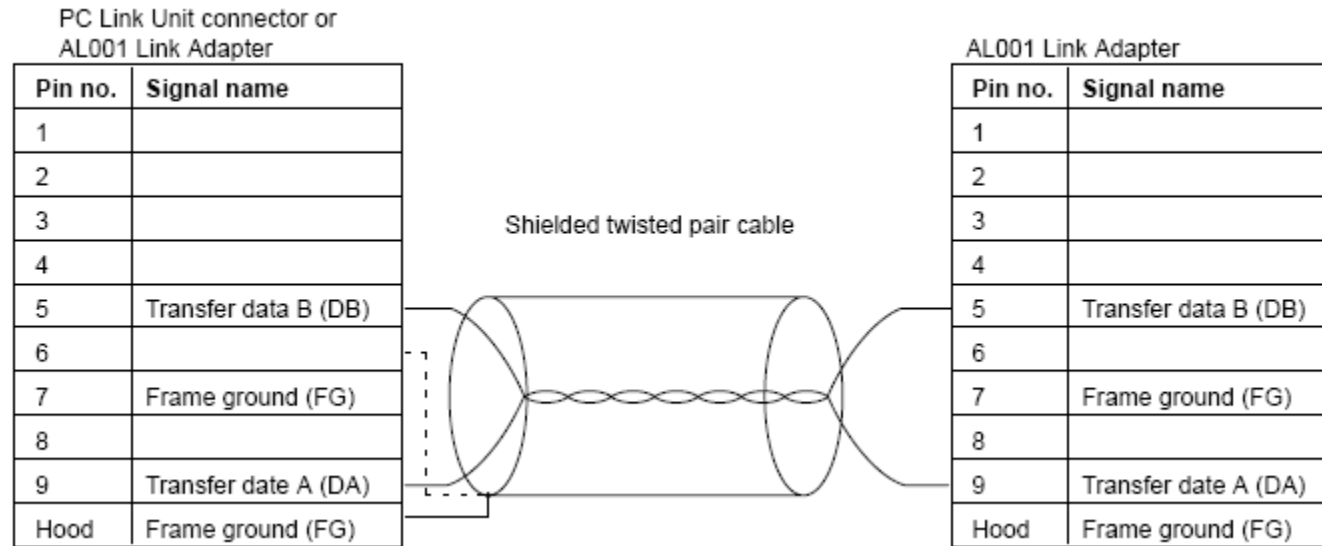
The baud rate of the Host Link Unit, as determined by the following switch settings, must match that of the host computer.

SW3	Baud rate
0	300 bps
1	600 bps
2	1,200 bps
3	2,400 bps
4	4,800 bps
5	9,600 bps
6	19,200 bps
7	Do not set
8	
9	

SW4: Command Level, Parity and Transmission Code

SW4	Command Level*	Parity	Transmission Code
0	1	Even	ASCII 7 bit, 2 stop bits
1	1,2		
2	1,2,3**		
3	Do not set		
4	1	Odd	
5	1,2		
6	1,2,3		
7	Do not set		
8	1	Even	JIS 8 bit, 1 stop bit
9	1,2		
A	1,2,3		
B	Do not set		
C	1	Odd	
D	1,2		
E	1,2,3		
F	Do not set		

