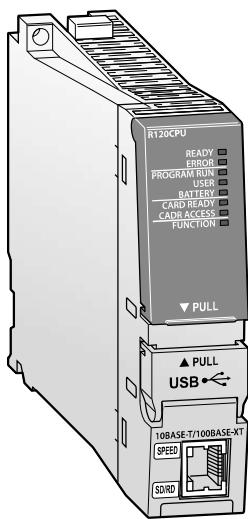


■ PLC CPU modules



At the core of the MELSEC iQ-R series is a programmable controller CPU. This CPU is the heart of the control system and includes various features for different applications. The most common CPU is the programmable controller CPU, into which various features are embedded, enabling it to perform a wide range of control tasks.

Special features:

- Highly scalable with five types available
 - Built-in hardware features
 - RENCPUs with built-in CC-Link IE port
 - Flexible, large-capacity data storage
 - Data management utilizing internal database (DB)
 - High-speed, event driven programs
 - CPU program management data
 - Intuitive root cause analysis
 - Easy collection of manufacturing data

Specifications	R00CPU	R01CPU	R02CPU	R04CPU R04ENCPU	R08CPU R08ENCPU	R16CPU R16ENCPU	R32CPU R32ENCPU	R120CPU R120ENCPU
Type	Programmable controller CPU							
I/O points	4096							
CPU self-diagnostic functions	CPU error detection, Watch Dog, battery error detection, memory error detection, program check, power supply error detection, fuse error detection							
Multiple CPU system	Up to 4 CPU modules can be used in combination on one base unit. A multiple CPU system can not be configured with a R□ENCPU.							
Battery buffer	All CPU modules are fitted with a lithium-battery with a life expectancy of 5 years.							
Memory type	RAM, ROM	RAM, ROM, SD memory card						
Memory capacity for PLC program	10 k steps (40 kBByte)	15 k steps (60 kBByte)	20 k steps (80 kBByte)	40 k steps (160 kBByte)	80 k steps (320 kBByte)	160 k steps (640 kBByte)	320 k steps (1280 kBByte)	1200 k steps (4800 kBByte)
Instruction processing time	LD instruction ns MOV instruction ns PC MIX value ^① instr./μs	31.36 62.72 19		3.92 7.84 146	0.98 1.96 419			
Timer (T)	points	2048 (user-changeable)						
Counter (C)	points	1014 (user-changeable)						
Internal relay (M)	points	12288 (user-changeable)						
Data register/special register (D)	points	12288 (user-changeable)		18432 (user-changeable)				
File register (R/ZR)	points	0 (user-changeable)						
Interrupt pointer (I)	points	1024 (fixed)						
Pointer (P) (global/local) (default)	points	8192 (user-changeable, up to 16384)						
Annunciator (F)	points	2048 (user-changeable)						
Index register (Z)	points	20 (user-changeable, up to 24)						
Link relay (B)/link register (W)	points	8192 (user-changeable)						
Number of connectable extensions		7						
Max. number of insertable modules		64						
Internal power consumption (5 V DC)	A	R□CPU: 0.67 R□ENCPU: 1.49						
Weight	kg	R□CPU: 0.20 R□ENCPU: 0.40						
Dimensions (WxHxD)	mm	R□CPU: 27.8x106x110 R□ENCPU: 56x106x110						
Order information	Art. no.	332847	334294	403616	279576 290226	279577 290227	279578 290228	279579 290232
Accessories		NZ1MEM-2GBSD; 2 GB SD memory card ^② ; NZ1MEM-4GBSD; 4 GB SDHC memory card ^② ; NZ1MEM-8GBSD; 8 GB SDHC memory card ^② ; NZ1MEM-16GBSD; 16 GB SDHC memory card ^② ; NZ2MC-1MB; 1 MB extended SRAM cassette; NZ2MC-2MB; 2 MB extended SRAM cassette; NZ2MC-4MB; 4 MB extended SRAM cassette; NZ2MC-8MB(E); 8 MB extended SRAM cassette ^③ ; NZ2MC-16MB; 16 MB extended SRAM cassette ^④						

