

CP1L-J: Comparison Table

This reference table highlights only the differences between the indicated models.

Refer to:

- CP1L Manuals
- [https://files.omron.eu/downloads/latest/manual/en/w471_cp1l_cpu_unit_\(including_cp1l-j\)_operation_manual_en.pdf](https://files.omron.eu/downloads/latest/manual/en/w471_cp1l_cpu_unit_(including_cp1l-j)_operation_manual_en.pdf)
- CP1L-E Manual
- https://files.omron.eu/downloads/latest/manual/en/w516_cp1l-el_cp1l-em_cpu_unit_operation_manual_en.pdf

Original Item	CP1L-J14DR-D	CP1L-J14DR-A	CP1L-J14DT1-D	CP1L-J20DR-A	CP1L-J20DR-D	CP1L-J20DT1-D
Suggested replacement	CP1L-EL20DR-D	CP1L-EL20DR-D	CP1L-EL20DT1-D	CP1L-EL20DR-D	CP1L-EL20DR-D	CP1L-EL20DT1-D
# Inputs	8 -> 12	8 -> 12	8 -> 12			
# outputs	6 -> 8	6 -> 8	6 -> 8			
Power supply		220 Vac -> 24 Vdc		220 Vac -> 24 Vdc		
Output type						
dimension L	86 mm -> 130 mm	86 mm -> 130 mm	86 mm -> 130 mm	86 mm -> 130 mm	86 mm -> 130 mm	86 mm -> 130 mm
Dimension H						
Dimension W						
Wiring			TR Output 4 separate commons -> TR Output 2 separate commons + PS			TR Output 4 separate commons -> TR Output 2 separate commons + PS
Program memory	1KStep -> 5KStep	1KStep -> 5KStep	1KStep -> 5KStep	1KStep -> 5KStep	1KStep -> 5KStep	1KStep -> 5KStep
FB memory	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep
Data Memory						
Built-in						
Slot for plug-in modules						
USB (programming interface only)	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available
Ethernet	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1
Number of CP1W units						
Interrupt	4 (HSC: 5KHz in total) -> 6 (HSC: 5KHz in total)	4 (HSC: 5KHz in total) -> 6 (HSC: 5KHz in total)	4 (HSC: 5KHz in total) -> 6 (HSC: 5KHz in total)			
Single phase monodirectional	4x20KHz -> 4x100KHz	4x20KHz -> 4x100KHz	4x20KHz -> 4x100KHz	4x20KHz -> 4x100KHz	4x20KHz -> 4x100KHz	4x20KHz -> 4x100KHz
Bidirectional: pulse + direction; CW/CCW	2x10KHz -> 2x100KHz	2x10KHz -> 2x100KHz	2x10KHz -> 2x100KHz	2x10KHz -> 2x100KHz	2x10KHz -> 2x100KHz	2x10KHz -> 2x100KHz
Bidirectional: differential phases (x4) (A, B, Z) pulse + direction	2x10KHz -> 2x50KHz	2x10KHz -> 2x50KHz	2x10KHz -> 2x50KHz	2x10KHz -> 2x50KHz	2x10KHz -> 2x50KHz	2x10KHz -> 2x50KHz
PWM			2x20KHz -> 2x100KHz			2x20KHz -> 2x100KHz
CP1W-ME05M						
Real time clock						
CP1W-DAM01						
CP1W-CIF41	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available
0-10V	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)
Analog adjuster	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available
Backup battery						
Only CPU with 220 Vac supply		200mA -> not available		200mA -> not available		
Program language						

CP1L-L10: Comparison Table

This reference table highlights only the differences between the indicated models.
Refer to:

CP1L Manuals

[https://files.omron.eu/downloads/latest/manual/en/w471_cp1l_cpu_unit_\(including_cp1l-j\)_operation_manual_en.pdf](https://files.omron.eu/downloads/latest/manual/en/w471_cp1l_cpu_unit_(including_cp1l-j)_operation_manual_en.pdf)

