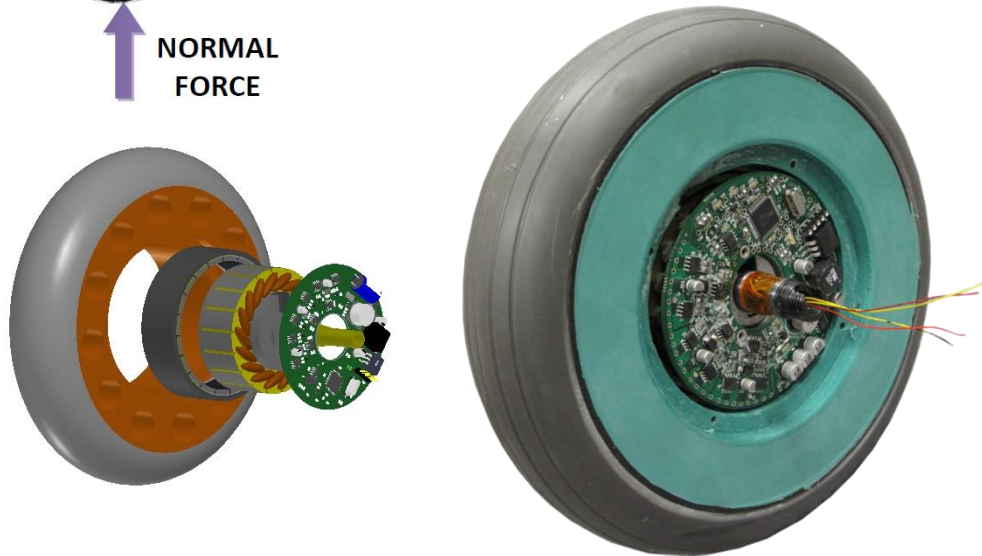
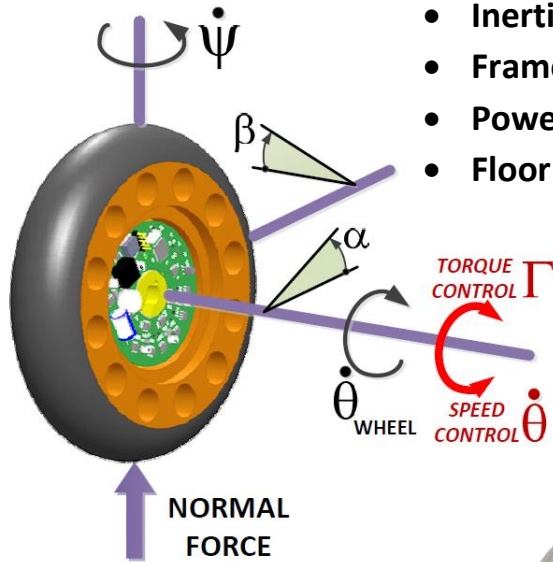


## Intelligent Motorized Wheel

providing services:

- Speed and Torque control
- Inertial Measurement sensors
- Frame Tilt and Roll information
- Power Management
- Floor contact Normal Force sensor



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## DIFFERENT ROLLATORS EQUIPPED WITH iWHEEL

### TOPRO ROLLATOR



### MEYRA ROLLATOR



### iWHEEL FIXING TO THE FRAME

# CAN-BUS FRAMES DESCRIPTION

Electronics Board	CAN Frame ID			CAN Frame ID (dec)	CAN Frame ID (hexa)	NAME	Data								Data Length (Bytes)	Period (ms)
	Node Type	Node ID	Data ID				B0	B1	B2	B3	B4	B5	B6	B7		
iWheel left	1	0	0	256	100	SPEED	Speed MSB (int16s, RPH)	Speed LSB (int16s, RPH)							2	4
	1	0	14	270	10E	BATTERY	Voltage MSB (int16u, mV)	Voltage LSB (int16u, mV)	Current MSB (int16s, mA)	Current LSB (int16s, mA)					4	50
	1	0	1	257	101	MIXED	Battery Voltage (int8u, dV)	Controller Temperature (int8u, °C)	Odometry Ticks MSB (int32s)	Odometry Ticks (int32s)	Odometry Ticks (int32s)	Odometry Ticks LSB (int32s)	CPU Usage (int8u, %)		7	40
	1	0	3	259	103	FLOOR CONTACT	Force N MSB (int16s, dN) (1Kg=9.8N)	Force N LSB (int16s, dN) (1Kg=9.8N)							6	40
	1	0	4	260	104	FLOOR CONTACT	Z0_offset LSB (uint16s)	Z0_offset MSB (uint16s)							2	1000
	1	0	15	271	10F	INERTIAL	Gyro X MSB (int16s, raw units)	Gyro X LSB (int16s, raw units)	Gyro Y MSB (int16s, raw units)	Gyro Y LSB (int16s, raw units)	Gyro Z MSB (int16s, raw units)	Gyro Z LSB (int16s, raw units)			6	16
	1	0	16	272	110	INERTIAL	Acceleration X MSB (int16s, raw units)	Acceleration X LSB (int16s, raw units)	Acceleration Y MSB (int16s, raw units)	Acceleration Y LSB (int16s, raw units)	Acceleration Z MSB (int16s, raw units)	Acceleration Z LSB (int16s, raw units)			6	16
	1	0	10	266	10A	SETPOINTS	Left Motor Setpoint Type	Left Speed Setpoint MSB (int16s, mm/s)	Left Speed Setpoint LSB (int16s, mm/s)	Left Current Setpoint MSB (int16s, mA)	Left Current Setpoint LSB (int16s, mA)				5	10
iWheel right	1	1	0	288	120	SPEED	Speed MSB (int16s, RPH)	Speed LSB (int16s, RPH)							2	4
	1	1	14	302	12E	BATTERY	Voltage MSB (int16u, mV)	Voltage LSB (int16u, mV)	Current MSB (int16s, mA)	Current LSB (int16s, mA)					4	50
	1	1	1	289	121	MIXED	Battery Voltage (int8u, dV)	Controller Temperature (int8u, °C)	Odometry Ticks MSB (int32s)	Odometry Ticks (int32s)	Odometry Ticks (int32s)	Odometry Ticks LSB (int32s)	CPU Usage (int8u, %)		7	40
	1	1	2	290	122	DIFFERENTIAL KINEMATICS	Estimated Pose X (int16s, mm)	Estimated Pose X (int16s, mm)	Estimated Pose Y (int16s, mm)	Estimated Pose Y (int16s, mm)	Estimated Pose Z (int16s, mm)	Estimated Pose Z (int16s, mm)	Estimated Pose PSI (int16s, mrad)	Estimated Pose PSI (int16s, mrad)	8	40
	1	1	3	291	123	FLOOR CONTACT	Force N MSB (int16s, dN) (1Kg=9.8N)	Force N LSB (int16s, dN) (1Kg=9.8N)							6	40
	1	1	4	292	124	FLOOR CONTACT	Z0_offset LSB (uint16s)	Z0_offset MSB (uint16s)							2	1000
	1	1	10	298	12A	SETPOINTS	Right Motor Setpoint Type	Right Speed Setpoint MSB (int16s, mm/s)	Right Speed Setpoint LSB (int16s, mm/s)	Right Current Setpoint MSB (int16s, mA)	Right Current Setpoint LSB (int16s, mA)				5	10