

Industrial Robotic Arm

Multi-Axis

Industry: IoT

Summary

Customer Challenge

A manufacturer of a robot arm needs to measure force and torque when the arm picks up and places objects. The manufacturer needs a wireless system to accomplish this in order to log the measurement results.

Interface Solution

Interface supplied Model 6A40A 6-Axis Load Cell with Model BX8-HD44 Data Acquisition Amplifier.

Results

The 6A40-6 Axis Load Cell was able to measure all forces and torques (F_x , F_y , F_z , M_x , M_y , M_z) and the BX8-HD44 Data Acquisition/Amplifier was able to log, display, and graph these measurements while sending scaled analog output signals for these axes to the robot's control system

Materials

- 6A40 6-Axis Load Cell
- BX8-HD44 Data Acquisition Amplifier which includes BlueDAQ configuration, logging, display and graphing software
- Customer's robotic arm and control system

How It Works

1. Customer installed 6A40 6-Axis Load Cell between robot flange and robot grabber.
2. 6A40 6-Axis Load Cell was connected to BX8-HD44 Data Acquisition/Amplifier.
3. Customer connected analog outputs to their control system.
4. Result, customer is now able to measure forces and torques in 6 axes and send a scaled analog output signal to their robotic arm control system.