CP1L-E Manual

https://files.omron.eu/downloads/latest/manual/en/w516_cp1l-el_cp1l-em_cpu_unit_operation_manual_en.pdf

Original Item	CP1L-L10DR-A	CP1L-L10DR-D	CP1L-L10DT1-D	CP1L-L10DT-A	CP1L-L10DT-D
Suggested replacement	CP1L-EL20DR-D	CP1L-EL20DR-D	CP1L-EL20DT1-D	CP1L-EL20DT-D	CP1L-EL20DT-D
# Inputs	6 -> 12	6 -> 12	6 -> 12	6 -> 12	6 -> 12
# outputs	4 -> 8	4 -> 8	4 -> 8	4 -> 8	4 -> 8
Power supply	220 Vac -> 24 Vdc			220 Vac -> 24 Vdc	
Output type					
dimension L	66 mm -> 130 mm	66 mm -> 130 mm	66 mm -> 130 mm	66 mm -> 130 mm	66 mm -> 130 mm
Dimension H					
Dimension W					
Wiring			TR Output 3 separate commons -> TR Output 2 separate commons + PS	TR Output 3 separate commons -> TR Output 2 separate commons + PS	TR Output 3 separate commons -> TR Output 2 separate commons + PS
Program memory					
FB memory	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep
Data Memory					
Built-in					
Slot for plug-in modules	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1
USB (programming interface only)	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available
Ethernet	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1
Number of CP1W units	-- -> 1	-- -> 1	-- -> 1	-- -> 1	-- -> 1
Interrupt	2 (HSC: 5KHz in total) -> 6 (HSC: 5KHz in total)	2 (HSC: 5KHz in total) -> 6 (HSC: 5KHz in total)	2 (HSC: 5KHz in total) -> 6 (HSC: 5KHz in total)	2 (HSC: 5KHz in total) -> 6 (HSC: 5KHz in total)	2 (HSC: 5KHz in total) -> 6 (HSC: 5KHz in total)
Single phase monodirectional					
Bidirectional: pulse + direction; CW/CCW					
Bidirectional: differential phases (x4) (A, B, Z)					
pulse + direction					
PWM					
CP1W-ME05M					
Real time clock					
CP1W-DAM01					
CP1W-CIF41	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available
0-10V	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)
Analog adjuster	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available
Backup battery					
Only CPU with 220 Vac supply	200mA -> not available			200mA -> not available	
Program language					

CP1L-L14: Comparison Table

This reference table highlights only the differences between the indicated models.

Refer to:

CP1L Manuals	https://files.omron.eu/downloads/latest/manual/en/w471_cp1l_cpu_unit_(including_cp1l-j)_operation_manual_en.pdf
CP1L-E Manual	https://files.omron.eu/downloads/latest/manual/en/w516_cp1l-el_cp1l-em_cpu_unit_operation_manual_en.pdf

Original Item	CP1L-L14DR-A	CP1L-L14DR-D	CP1L-L14DT1-D	CP1L-L14DT-A	CP1L-L14DT-D	
Suggested replacement	CP1L-EL20DR-D	CP1L-EL20DR-D	CP1L-EL20DT1-D	CP1L-EL20DT-D	CP1L-EL20DT-D	
# Inputs	8 -> 12	8 -> 12	8 -> 12	8 -> 12	8 -> 12	
# outputs	6 -> 8	6 -> 8	6 -> 8	6 -> 8	6 -> 8	
Power supply	220 Vac -> 24 Vdc			220 Vac -> 24 Vdc		
Output type						
dimension L	86 mm -> 130 mm	86 mm -> 130 mm	86 mm -> 130 mm	86 mm -> 130 mm	86 mm -> 130 mm	
Dimension H						
Dimension W						
Wiring			TR Output 4 separate commons -> TR Output 2 separate commons + PS	TR Output 4 separate commons -> TR Output 2 separate commons + PS	TR Output 4 separate commons -> TR Output 2 separate commons + PS	
Program memory						
FB memory	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	
Data Memory						
Built-in						
Slot for plug-in modules						
USB (programming interface only)	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	
Ethernet	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1	
Number of CP1W units						
Interrupt	4 (HSC: 5KHz in total) -> 6 (HSC: 5KHz in total)	4 (HSC: 5KHz in total) -> 6 (HSC: 5KHz in total)	4 (HSC: 5KHz in total) -> 6 (HSC: 5KHz in total)	4 (HSC: 5KHz in total) -> 6 (HSC: 5KHz in total)	4 (HSC: 5KHz in total) -> 6 (HSC: 5KHz in total)	
Single phase monodirectional						
Bidirectional: pulse + direction; CW/CCW						
Bidirectional: differential phases (x4) (A, B, Z)						
pulse + direction						
PWM						
CP1W-ME05M						
Real time clock						
CP1W-DAM01						
CP1W-CIF41	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	
0-10V	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	
Analog adjuster	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	
Backup battery						
Only CPU with 220 Vac supply	200mA -> not available			200mA -> not available		
Program language						

