BOM Electronics

Type	Reference	Description	Qty	Price	LINK
LLC BOX					
Connector	KF2EDGWB 4 pins	1. Gnd, 5v, 12v, 24v regulated 2. Encoder 1 3. Encoder 2 4. Lidar 5. Flexi 6. Mag sensor 7. Rearm button 8. Serial port to HLC 9. Motor Drives + Pinhook power	10	8 euros for 10 units pack	LINK
	DB15 female 3 rows	for RFID interrogator	1	3 euros	LINK
Boards	Arduino Mega 2560	for LLC	1	9 euros	LINK
	Protoboard		1	3 euros	LINK
	8 channels optocoupler	AL-ZARD Optocoupler Isolation Board Voltage Converter 5v to 24v	1		LINK
	LCD03	I2C LCD 20x4	1		LINK
	Pololu MD01A	Pinhook drive	1		LINK
Components	Keypad	2 Key Matrix Membrane Switch Keypad	1	1 euro	LINK
	Electronic components	• Buzzer • Resistors • Zener diodes • Schmitt Trigger • DCDC LM7812 (for pinhook)			
	Box	BOX. 3D Printed	1		
PinHook					
	Linear Actuator DC 12V	Pinhook	1		LINK
Power system					
DCDC		24V to 12V 5A DC DC Converter	1		LINK
	V-INFINITY VDZ200-D24-S24	24V to 24V, 4.16 A DC DC Converter	1		
	TOBSUN EA50-5V	24V to 5V 10A DC DC Converter	1		LINK
		Voltage distributors	3		LINK
		24 AWG black and red cables	2		LINK
		14 AWG black and red cables	2		LINK
		Terminals	1		LINK
		Fuse box	1		LINK
		Voltmeter	1		LINK
	DSK 10325	Batteries 12v, 12Ah, 15.1 x 9.8 x 9.9 cm; 3.18 kg	2		
	XLR 3 female	Charging connector	1		
		Relay 24v	1		
		Power Switch 5A	1		
		Battery charger 24v	1		
Traction system					
	Valeo 0278AL	Motor	1		

	Valeo 0278AR	Motor	1		
	US Digital E4P	Encoders	2		
	PG Drives D51400.01	Drives	2		
		PWM to analog converter	2		LINK
		Drive status Leds + resistors (1.2K)	2		
Safety System					
		Safety Stop Button	1		
	Flexysoft	Safety PLC	1		
	S300 Expert	Sick Lidar	1		
	RYC-1201	Remote stop set (sender + receiver) 12v 433Mhz	1		LINK
		Back sensor	1		
Cables and converters					
Converter	USB2.0 to RS-485 RS-422	Interface Lidar to HLC	1		LINK
	USB to Serial converter	From LLC to HLC	1		
Cable		90 Degree USB Male to Female Extension Cable (Type 1)	2		LINK
		90 Degree USB Male to Female Extension Cable (Type 2)	2		LINK
		USB cable from HLC to LLC	1		
Other					
	Push button	Rearm	1		LINK
	RPi 3b	HLC (High Level Controller)	1		
		Touch Screen for RPi	1		
	Macome GS4484	Magnetic band reader	1		
	SICK RFH630	RFID interrogator	1		