



K120S

Item		Specification				Remark
		K7M-DR20U	K7M-DR30U	K7M-DR40U	K7M-DR60U	
		K7M-DRT20U	K7M-DRT30U	K7M-DRT40U	K7M-DRT60U	
Operation method		Cyclic execution of stored program, Time-driven interrupt, Process-driven interrupt				
I/O control method		Refresh method, Direct method by command				
Program language		Ladder Diagram, Instruction List				
Number of instructions	Basic command	30				
	Application command	277				
Processing speed		0.1 $\mu$ s/Step				
Program memory capacity		10k step				
I/O points	Input	12	18	24	36	
	Output	8	12	16	24	
Data area	P	P000~P63F				I/O relay
	M	M000~M191F				Auxiliary relay
	K	K000~K31F				Keep relay
	L	L000~L63F				Link relay
	F	F000~F63F				Special relay
	T	100ms : T000~T191(192 points) / 10ms : T192~T250(59 points) / 1ms : T251~T255(5 points), Adjustable by parameter setting				Timer
	C	C000~C255				Counter
	S	S00.00~S99.99				Step controller
	D	D0000~D4999				Data register
Operation mode		RUN, STOP, PAUSE, DEBUG				
Self-diagnostic function		Scan time, memory, I/O and power supply				
Data back-up method		Program: EEPROM, Data: Super-capacitor				
Max. expansion stage		Up to 2 stages (External memory or RTC module can be connected as 4th expansion)				

Built-in function	PID control function		Controlled by command, Relay and PRC auto-tuning, PMM/manual output, adjustable operation scan time, Anti-windup, SV ramp, Delta MV, Position and velocity algorithm.			
	Cnet I/F function		MASTER-K dedicated protocol, Modbus protocol, User-defined protocol, No protocol			
	High speed counter function	Speed	1 Phase: 100kHz 2Ch / 20kHz 2Ch			
			2 Phase: 50kHz 1Ch / 10kHz 1Ch			
		Counter mode	4 different counter functions: 1-Phase			
			1 phase, up-down by program			
			1 phase, up-down by B-phase input			
			2 phase, up-down by 1 phase			
	Additional function	2 phase, up-down by phase difference				
		Internal/External preset function, Latch counter function, Comparison output function, RPM function				
	Positioning function	Basic function	No. of axis: 2 axes			
			Control method: PTP/speed			
			Control unit: Pulse			
			Positioning data: 20 data per each axis (Step No: 1~20)			
			Operation mode: End, Keep, Cont			
			Control method: Single, Repeated, Operation			
		Positioning	Positioning method: Absolute method/Incremental method			
			Address range: -2,147,483,648 ~ 2,147,483,647			
			Speed: Max. 100kpps (Speed: 5 ~ 100,000pps)			
		Return to origin	Acceleration/Deceleration processing (Operation pattern: Trapezoidal method)			
Origin detection when approximate origin turns off						
Jog	Origin detection after deceleration when approximate origin turns on					
	Speed setting range: 5 ~ 100,000pps (High/Low)					
Pulse catch		Pulse width: 10 $\mu$ s 2 points (P0000~P0001) / 50 $\mu$ s 6 points (P0002~P0007)				
External interrupt		8 points: 10 $\mu$ s 2 points (P0000~P0001) / 50 $\mu$ s 6 points (P0002~P0007)				
Input filter		0, 1, 2, 5, 10, 20, 50, 100, 200, 500, 1000ms set by user				
Weight(g)		520	540	660	850	

RS-232C 1 port  
RS-485 1 port

DRT Type Only