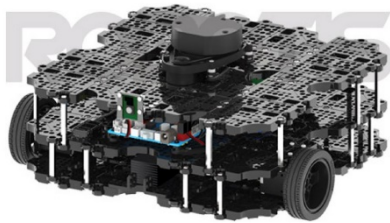


Technical Datasheet

ROBOTIS Turtlebot3 Waffle Pi

Status: February 2021

TURTLEBOT3 Waffle Pi



General

Maximum Translational Velocity	0.26 m / s
Maximum Rotational Velocity	1.82 rad / s (104.27 deg / s)
Maximum Payload	30 kg
Dimension (L*W*H)	281 x 306 x 141 mm
Weight (+ SBC + Battery + Sensors)	1.8 kg
Max. traversable step	10 mm
PC Connection	USB
	3.3 V / 800 mA
Power Connectors	5 V / 4 A 12 V / 1 A

Performance

Operating Time	About 2 h
Charging Time	About 2 h 30 min
DYNAMIXEL	XM430-W210-T
SBC	Raspberry Pi 3 Model B and B+
Embedded Controller	OpenCR (32-bit ARM® Cortex®-M7)
Remote Controller	RC-100B + BT-410 Set (Bluetooth 4, BLE)
	Raspberry Pi Camera 360° LiDAR
Sensor	3-Axis gyroscope 3-Axis accelerometer 3-Axis magnetometer

Camera	Raspberry Pi Camera Module v 2.1
Expansion Pins	GPIO 18 pins Arduino 32 pins
Peripheral	UART x3, CAN x1, SPI x1, I2C x1, ADC x5, 5pin OLLO x4
DYNAMIXEL Ports	RS485 x 3, TTL x 3
Audio	Several programmable beep sequences
Programmable user LED	4
Board Status LED	1
Battery Status LED	1
Arduino LED	1
Push button	2
Reset button	1
Dip switch	2
Lithium polymer battery	11.1 V 1800 mAh / 19.98 Wh 5C
	100-240 V
Input	AC 50/60 Hz 1.5 A @max
Output	12 Vdc, 5A
Firmware Upgrade	Via USB / via JTAG

Features

OpenMANIPULATOR	Can be equipped with the ROBOTIS OpenMANIPULATOR
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Manufacturer Specifications

HAN	901-0119-201
EAN	0096718605286
Package weight	3.46 kg