CP1L-L20: Comparison Table

This reference table highlights only the differences between the indicated models.

Refer to:

- CP1L Manuals
- [https://files.omron.eu/downloads/latest/manual/en/w471_cp1l_cpu_unit_\(including_cp1l-j\)_operation_manual_en.pdf](https://files.omron.eu/downloads/latest/manual/en/w471_cp1l_cpu_unit_(including_cp1l-j)_operation_manual_en.pdf)
- CP1L-E Manual
- https://files.omron.eu/downloads/latest/manual/en/w516_cp1l-el_cp1l-em_cpu_unit_operation_manual_en.pdf

Original Item	CP1L-L20DR-A	CP1L-L20DR-D	CP1L-L20DT1-D	CP1L-L20DT-A	CP1L-L20DT-D	
Suggested replacement	CP1L-EL20DR-D	CP1L-EL20DR-D	CP1L-EL20DT1-D	CP1L-EL20DT1-D	CP1L-EL20DT-D	
# Inputs						
# outputs						
Power supply	220 Vac -> 24 Vdc			220 Vac -> 24 Vdc		
Output type						
dimension L	86 mm -> 130 mm	86 mm -> 130 mm	86 mm -> 130 mm	86 mm -> 130 mm	86 mm -> 130 mm	
Dimension H						
Dimension W						
Wiring			TR Output 4 separate commons -> TR Output 2 separate commons + PS	TR Output 4 separate commons -> TR Output 2 separate commons + PS	TR Output 4 separate commons -> TR Output 2 separate commons + PS	
Program memory						
FB memory	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	
Data Memory						
Built-in						
Slot for plug-in modules						
USB (programming interface only)	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	
Ethernet	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1	
Number of CP1W units						
Interrupt						
Single phase monodirectional						
Bidirectional: pulse + direction; CW/CCW						
Bidirectional: differential phases (x4) (A, B, Z)						
pulse + direction						
PWM						
CP1W-ME05M						
Real time clock						
CP1W-DAM01						
CP1W-CIF41	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	
0-10V	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	
Analog adjuster	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	
Backup battery						
Only CPU with 220 Vac supply	200mA -> not available			200mA -> not available		
Program language						

CP1L-M30 CP1L-M40: Comparison Table

This reference table highlights only the differences between the indicated models.

Refer to:

CP1L Manuals [https://files.omron.eu/downloads/latest/manual/en/w471_cp1l_cpu_unit_\(including_cp1l-j\)_operation_manual_en.pdf](https://files.omron.eu/downloads/latest/manual/en/w471_cp1l_cpu_unit_(including_cp1l-j)_operation_manual_en.pdf)

CP1L-E Manual https://files.omron.eu/downloads/latest/manual/en/w516_cp1l-el,_cp1l-em_cpu_unit_operation_manual_en.pdf

