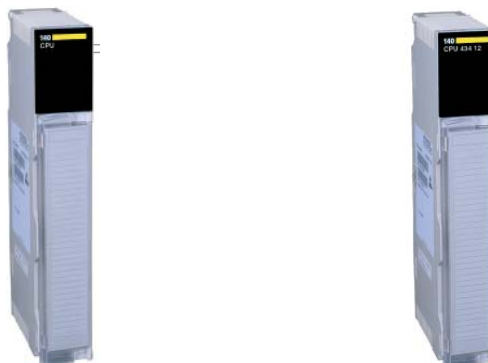


Modicon Quantum automation platform

Unity processors

Automation platform for Unity Pro software offer	Simple applications	Simple and complex applications
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Number of racks 2/3/4/6/10/16 slots	Local I/O	2 racks (1 main + 1 extension)
	Remote I/O (RIO)	31 stations with 2 racks
	Distributed I/O (DIO)	3 networks with 63 single-rack stations
Maximum discrete I/O (1)	Local I/O	No limit (max. 27 slots)
	Remote I/O (RIO)	31,744 input channels and 31,744 output channels
	Distributed I/O (DIO)	8000 input channels and 8000 output channels per network
Maximum analog I/O (1)	Local I/O	No limit (max. 27 slots)
	Remote I/O (RIO)	1984 input channels and 1984 output channels
	Distributed I/O (DIO)	500 input channels and 500 output channels per network
Application-specific modules		Intrinsically safe I/O, high-speed counter, axis control, interrupt inputs, serial link, accurate time stamping

Number of communication modules and axes (in local rack)	Ethernet TCP/IP, Modbus Plus, Profibus DP, SY/Max Ethernet, SERCOS, all combinations	2	6
Bus connections	Modbus	2 integrated RS 232/485 Modbus slave RTU/ASCII ports	2 integrated RS 232 Modbus slave RTU/ASCII ports
	AS-Interface actuator/sensor bus	Limited number on local rack (max. 27 slots), 4 on remote rack (RIO), 2 on distributed rack (DIO)	
	Profibus DP/SERCOS MMS (2)	Profibus DP/SERCOS MMS, 2 "option" modules on local rack	Profibus DP/SERCOS MMS, 6 "option" modules on local rack
Network connections	Modbus Plus	1 integrated port, 2 "option" modules on local rack	1 integrated port, 6 "option" modules on local rack (3)
	Ethernet TCP/IP	2 "option" modules on local rack	6 "option" modules on local rack
	USB	-	

Process control	Control loops (4)	20 to 40 programmable channels	40 to 80 programmable channels
Redundancy		Power supplies, remote I/O network, Modbus Plus modules, Ethernet TCP/IP modules	
Hot Standby availability		-	

Memory capacity without PCMCIA card	IEC program	400 Kb	800 Kb
	Located data (State RAM)	20 Kb	128 Kb
Memory extension with PCMCIA card	Program and data storage	-	-
	Data storage	-	-

Quantum CPU	140 CPU 311 10	140 CPU 434 12 U
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(1) The maximum values for the number of discrete I/O and analog I/O are not cumulative.

(2) Profibus DP modules by our partner Prosoft.

(3) Modbus Plus modules: Only the first 2 of the 6 modules feature the full range of functions.

(4) Usage values, including memory resources and processor power.

(5) The number of loops is limited according to their complexity (volume of associated data to be transferred from Normal to Standby).

Complex applications

Applications with redundancy (Hot Standby)



2 racks (1 main + 1 extension)
31 stations with 2 racks (1 main + 1 extension)
3 networks with 63 single-rack stations
No limit (max. 26 slots)
31,744 input channels and 31,744 output channels
8000 input channels and 8000 output channels per network
No limit (max. 26 slots)
1984 input channels and 1984 output channels
500 input channels and 500 output channels per network
Intrinsically safe I/O, high-speed counter, axis control, interrupt inputs, serial link, accurate time stamping

6
1 integrated RS 232/485 Modbus slave RTU/ASCII port
Limited number on local rack (max. 26 slots), 4 on remote rack (RIO), 2 on distributed rack (DIO)
Profibus DP/SERCOS MMS, 6 "option" modules on local rack
1 integrated port, 6 "option" modules on local rack (3)
1 integrated port (10BASE-T/100BASE-TX), 6 "option" modules on local rack
1 port reserved for programming PC
20 to 60 programmable channels
Power supplies, remote I/O network, Modbus Plus modules, Ethernet TCP/IP modules
-

1 integrated 100BASE-FX Hot Standby port, 6 "option" modules on local rack

20 to 60 programmable channels (5)

Yes

512 Kb	1024 Kb
128 Kb	
Up to 7168 Mb	
8192 Mb	

140 CPU 651 50	140 CPU 651 60	140 CPU 671 60
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