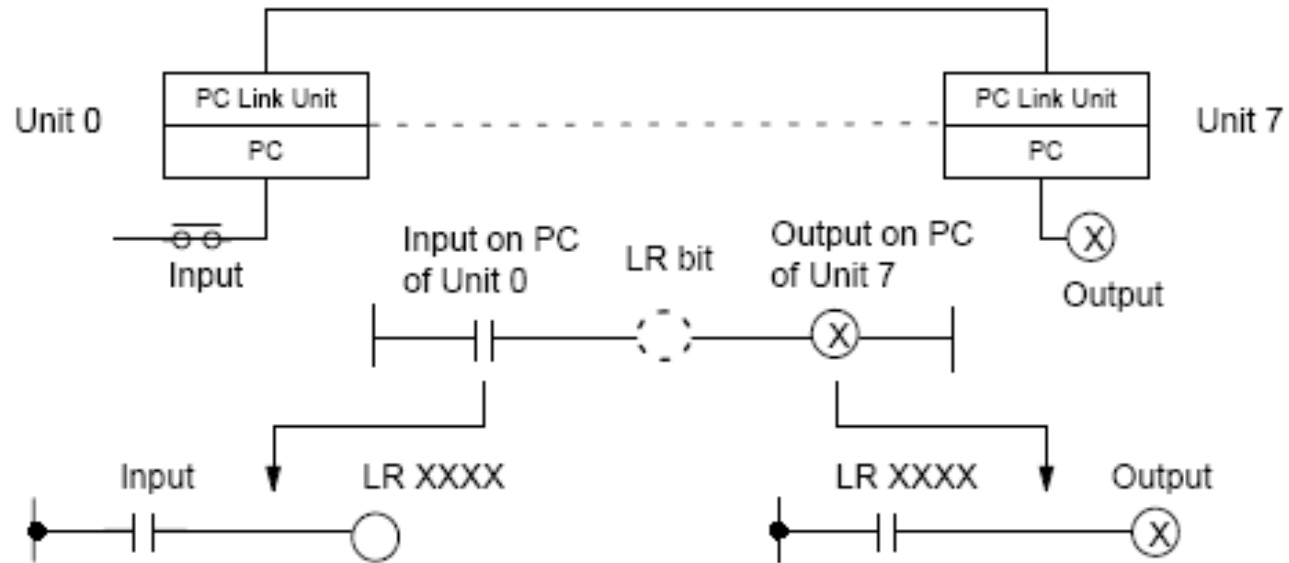
Cablaggio



5-----5

9-----9

Ladder



Flag Errors

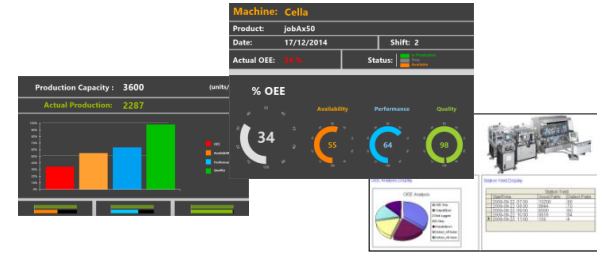
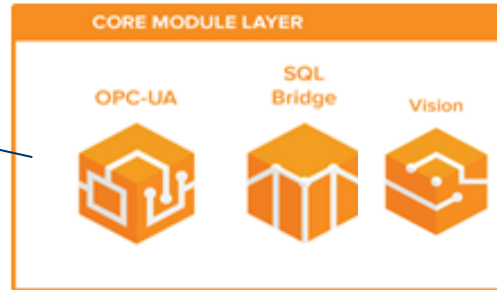
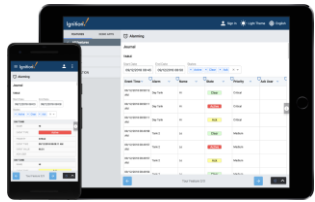
PC RUN Flags can be read to determine the operational status of each PC to which a PC Link Unit is mounted. All PCs are operational when their PC RUN Flag is ON.

If there is a transfer error or a power failure for any PC Link Unit, the Error Flag for that Unit will turn ON, and an error message will be sent. When the error is removed (the power comes on or transfer preparation is completed) the Error Flag will go OFF. An error in Unit 0 stops all data transfer, but an error in another Unit only stops that Unit's communication. LR bit status is maintained whenever communication stops for one or more Units. Error Flags will not turn ON for FALS(07) instructions; use the PC RUN Flags. The following tables show the unit number for Single-level Systems (top line) and the unit number followed by the level for Multilevel Systems (bottom line).

C200H, C200HS, C200HX/HG/HE(-Z), C1000H, and C2000H PCs

	Bit 8								Bit 7								Bit 0
	Bit 15																
SR 247	#31 #15,1	#30 #14,1	#29 #13,1	#28 #12,1	#27 #11,1	#26 #10,1	#25 #9,1	#24 #8,1	#31 #15,1	#30 #14,1	#29 #13,1	#28 #12,1	#27 #11,1	#26 #10,1	#25 #9,1	#24 #8,1	
SR 248	#23 #7,1	#22 #6,1	#21 #5,1	#20 #4,1	#19 #3,1	#18 #2,1	#17 #1,1	#16 #0,1	#23 #7,1	#22 #6,1	#21 #5,1	#20 #4,1	#19 #3,1	#18 #2,1	#17 #1,1	#16 #0,1	
SR 249	#15 #15,0	#14 #14,0	#13 #13,0	#12 #12,0	#11 #11,0	#10 #10,0	#9 #9,0	#8 #8,0	#15 #15,0	#14 #14,0	#13 #13,0	#12 #12,0	#11 #11,0	#10 #10,0	#9 #9,0	#8 #8,0	
SR 250	#7 #7,0	#6 #6,0	#5 #5,0	#4 #4,0	#3 #3,0	#2 #2,0	#1 #1,0	#0 #0,0	#7 #7,0	#6 #6,0	#5 #5,0	#4 #4,0	#3 #3,0	#2 #2,0	#1 #1,0	#0 #0,0	
	Error Flags								PC RUN Flags								

Schema Collegamento



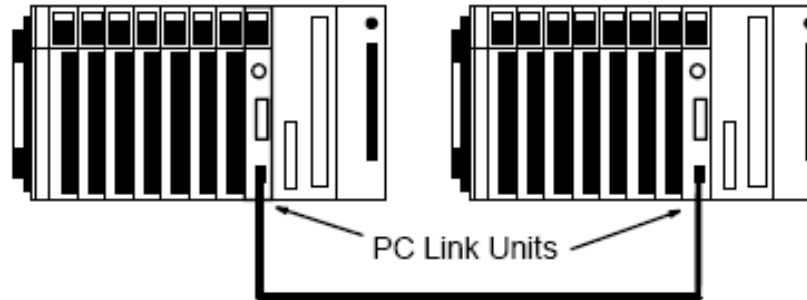
KPI AND DIAGNOSTIC

DATABASE



SCADA PC

RS232



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