



UNIVERSAL ROBOTS

A Teradyne Robotics Company

CB7 Core

Generation 7

Technical datasheet

Updated September 2026

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CB7 Core

Compatibility

Robot arm series	g-Series, e-Series, UR-Series
Software compatibility	PolyScope X
Teach Pendant	TP7
Models	CB7 Core

Environment

Operating temperature	0-50 °C with reduced performance from 35 °C and up.
Humidity	≤ 90% RH (non-condensing)
Noise level	< 55 dB(A)
Pollution degree	2

Protection

IP classification	Control Box: IP54
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Physical

Control box size (W x H x D)	393 x 284 x 201 mm / 15.5 x 11.2 x 7.9 in
Weight	12.4 kg / 27.3 lb
Materials	Aluminium, plastic, steel
Mounting	Wall mount or free-standing

Electrical interface

I/O ports	16 configurable digital in, 16 configurable digital out (all safety-assignable as 8 dual-channel pairs), 2 analog in, 2 analog out, 4 quadrature digital in
I/O power supply	24 V / 4 A
System update frequency	500 Hz
Fieldbus	MODBUS TCP, EtherNet/IP adapter, PROFINET
USB	2x USB-A, 2x USB-C (DisplayPort on both USB-C ports)
Network	3x Ethernet RJ-45 (10/100/1000 Mbps), 1000BASE-T
SCC rating	200 A
Power supply	100-240 VAC, 50-60 Hz
Control Box connector type	Harting receptacle

Memory

RAM	8 GB
Flash	20 GB onboard

Contact

UR HQ address

UR HQ phone

UR email

UR website

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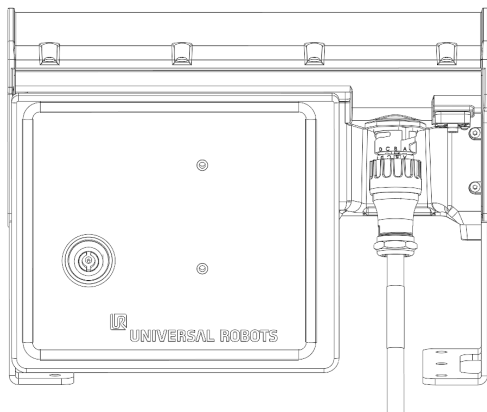
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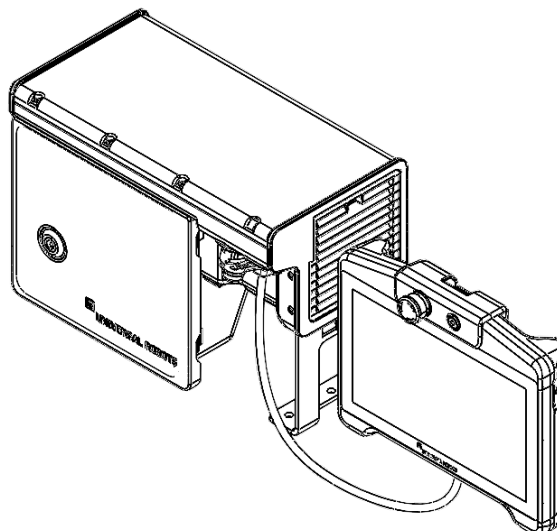
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Robot Cable connection to Control Box



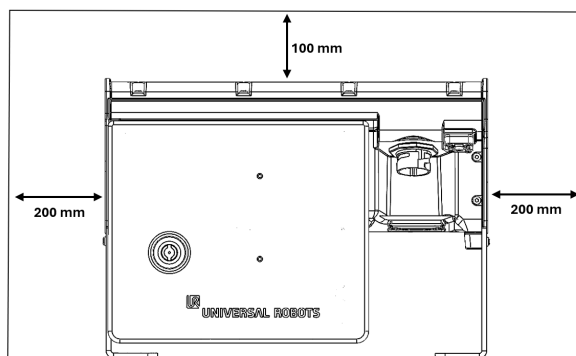
Teach Pendant connected to Control Box



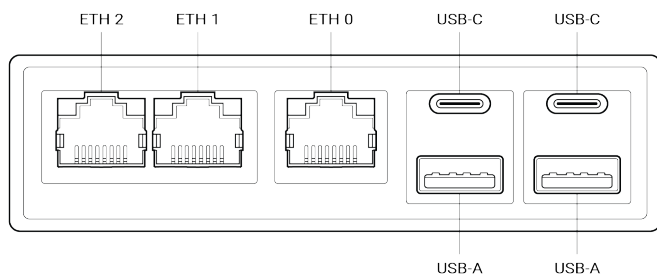
Controller I/O terminal layout

Analog Outputs		Analog Inputs		Power		Remote		0V	
LDV	AO	AO	AI1	PWR	24V	24V	24V	0V	0V
AO	AO	AO	AI1	GND	0V	0V	0V	DI0	DI0
AO	AO	AO	AI1	24V	ON	ON	ON	DI1	DI1
AO	AO	AO	AI1	0V	OFF	OFF	OFF	DI2	DI2
AO	AO	AO	AI1					DI3	DI3
Safety		Configurable Inputs		Configurable Outputs		Configurable Inputs		Configurable Outputs	
24V	E10	24V	CI0	24V	CO0	24V	CI8	24V	CO8
24V	E11	24V	CI1	24V	CO1	24V	CI9	24V	CO9
24V	E12	24V	CI2	24V	CO2	24V	CI10	24V	CO10
24V	E13	24V	CI3	24V	CO3	24V	CI11	24V	CO11
24V	E14	24V	CI4	24V	CO4	24V	CI12	24V	CO12
24V	E15	24V	CI5	24V	CO5	24V	CI13	24V	CO13
24V	E16	24V	CI6	24V	CO6	24V	CI14	24V	CO14
24V	E17	24V	CI7	24V	CO7	24V	CI15	24V	CO15

Control Box mounting clearances



Control ports diagram



UNLESS OTHERWISE SPECIFIED: Dimensions are in millimeters.
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