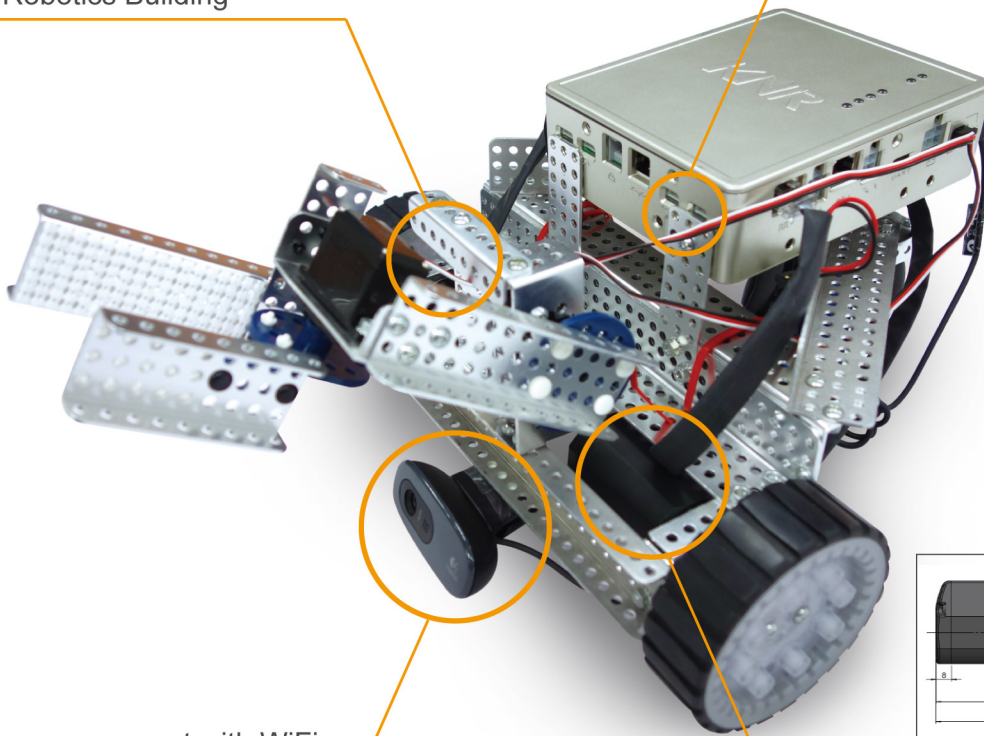


Feature of KNR

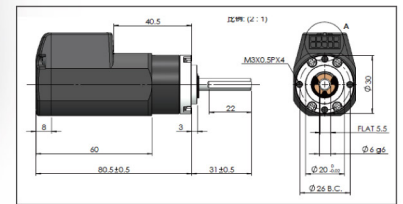


Ultrasonic sensor module

Matrix Robotics Building



USB camera connect with WiFi



DC motor with encoder & motor driver



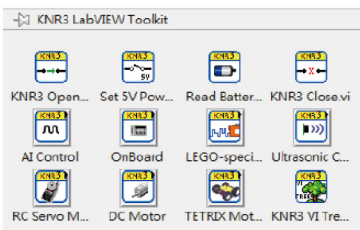
I2C Sensor adaptor modular

Robotics application integrated

Direct transfer camera's vision through WiFi

Plug and play DC motor, with high speed(490 RPM) & high Torque (60 kg-cm) include

I2C sensor adaptor module support with LEGO®/HiTechnic sensor



LabVIEW KNR API

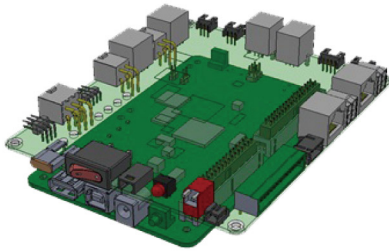
Mechanical system

Compatible with Matrix

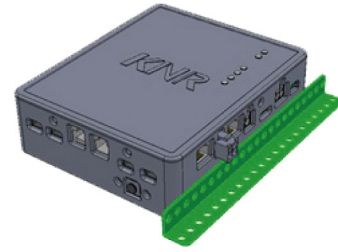
Software

LabVIEW with KNR API, C/C++

Specifications



NI MyRIO-1950



KNR Controller

FPGA with Integrated Dual-Core Real-Time Processor (NI myRIO-1950)

Platform	Xilinx® Zynq-7010
Processor	Dual-Core ARM Cortex-A9 at 667 MHz
System Memory	256 MB
Storage Memory	512 MB
Operating System	Linux
Language Support	LabVIEW2013, Eclipse C/C++

Physical / Electrical Characteristics

Input Power	12V~26V
Dimensions	144mm x 120mm x 42mm
Weight	N/A

I/O and Communication Ports

DIO (4 moduled)	Options/Type	24 channels (6 ch in each moduled port)
	DC Motor Box (module)	1 DC Motor
	RC Servo Box (module)	5 DC
	I2C Box (module)	3 I2C device or 6 ch DIOs
I2C	2 DIO each (LEGO RJ12)	1 LEGO I2C device
RC servo port	1 DIO each	2 channels
Ultrasonic port	1 DIO each	2 channels
IR sensor port	1 AI each	2 channels
UART port	2 DIO each	1 channel
RS 232 port	2 DIO each	1 channel
AI port	3 AI each (RJ12)	1 channel
USB Host	to Sensor, CAM or WiFi	1 port
USB Device	to PC	1 port
Accelerometer		Int. 3-axis
Spring connectors	14 pin	5V x 2, AI x 2, AO x 4, GND x 6