## **CR Collaborative Robot Series**

**Specifications** 

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Product Name		CR3	CR3L	CR5	CR7	
Weight		16.5kg	39.5kg	25kg	24.5kg	
Rated Payload		3kg	3kg	5kg	7kg	
Reach		620mm	1700mm	900mm	800mm	
Max. Reach		795mm	1919mm	1096mm	990mm	
Rate	d Voltage	DC48V	DC48V	DC48V	DC48V	
Max. Speed of TCP		2m/s	4m/s	3m/s	3m/s	
	J1	±360°	±360°	±360°	±360°	
	J2	±360°	±360°	±360°	±360°	
Joint	J3	±155°	±170°	±160°	±160°	
Ranges	J4	±360°	±360°	±360°	±360°	
	J5	±360°	±360°	±360°	±360°	
	J6	±360°	±360°	±360°	±360°	
Max. Speed	J1/J2	180°/s	120°/s	180°/s	180°/s	
of Joints	J3/J4/J5/J6	180°/s	180°/s	180°/s	180°/s	
End-Effector	DI/DO/AI	2				
I/O Interface	AO	0				
Communica- tion Inter- face	Communication	RS485				
	DI	16				
	DO/DI	16				
Controller	AI/AO	2				
I/O	ABZ Incremental Encoder	1				
	Cable length from body to cabinet	5M				
Repeatability		±0.02mm	±0.05mm	±0.02mm	±0.02mm	
Communication		TCP/IP, Modbus TCP, EtherCAT, WIFI				
IP Rating		IP54				
Temperature		0°C -45°C				
Power Consumption		120W	300W	150W	150W	
Materials		Aluminum alloy, ABS plastic				



DOE	301	DOBOO CORD			
Product Name		CR10	CR12	CR16	
Weight		40kg	39.5kg	40kg	
Rated Payload		10kg	12kg	16kg	
	Reach	1300mm	1200mm	1000mm	
Ma	ax. Reach	1525mm	1425mm	1223mm	
Rated Voltage		DC48V	DC48V	DC48V	
Max. S	Speed of TCP	4m/s	4m/s	3m/s	
	J1	±360°	±360°	±360°	
	J2	±360°	±360°	±360°	
Joint	J3	±160°	±160°	±160°	
Ranges	J4	±360°	±360°	±360°	
	J5	±360°	±360°	±360°	
	J6	±360°	±360°	±360°	
Max. Speed	J1/J2	120°/s	120° /s	120°/s	
of Joints	J3/J4/J5/J6	180°/s	180°/s	180°/s	
End-Effector I/O	DI/DO/AI	2			
Interface	AO	0			
Communication Interface	Communication	RS485			
	DI	16			
	DO/DI	16			
Controller	AI/AO	2			
I/O	ABZ Incremental Encoder	1			
	Cable length from body to cabinet		5M		
Repeatability		±0.03mm	±0.03mm	±0.03mm	
Communication		TCP/IP, Modbus TCP, EtherCAT, WIFI			
IP Rating		IP54			
Temperature		0°C -45°C			
Power Consumption		350W	350W	350W	
Materials		Aluminum alloy, ABS plastic			

## **Controller Specifications**

Model	DOBOT CC16X		
Size	360mm (Length)*160mm (Width)* 402.4mm (Height)		
Control Cabinet Weight	12kg		
Controlled Axes	6 Axes + External Expansion Axes		
Power Input	Single Phase 110V/220V AC, 7.5A, 50/60HZ		
Power Output	48V, 20A		
Supported Motor Power (Max)	-		
Braking Resistors	Four, 17W, 10Ω		
Supported Encoder Types	_		
Communication Interface	EtherCAT (for External Axes), Ethernet		
I/O Interface	16 Digital Outputs  16 Digital Inputs/Outputs (Multiplexing)  2 Analog Outputs (Voltage: 0V-10V, Current: 4mA-20mA)  2 Analog Inputs (Voltage: 0V-10V, Current: 4mA-20mA)  1 Incremental Encoder ABZ Input		
Teaching & Playback Method	Hand-Held Teaching Pendant/APP		
Programming Language	Script  Graphical Programming (Blockly)		
Installment	Floor		
Environment	Temperatures: 0°C ~45°C , Humidity: ≤ 95%, No Condensation		
Protection Rating	IP20		
Cooling Method	Forced-Air Cooling		
Safety Features	Emergency stop function, reserved external security interface that can be controlled by I/O interface		
Indicator	The indicator light remain red when the power is on and be off when the power is off.		
	Diagnostic Software Tool		
Maintenance	Power-off Zero Save		
	Reserve Remote Service		