Original Item	CP1L-M30DR-A	CP1L-M30DR-D	CP1L-M30DT1-D	CP1L-M30DT-D	CP1L-M40DR-A	CP1L-M40DR-D	CP1L-M40DT1-D	CP1L-M40DT-D
Suggested replacement	CP1L-EM30DR-D	CP1L-EM30DR-D	CP1L-EM30DT1-D	CP1L-EM30DT-D	CP1L-EM40DR-D	CP1L-EM40DR-D	CP1L-EM40DT1-D	CP1L-EM40DT-D
# Inputs								
# outputs								
Power supply	220 Vac -> 24 Vdc				220 Vac -> 24 Vdc			
Output type								
dimension L								
Dimension H								
Dimension W								
Wiring			TR Output 5 separate commons -> TR Output 3 separate commons + PS	TR Output 5 separate commons -> TR Output 3 separate commons + PS			TR Output 6 separate commons -> TR Output 4 separate commons + PS	TR Output 6 separate commons -> TR Output 4 separate commons + PS
Program memory								
FB memory	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep
Data Memory								
Built-in								
Slot for plug-in modules								
USB (programming interface only)	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available
Ethernet	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1
Number of CP1W units								
Interrupt								
Single phase monodirectional								
Bidirectional:								
pulse + direction; CW/CCW								
Bidirectional:								
differential phases (x4) (A, B, Z)								
pulse + direction								
PWM								
CP1W-ME05M								
Real time clock								
CP1W-DAM01								
CP1W-CIF41	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available
0-10V	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)
Analog adjuster	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available
Backup battery								
Only CPU with 220 Vac supply	300mA -> not available				300mA -> not available			
Program language								

CP1L-M60: Comparison Table

This reference table highlights only the differences between the indicated models.

Refer to:

- CP1L Manuals
- [https://files.omron.eu/downloads/latest/manual/en/w471_cp1l_cpu_unit_\(including_cp1l-j\)_operation_manual_en.pdf](https://files.omron.eu/downloads/latest/manual/en/w471_cp1l_cpu_unit_(including_cp1l-j)_operation_manual_en.pdf)
- CP1L-E Manual
- https://files.omron.eu/downloads/latest/manual/en/w516_cp1l-el,_cp1l-em_cpu_unit_operation_manual_en.pdf

Original Item	CP1L-M60DR-A	CP1L-M60DR-D	CP1L-M60DT1-D	CP1L-M60DT-D
Suggested replacement	CP1L-EM40DR-D + CP1W-20EDR1	CP1L-EM40DR-D + CP1W-20EDR1	CP1L-EM40DT1-D + CP1W-20EDT1	CP1L-EM40DT-D + CP1W-20EDT
# Inputs	36 -> 24 + 12	36 -> 24 + 12	36 -> 24 + 12	36 -> 24 + 12
# outputs	24 -> 16 + 8	24 -> 16 + 8	24 -> 16 + 8	24 -> 16 + 8
Power supply	220 Vac -> 24 Vdc			
Output type				
dimension L	195 mm -> 150 mm + 86 mm	195 mm -> 150 mm + 86 mm	195 mm -> 150 mm + 86 mm	195 mm -> 150 mm + 86 mm
Dimension H				
Dimension W				
Wiring	check input and output wiring	check input and output wiring	check input and output wiring	check input and output wiring
Program memory				
FB memory	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep	Not available -> 10Kstep
Data Memory				
Built-in				
Slot for plug-in modules				
USB (programming interface only)	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available
Ethernet	Not Available -> 1	Not Available -> 1	Not Available -> 1	Not Available -> 1
Number of CP1W units				
Interrupt				
Single phase monodirectional				
Bidirectional:				
pulse + direction; CW/CCW				
Bidirectional:				
differential phases (x4) (A, B, Z)				
pulse + direction				
PWM				
CP1W-ME05M				
Real time clock				
CP1W-DAM01				
CP1W-CIF41	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available	Optional -> Not Available
0-10V	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)	1 AI (8 bits) -> 2 AI (10 bits)
Analog adjuster	1 -> Not Available	1 -> Not Available	1 -> Not Available	1 -> Not Available
Backup battery				
Only CPU with 220 Vac supply	300mA -> not available			
Program language				