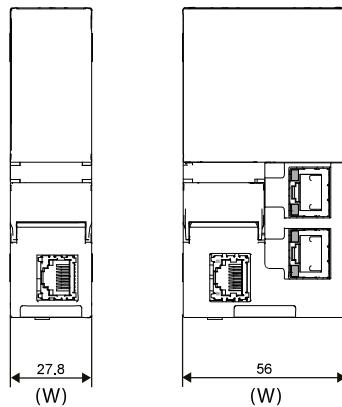
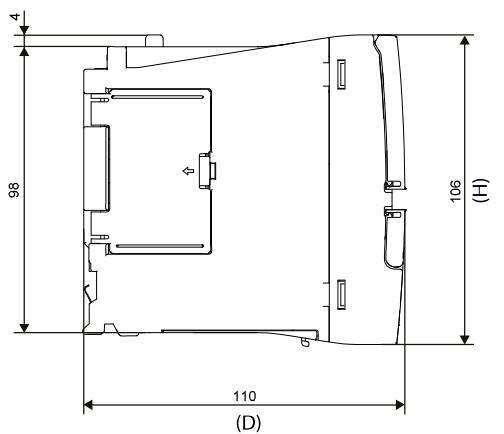
① Average number of instructions such as for basic instructions and data processing executed in 1 μ s. The larger the value, the faster the processing speed.

② ROOCPU is not supported

③ Only supported by safety and process CPU

④ Safety CPU is not supported

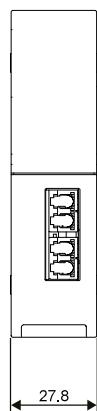
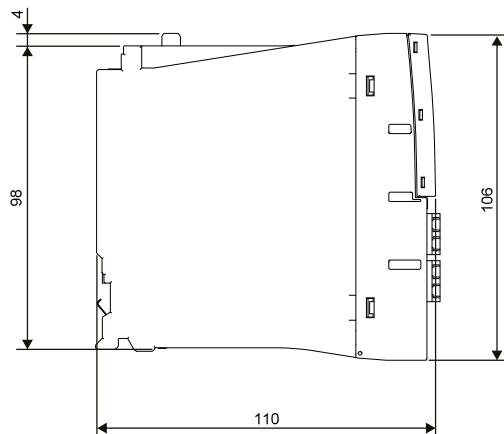
■ CPU modules



Type	W	H	D
R04CPU			
R08CPU			
R16CPU			
R32CPU			
R120CPU	27.8	106	110
R04ENCPU			
R08ENCPU			
R16ENCPU			
R32ENCPU			
R120ENCPU	56	106	110

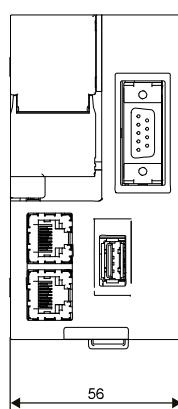
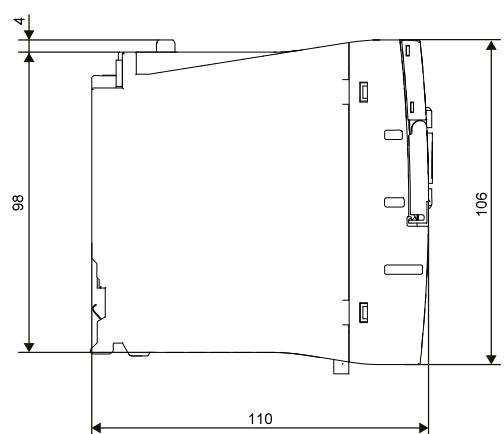
Unit: mm

■ Process CPU modules and redundant function module



Unit: mm

■ C Controller CPU



Unit: mm